# ACADEMIC CATALOG 2023-2024



# **SUNY CANTON**

34 Cornell Drive, Canton, New York 13617

**Office of Admissions:** 315-386-7123 / 800-388-7123

FAX: 315-386-7929

www.canton.edu / admissions@canton.edu

Academic Calendar 2023-2024

Please reference the following link for updated Academic Calendar information.

### https://www.canton.edu/academic/calendar/

https://www.canton.edu/media/pdf/Academic-Calendar-2023-24.pdf

#### NON-DISCRIMINATION NOTICE

SUNY Canton does not discriminate based on race, color, national origin, sex, gender identity, disability, or age in its education programs, services, and activities, including employment policies and practices. The following people have been designated to handle all inquiries regarding non-discrimination policies:

Affirmative Action, Equity, and Compliance Coordinator/Director of Human Resources Joann Ellis 315-386-7325 hr@canton.edu

Title IX Coordinator Nicodeme Auguste 315-386-7050 title9@canton.edu

Section 504 Officer Megan Riedl 315-386-7392 ADA@canton.edu

All students, interns and College's employees are the purview of Civil Rights Compliance Officers.

The College offers a variety of career and technical education programs. For descriptions of programs and admissions criteria, visit the Admissions website at https://www.canton.edu/admissions/.

#### SUNY CANTON DISCRIMINATION COMPLAINT PROCEDURE (INCLUDING TITLE IX)

#### How to File a Complaint

Follow the process outlined in the SUNY Canton Discrimination Complaint Procedure (including Title IX) (https:// www.canton.edu/student-handbook/section-30-student-life/discrim\_harassment.html). If you have any questions on the process, please contact a Civil Rights Compliance Officer (https://www.canton.edu/crc/officers/).

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#### CATALOG DISCLAIMER

Notwithstanding anything contained in this Catalog, SUNY Canton expressly reserves the right, wherever it deems advisable, (1) to change or modify its schedule of tuition and fees, (2) to withdraw, cancel, reschedule or modify any course, program of study, degree or any requirement in connection with the foregoing, and (3) to change or modify any academic or other policy. Please be advised that, due to printing deadlines, information in this Catalog may be outdated. Changes in information in this Catalog and new academic regulations, policies or programs will be published on campus and in each semester's registration materials. It is the responsibility of each student to ascertain current information that pertains to the individual's program, particularly with regard to satisfaction of degree requirements, through consultation with the student's advisor, the office of the student's dean, and other appropriate offices such as the Registrar or Financial Aid. In preparing this Catalog, efforts are made to provide pertinent and accurate information; however, SUNY Canton assumes no responsibility for Catalog errors or omissions.

# SUNY Canton's Mission and Goals



# Great Majors. Great Careers.

### MISSION STATEMENT

SUNY Canton is dedicated to providing a progression of accessible, affordable, high-quality applied programs that enable students in the North Country, New York State, and beyond to achieve their highest potential both personally and professionally.

### VISION STATEMENT

Educating the leaders of tomorrow for careers in the global technological economy.

### VALUES STATEMENT/DISTINCTIVE IDENTITY

#### We Value...

A Student-Centered Philosophy... by keeping students' best interests at the center of everything that we do.

**Excellence...** by challenging everyone to perform at a consistently high level through continuous quality improvement. **Integrity...** by treating others with honesty and respect during every interaction.

- Success... by creating an environment that encourages maximum personal and professional growth and helps students translate that growth into meaningful action.
- **Diversity...** by fostering a culture of inclusiveness that values individual differences, gives voice to all in the campus community, promotes the free exchange of ideas based on merit, and encourages a global perspective.
- Access... by offering affordable career-oriented public higher education to motivated, mature and disciplined students through innovative delivery methods.

**Sustainability...** by implementing viable long-term options for resource usage, disaster management, transportation, and waste management in connection with all campus activities and weaving sustainability concepts throughout the curriculum.

Flexibility... by embracing change to better address the needs of the college community and society at large.

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### INSTITUTIONAL STUDENT LEARNING OUTCOMES

The Institutional Student Learning Outcomes (ISLOs) represent the knowledge, skills, and attitudes students will develop as a result of their education experience at SUNY Canton. Upon completion of a degree program at SUNY Canton, students will have competency in five areas:

- 1. Communication Skills
- 2. Critical Thinking
- 3. Foundational Skills
- 4. Social Responsibility
- 5. Industry, Professional, Discipline-Specific Knowledge and Skills

ISLO	Definition
<b>1. Communication Skills</b> (all subsets required for pro- grams)	The category of communication skills requires students to demonstrate competency in both oral and written expression, including a basic understanding of discourse contexts and appropriate use of style and necessary writing technologies.
Oral	Students demonstrate or share knowledge to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors through a prepared, purposeful, communicative act.
Written	Students develop and express ideas in writing. This written communication involves learn- ing to work in many genres and styles. It can also involve working with many different writ- ing technologies, and mixing texts, data, and images.
<b>2. Critical Thinking</b> (one of three subsets required for programs)	The category of critical thinking requires students to demonstrate competency in for- mulating conclusions as a result of exploration, evaluation, and analysis. Students will explore, evaluate, and analyze objects, subjects, and phenomena.
Critical Analysis	Students demonstrate a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
Inquiry and Analysis	Students demonstrate a systematic process of exploring issues/objects/works through the collection and analysis of evidence that result in informed conclusions/judgments (inquiry) and demonstrate the process of organizing complex topics or issues into parts to gain a better understanding of them (analysis).
Problem Solving	Students design, evaluate, and possibly implement strategies to answer an open-ended question or achieve a desired goal.
<b>3. Foundational Skills</b> (all subsets required for pro- grams)	The category of foundational skills requires students to demonstrate knowledge in infor- mation management, basic math skills as required by disciplinary standards, and skills associated with their discipline.
Information Management	Students perform the basic operations of personal computer use to understand and use basic research techniques; and locate, evaluate and synthesize information from a variety of sources.
Quantitative Literacy & Rea- soning (QLR) (Requirement filled by GER 1)	Students demonstrate competency in working with data. Individuals with QLR skills will possess the ability to reason and solve quantitative problems from a wide array of contexts. Students will be able to create arguments supported by quantitative evidence, accurately communicate those arguments in a variety of formats (e.g. using words, tables, graphs, mathematical equations, etc., as appropriate), and check the results for reasonableness and accuracy.
<b>4. Social Responsibility</b> (two of four subsets required for programs)	The category of social responsibility requires students to demonstrate understanding of cultural relations and global concerns. Students should demonstrate cultural sensitivity and global concerns with an emphasis on ethical standards.

Ethical Reasoning	Students demonstrate the ability to assess their own and others' ethical values and the social context of problems, recognize ethical issues in a variety of settings and contexts (which could include cultural, historical, or professional contexts), think about how different ethical perspectives might be applied to dilemmas, and consider the ramifications of decisions and actions.
Global Learning	Students critically analyze and engage with complex, interdependent global systems and legacies (natural, physical, social, cultural, economic, or political) and explore their implications for people's lives and the earth's sustainability.
Intercultural Knowledge	Students demonstrate knowledge that supports effective and appropriate sensitivity to, and interaction in, a variety of cultural contexts.
Teamwork	Students exhibit behaviors that facilitate teamwork and collaboration as demonstrated by effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions.
5. Industry, Professional, Discipline-Specific Knowledge and Skills	The category of industry, professional, and discipline-specific knowledge and skills re- quires students to demonstrate the knowledge and skills necessary to succeed as leaders of tomorrow in their chosen career path.



### COLLEGE GOALS

- Offer programs in business, public service, health, liberal arts and engineering technologies that prepare students to enter rewarding careers and continue their education.
- Deliver a program of general education which provides a broad set of coherent and focused educational experiences aimed at enabling students to acquire knowledge and skills that are useful and important for all persons.
- Provide a community that enhances the development of leadership skills and creativity; encourages intellectual, ethical, and cultural growth; promotes an appreciation of our multicultural society; and advocates physical and emotional well-being.
- Promote excellence and innovation in teaching, advance scholarship and research, encourage continuous curricular evolution, and integrate technology into educational experiences.
- Design and implement extended and alternative programs to address the needs of national and international students, businesses, government agencies, and other specialized audiences.
- Advance the institution through philanthropic activities, external funding and cultivation of strong alumni relations.



The State University of New York at Canton is a public, coeducational, residential college located on a spacious campus along the banks of the Grasse River. Its northern location places SUNY Canton close to the Adirondack Mountains, the St. Lawrence River, and major Canadian cities such as Ottawa and Montreal.

### **A**CADEMICS

SUNY Canton is Northern New York's four- and two-year college for technology, health, management and public service. SUNY Canton offers more than 50 majors leading to bachelor's degrees, associate degrees, and one-year certificates. Numerous articulation agreements with other institutions provide further opportunities in fields such as business administration, forestry and medicine. Graduates of twoyear programs are encouraged to enroll in bachelor's degree programs or begin their careers immediately.

SUNY Canton's 3,200 students are taught by faculty who have both outstanding academic credentials and excellent technical experience. Most have on-thejob professional experience, are licensed in their fields, and are current practitioners in their professions.

### **CAMPUS ENVIRONMENT**

Academic facilities include numerous classroom buildings containing many specialized labs for practice in technologybased disciplines. The Learning Commons, includes the Southworth Library, Betty J. Evans Tutoring Center, Information Services Helpdesk, and the Cyber Café. The Learning Commons is a resource-rich hub for innovation, collaboration, and engagement that provides the campus community with access to resources, technology, and services that promote teaching and learning. The Learning Commons strives to create access to resources, program, and support for all students both on-campus and virtually. The Computer Center provides access for all students in open computer labs and networked computer classrooms. Students receive an email account and can access the Internet in computer labs or via wireless network access in most areas of campus, including all residence hall rooms.

The College opened a \$42 million athletic facility in July 2011. The massive building includes an ice arena, fitness center, basketball courts, field house, and swimming pool. Other additions include a synthetic turf field and a baseball field. SUNY Canton has expanded its sports offerings and has recently added women's volleyball, men's and women's golf, women's ice hockey, women's lacrosse and men's lacrosse. That brings the total number of sports teams to 15, including men's and women's basketball, cross country, soccer, men's ice hockey, softball and baseball. The Kangaroos are a Division III NCAA member.

Kennedy Hall is the name of the new 305-bed, apartment-style residence hall on campus. It opened in August 2011 and features all single rooms in three, four, and five bedroom suites.

The four existing residence halls have also undergone renovations and house 950 students in single rooms, doubles, triples and suites. Special theme floors allow students to select living and learning options best suited to their interests. There's even a residence hall that allows small pets. Chaney Dining Center provides meals for residential students, and snack bars located around the campus make it easy to grab a quick bite to eat.

There are numerous student clubs, and the Richard W. Miller Campus Center serves as the hub for a wide range of cultural and recreational activities. Since the campus is located in a residential community that welcomes college/community interaction,



### **SUNY Canton**

students find that SUNY Canton provides a fine blend of college learning and community involvement.

Many SUNY Canton alumni pursue careers in the technologies. Two-thirds of each graduating class choose to enter productive careers directly after graduation. Each year, nearly 100 percent of these graduates are successful in finding jobs for which SUNY Canton prepared them.

### CAMPUS HISTORY

Originally founded in 1906 as the School of Agriculture (SOA) at St. Lawrence University, SUNY Canton was the first postsecondary, two-year college in New York authorized by the Legislature. In 1941, SOA was renamed the New York State Agricultural and Technical Institute (ATI). ATI became a member college of the State University of New York in 1948. To recognize advanced technology programs added in the 1950s and '60s, the College underwent another name change in 1965, this time becoming the State University of New York Agricultural and Technical College at Canton or ATC. In 1987, the University's Board of Trustees authorized yet another name change to the College's present designation as State University of New York College of Technology at Canton.

In 1997, SUNY Canton received bachelor's degree granting approval from the SUNY Trustees and the Governor of New York State. Since then, more than 20 bachelor's degrees have been approved, and several others are in development.

### LOCATION

The village of Canton is situated in the St. Lawrence Valley near the northern foothills of the Adirondack Mountains and the scenic Thousand Islands. The location is perfect for those who enjoy outdoor activities, which range from camping, boating and hiking to cross-country and downhill skiing. Lake Placid, site of the 1980 winter Olympics, is less than two hours away and offers a multitude of activities throughout the year. For those who wish to have a more metropolitan experience, Montreal and Ottawa are approximately two hours north across the Canadian border. These two cities provide a variety of attractions for shopping, plays and concerts as well as beautiful parks and recreational facilities.

The College is located on the outskirts of the village along the Grasse River, which adds to its beauty and relaxed atmosphere. The village is a short walk from campus and offers several unique shops and restaurants.

### ACCREDITATIONS

SUNY Canton is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104-2680 — Telephone (267) 284-5000, Fax (215) 662-5501. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

The Air Conditioning Engineering Technology, Civil Engineering Technology, Electrical Engineering Technology, and Mechanical Engineering Technology programs are accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET.

The Veterinary Science Technology program is accredited by the American Veterinary Medical Association. The Accreditation Commission for Education in Nursing has accredited the Nursing, AAS program. The Physical Therapist Assistant program is accredited by the Commission on Accreditation in Physical Therapy Education. The Dental Hygiene, AAS program is accredited by The American Dental Association (ADA), Commission on Dental Accreditation (CODA). The Automotive Technology program is certified by the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE).

The Sports Management program is accredited by the Commission on Sports Management Accreditation (COSMA).

### Associated Colleges of the St. Lawrence Valley

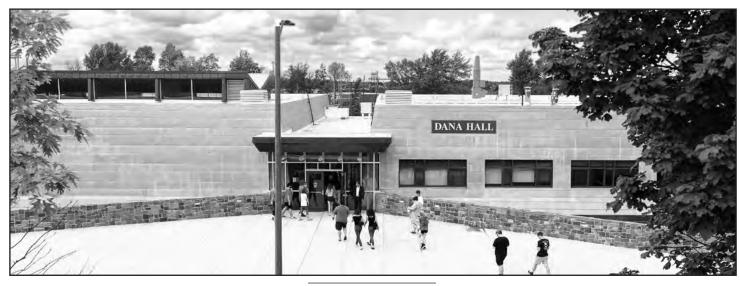
SUNY Canton is a member of the Associated Colleges of the St. Lawrence Valley, a consortium that also includes Clarkson University, SUNY Potsdam, and St. Lawrence University. The Associated Colleges, with approximately 12,500 students in two villages 11 miles apart, expands opportunities through such activities as cross-registration for courses at the other three campuses, coordination of social events, and library privileges at all four college libraries.

### Alumni Association

The Alumni Association maintains contact between the College and its alumni, keeping them informed about the College's programs and activities and encouraging their participation.

The Association works with the Canton College Foundation in coordinating the College's Annual Fund program to provide financial support for a variety of college activities. As a result of these efforts, funds can be provided for student scholarships and emergency loans, faculty research and special projects, and other activities in need of financial support.

	Prerequisite Regents Exams (NYS) <sup>1</sup>									
		egice		1	MATH		ENGL	CHEM	BIO	]
		egree ograms	70+ on 1 math Regents exam and passed	70+ on 2 math Regents exams and passed 3rd	70+ on 3 math Regents exams or 75+ on	80+ on 3 math Regents exams	75+ on ELA Regents	65+ on Chemistry Regents & 70+ on	75+ on Regents & 65+ on Chem	Associate Degree in appropriate field
CODE	PAGE	PROGRAM TITLE	2nd year of math	year of math	Geometry Regents			3rd math Regents	Regents	
2645	68	Agribusiness Management, BBA	•		i		•			
1965	69	Applied Psychology, BS	•		İ 👘	1	•	İ		
2488	70	Civil and Environmental Engineering Technology, B.Tech.		Ì	•	1	•	ĺ	Ì	
3006	71	Crime Analysis, BS	•	Ì	İ	1	•	Ì	Ì	
1359	72	Criminal Investigation, B.Tech.	•		1		•	İ		
1911	73	Criminal Justice: Law Enforcement Leadership, B.Tech.	•		1	1	•			
2698	74	Cybersecurity, BS			•	1	•	İ	İ	1
2699	75	Early Childhood Care and Management, BBA	•	ĺ	1	1	•			
0216	76	Electrical Engineering Technology, B.Tech.		İ	•		•	İ	İ	
1864	77	Emergency Management, BS		•	İ	1	•			
2991	78	Esports Management, BBA	•	İ	1	1	•	İ	İ	1
0282	79	Finance, BBA	•		1		•			
2994	80	Forensic Criminology, BS	•		İ	1	•	İ		
1525	81	Funeral Services Administration, B.Tech.	•		1		•			
2638	82	Game Design and Development, BS			•	1	•			
2026	83	Graphic and Multimedia Design, BS		•	1	1	•			
2254	84	Health and Fitness Promotion, B.Tech.	•				•			
253	85	Health Care Management, BS		•	1	1	•			
2335	86	Homeland Security, B.Tech.	•				•			
1935	87	Industrial Technology Management, B.Tech.			•		•			
2045	88	Information Technology, B.Tech.			•		•			
0818	89	Legal Studies, BS	•				•			
1645	90	Management, BBA	•				•			
0235	91	Mechanical Engineering Technology, B.Tech.			•		•			
0291	92	Nursing, 2 + 2, BS		•			•			•
2373	93	Nursing Dual Degree, AAS/BS <sup>34</sup>			•		•	•	•	
0182	94	Sports Management, BBA	•				•			
2673	95	Technological Communication, BS	•				•			
2535	96	Veterinary Service Administration, 2 + 2, BBA		•			•			•
2278	97	Veterinary Technology, BS <sup>3</sup>			•		•	•	•	





#### Prerequisite Regents Exams (NYS)<sup>1</sup>

		8		MA	TH		ENGL	CHEM	BIO	
		egrees <sup>2</sup>	70+ on 1 math Regents exam and passed 2nd year of math	70+ on 2 math Regents exams and passed 3rd year of math	70+ on 3 math Regents exams or 75+ on Geometry Regents	80+ on 3 math Regents exams	75+ on ELA Regents	65+ on Regents and 75+ Geometry Regents	75+ on Regents & 65+ on Chem Regents	Associate Degree in appropriate field
0473	98	Apprentice Training: Industrial Trades, AAS		m		e working on B	I OCES Jouri	neyman's Cer	<u> </u> t.	
0525	99	Automotive Technology, AAS	•				•		1	
0630	100	Business: Accounting, AAS	•				•			
0632	101	Business Administration, AAS	•				•			
0671	101	Business Administration-Transfer, AS		•			•			
0517	102	Civil Engineering Technology, AAS			•		•	ĺ	ĺ	
0581	103	Computer Information Systems, AAS	•	Ì			•		ĺ	
1162	104	Construction Technology: Management, AAS	•				•			
0640	105	Criminal Justice, AAS	•				•			
1327	106	Early Childhood, AS	•				•			
0699	107	Electrical Engineering Technology, AAS			•		•			
0530	108	Engineering Science, AS				•	•	•		
2208	109	General Technology, AAS			•		•			
0444	110	HVAC Engineering Technology, AAS			•		•			
2953	111	HVAC Trades, AOS	•				•			
0688	112	Individual Studies, AAS								
0250	113	Liberal Arts & Sciences: General Studies, AA, AS	•				•			
0493	114	Mechanical Engineering Technology, AAS			•		•			
0622	115	Nursing, AAS ***			•		•	•	•	
0489	116	Physical Therapist Assistant, AAS **			•		•	75+	•	
0521	117	Veterinary Science Technology, AAS **			•		•	•	•	

#### Prerequisite Regents Exams (NYS)<sup>1</sup>

Coope code	rative	Agreements <sup>2</sup> PROGRAM TITLE	70+ on 1 math Regents exam and passed 2nd year of math	70+ on 2 math Regents exams and passed 3rd year of math	70+ on 3 math Regents exams or 75+ on Geometry Regents	80+ on 3 math Regents exams	75+ on ELA Regents	65+ on Regents and 75+ Geometry Regents	75+ on Regents & 65+ on Chem Regents	Associate Degree in appropriate field
0250 / varies	130	Environmental Science & Forestry, w/SUNY ESF				•	•	•	•	
0620 / 1086	130	Forest Technology, w/SUNY ESF	•				•		•	
	133	UB School of Law Degree (3+3) - B.S. + J.D.								
0250	133	Upstate Medical Univ. Early Admissions Program				•	•	•	•	

#### Certificate Programs<sup>2</sup>

0955-Electrical Construction & Maintenance, p.118 0938-Practical Nursing, <sup>3</sup> p.119

> <sup>1</sup> Students will not be penalized for a canceled Regents Exam due to COVID19. <sup>2</sup> Refer to Programs of Study (pages 67-133) for specific requirements. <sup>3</sup> Selective Admission (see page 92, 93, 96, 97, 115, and 117 for more information). <sup>4</sup> Preadmission test required – Kaplan Nursing Admission Test

If you have questions, are a transfer or an out-of-state student, please call the Office of Admissions (1-800-388-7123) for more information.



### Admission to Canton

Admission to the State University of New York at Canton is based on the academic and personal qualifications of applicants and is made without regard to sex, age, race, color, creed, national origin, sexual orientation, military status, or disability of individuals. Admission will be offered to qualified applicants whose academic preparation and experience indicate a foundation for success in their chosen curricula.

Candidates for admission to SUNY Canton must have earned a high school diploma with a preferred minimum 75 cumulative average or a high school equivalency (GED/TASC). Please review the prerequisites listed for each program. All admissions decisions are subject to the discretion of the Executive Director of Enrollment. For students needing preparatory courses before being admitted to a program of interest, it may be necessary to extend the time needed to earn a degree or certificate.

Admitted students will be required to submit a \$50 enrollment deposit, which is refundable if students withdraw prior to May 1st. Students admitted after May 1st for the fall semester are allowed to request an enrollment deposit refund within 30 days of the date of their letter of admission. The preferred deposit deadline for the spring semester is January 1st. Students withdrawing their application before January 1st will have their deposit refunded upon request. Students admitted after January 1st for the spring semester are allowed to request an enrollment deposit refund within 30 days of the date of their letter of admission.

Degree seeking students must declare a major by the end of two full-time semesters or the completion of 30 credits.

For more information, contact the Office of Admissions at 315-386-7123, 800-388-7123, or www.canton.edu.

### **DEGREES OFFERED**

The College offers the opportunity for students to earn the degrees of Bachelor of

Technology, Bachelor of Business Administration, Bachelor of Science, Associate in Applied Science, Associate in Science, Associate in Arts, Associate in Occupational Studies, or a Certificate of one-year study. Many of our programs allow for a fall or spring start. <sup>A</sup> very select few allow for a summer start. Contact the Office of Admissions for details.

### **ADMISSION INTERVIEWS**

Prospective students and their families are strongly encouraged to visit the campus in-person or virtually to discuss college plans with an admissions counselor. In-person or virtual interviews help to show your level of interest in SUNY Canton and can be very helpful in making admissions decisions. Admissions interviews are offered Monday through Friday, as well as at Open Houses on select Saturdays. The interview provides an opportunity to discuss curricula and career choices, college life, and financial aid. All visiting students and their families will be offered a tour of the campus. Tours are offered regularly at 10 a.m., 12 p.m., and 2 p.m., Monday through Friday. Visit www. canton.edu/admissions/visit\_us.html or call 800-388-7123 to schedule a visit.

### How to Apply for Admission

An application for admission may be completed online at www.canton.edu/ apply. We accept the SUNY Application or the Common Application. In addition to the application form, applicants must submit all secondary school transcripts, showing date of graduation. For students who have earned a General Equivalency Diploma (GED) or Test Assessing Secondary Completion (TASC), proof of graduation is shown through submitting a copy of your diploma page. When applicable, send all previous official college transcripts to the Office of Admissions at SUNY Canton. Official transcripts can be sent electronically or by mail. However, they must come

directly from the issuing institution in order to be considered official. Send electronically to <u>admissions@canton.edu</u> or by mail to SUNY Canton, Office of Admissions, 34 Cornell Drive, Canton, NY 13617. SUNY Canton will be test optional for applicants applying for the fall 2022 or spring 2023 semesters.

All applications are processed on an individual basis and additional information may be requested by the Office of Admissions to make a fair assessment.

### WHEN TO APPLY FOR ADMISSION

Prospective students are encouraged to submit their application before December 1 for the fall semester and November 1 for the spring semester. Decisions with respect to admission are made on a rolling basis, unless otherwise specified. Our Nursing, Physical Therapist Assistant, Practical Nursing, Veterinary Science Technology, and Veterinary Technology programs are selective and we very much encourage students applying to these programs to submit their applications before the selective program priority deadlines of February 1 for the fall semester and December 1 for the spring semester. Candidates for admission to the spring semester should contact the Office of Admissions for the listing of available spring-start programs.

### Admission As Freshmen

Candidates for admission to the College must meet the following minimum requirements:

1. Be a graduate of a secondary school accredited by its State Education Department, hold a high school equivalency diploma, or meet certain home-school criteria.

**IEP diplomas are not considered.** Students with an IEP diploma must pass a high school equivalency.

2. Have completed, with a satisfactory level of achievement, the minimum course prerequisites for the curriculum selected.

3. Demonstrate academic preparation necessary for success in the curriculum selected.

The most important criterion for admission as freshmen directly from high school is the secondary school record (grade point average, pattern of course work, etc.). Some candidates will be asked to submit additional criteria, such as an essay, personal statement, or resume.

The Office of Admissions reserves the right to request additional information, and applicants may, of their own accord, submit additional supportive documents.

### Home-Schooled Students

Home-schooled students must provide supplemental materials as part of their application for admission to SUNY Canton. *Students of compulsory school age must provide one of the following* 

- 1. A high school diploma from an accredited state secondary school.
- 2. Letter from Superintendent of Schools certifying that the student has completed the substantial equivalent of a four-year high school course.

# Students beyond compulsory school age must provide one of the following:

- 1. Option #1 as stated above.
- 2. Option #2 as stated above.
- 3. Passing score on a high school equivalency (TASC/GED).
- 4. Proof of passing and completing all requirements for the required five Regents examinations or approved alternative assessments for these examinations. (However, you will be ineligible for financial aid.)
- 5. Completion of 24-credit hour program in accordance with 8 NYCRR Section 3.47 for Earned Degrees. (However, you will be ineligible for federal financial aid.)

6. Proof of previously earning and been granted a degree from a degree-granting institution.

### Online Correspondence High Schools

New York State does not approve correspondence study, including online, as equivalent to a high school diploma for New York State residents. Correspondence study and online diplomas are not valid for students who were New York State residents at the time they received the online diploma. New York State school districts are prohibited from recognizing correspondence or online programs of high school study as fulfilling the New York State requirements for completion of an approved course of high school study.

New York State residents who have attained a high school education/diploma through an online correspondence high school are not eligible to receive:

- New York State Tuition Assistance (TAP), Excelsior Scholarship, STEM Scholarship, TeachNY scholarship, 9/11 scholarship.
- •Many Federal financial aid programs.
- •An associates or bachelor's degree from a private or public college or university located within New York State.
- New York State residents may acquire recognized high school graduation through the following options:
- •Successful completion of the New York State TASC(GED) exam;
- •Successful completion of the 24-credit hour program in accordance with 8 NYCRR Section 3.47;
- •Successful completion of either the Accuplacer or CELSA Ability to Benefit test.

Questions regarding correspondence and online high school diplomas should be directed to: New York State Education Department High School Equivalency Office PO Box 7348 Albany, New York 12224 (518) 474-4906

Out-of-state residents should refer to the policies.

### PLACEMENT TESTING

The ACCUPLACER placement test may be required for scheduling purposes after acceptance into SUNY Canton. This decision is based on standardized test scores such as Regents exams, final course average, ACT or SAT scores, or certain program demands. Transfer students must demonstrate a "D" or better in a college-level English course to be exempt.

Students who are required to be tested will be notified via their college email and in their student portal via the New Student Checklist. Placement testing must take place prior to advising. For details and practice test items, go to www.canton. edu/testing. For more information, call 315-379-3954.

### Advanced Placement And Proficiency Examination Credit

SUNY Canton has a proficiency examination program to serve students who seek recognition for achievement acquired outside the conventional college classroom. Admission with advanced standing may be granted on the basis of satisfactory completion of College-Level Examination Program (CLEP) Subject Examinations, the Advanced Placement Program, both administered by the College Entrance Examination Board, the DSST Examination (formerly Dantes), and the International Baccalaureate (IB) examinations. Further, the College participates in selected Excelsior College Examinations (ECE) sponsored by the New York State Education Department. Interested students should check with

the Office of Admissions regarding credits awarded for these examinations. For a listing of how CLEP, AP and IB exams are utilized, see: <u>http://www.canton.edu/</u> <u>career\_services/docs/Exam\_Reference\_</u> <u>Guide.pdf</u>

### HONORS PROGRAM

The purpose of SUNY Canton's Honors Program is to attract and retain academically gifted students who are interested in pursuing knowledge and experience beyond the standard expectations of their degree. The Honors Program rewards hard working students by providing additional opportunities and privileges to facilitate academic and personal growth.

All Honors Program students are required to abide by the following requirements:

• Remain aware of Honors Program information by checking email, Brightspace, Honors Webpage, and attending meetings during the academic year

• Maintain a minimum cumulative 3.25 GPA.\*\*

• Complete a minimum of five Honors Courses for students enrolled in a four-year degree program.\*\*\*

• Complete a minimum of three Honors Courses for students in a two-year degree program.\*\*

> o In order for a non-honors course (with a minimum of 3 credit hours) to be credited as an honors course, students will be required to complete honors projects that comprise research, writing, and presentation components. o Up to three courses or 9 hours of honors course credit (or equivalent) can be transferred in from another college. Honor transfer credit to be approved by Honors Committee

• Attend Honors Program meetings and participate annually in the Scholarly Activities Celebration or other sanctioned event.

• Present (poster or oral) at Scholarly Activities Day, Honors Symposium or some other approved forum (i.e. academic conference):

o 2 times for four-year degree

o 1 times for two-year degree

• Provide evidence of participation in community service, academic/scholarly

activities or awards, and campus involvement outside of coursework. Students must be involved in:

o At least one school related group (club, organization, tutoring service, etc.) OR

o Community service effort or organization that is on volunteer bases OR

o Scholarly activity, such as an ongoing research project with a faculty advisor

• A student should inform the Honors Program Director whenever their address (including phone number and email) or academic major changes.

For more information about Honors Courses, please refer to the Honors Webpage at <u>www.canton.edu/honors/</u>.

### Admission Procedures And Requirements For International Students

An application for admission may be completed online at www.canton.edu/ apply. We accept the SUNY Application or the Common Application.

In addition to the application form, applicants must submit secondary school transcripts (translated to English), and all previous college transcripts (must be translated to English, SpanTran preferred), to the Office of Admissions at SUNY Canton. A \$50.00 non-refundable application fee (in U.S. funds) must accompany the application. This fee may not be waived for any reason. In the interest of time, it is recommended that the fee is paid by credit card when an online application is submitted.

An English Proficiency Exam is required if English is not your first language. Students must demonstrate English Proficiency in one of the following five ways:

#### TOEFL (School Code 2523)

61 Internet Based Test 500 Paper Based Test 173 Computer Based Test IELTS 6.0 Minimum 5.5 minimum in each subsection of exam
iTEP
3.5 Minimum
PTE Academic
44 Minimum
College Level English Course
Must receive a grade of "C" or better (US

Grade)

Students who are interested in SUNY Canton who do not meet English Proficiency requirements can apply for conditional admission in which they will enroll in the ESL program at Fulton Montgomery Community College (FMCC) for a period of time based on their level of proficiency. Once they have successfully completed the program, they will be offered full admission to SUNY Canton. Students must meet all other admission requirements at SUNY Canton to qualify for conditional admission.

For full consideration for Fall admission, the application must be submitted no later than April 1st. All required materials must be submitted by July 1st. If applying for Spring admission, the application must be completed no later than November 1st. All required materials must be submitted by December 1st. It may take several months to obtain the appropriate visa, so it is recommended that students apply for admission as early as possible. Additional supporting documents, such as a colored copy of the biography page of a valid passport, the Foreign Student Financial Statement (FSA-4) and supporting financial documentation will be required upon admission in order to obtain an I-20. These forms must be completed and certified by the appropriate financial institution. Please make sure the form is accurate and signed in all appropriate places to avoid delays with the I-20 processing. The application will be reviewed when all required information is received.

All documents should be sent to Office of Admissions, SUNY Canton, 34 Cornell Drive, Canton, NY 13617-1098, USA.

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### Transfer Student Admission

Applicants who have previously enrolled or taken at least one class at another institution after high school graduation, are considered transfer students. In addition to completing the application for admission, transfer students must also submit an official transcript from every college or university previously attended. Transfer students who have earned less than 24 college credit hours at the time of application will be required to submit their official high school transcript. However, we encourage all transfer students to submit their high school transcript for financial aid requirements. Lack of an official high school transcript on record with SUNY Canton may result in the loss of a financial aid opportunity. Transfer students must meet specific GPA and credit hour requirements for their program of application. All degree programs have specific requirements for admission. Transfer students should contact the Office of Admissions for further information at 1-800-388-7123.

For all transfer students, equivalency credit for coursework shall be determined by the Coordinator of Transfer Services. A preliminary evaluation notice will be sent via email and credits will be viewable in DegreeWorks. Students are encouraged to contact transfer@canton.edu with any subsequent questions or concerns regarding their evaluation. Courses completed at another institution transfer only as credits, quality points do not transfer. A letter grade of "D" or better is required for credit, unless specifically stated otherwise.

The Office of Admissions reserves the right to request additional information, and applicants may, of their own accord, submit additional supportive documents.

#### READMISSION

Students are considered to be readmits if they meet one of the following criteria: (1) have not attended classes as a matriculated student at SUNY Canton for at least one semester, have not been granted an official leave of absence, and have not attended another college; (2) have graduated and have not attended another college since graduation.

Students must complete a Readmission Application available online at <u>www.</u> <u>canton.edu/admissions/readmission.html</u>

**Readmit Academic Requirements** 

1							
TO RE-REGIS- TER FOR SEMESTER:	COMPLETED HOURS (EARNED HOURS) <sup>1</sup>	CUMULATIVE GPA					
2	9	1.25-1.49					
3	18	1.50-1.74					
4	27	1.75-1.99					
5	39	2.00					
6	51	2.00					
7	63	2.00					
8	75	2.00					
9	90	2.00					
10	105	2.00					

<sup>1</sup>At the discretion of the appropriate school dean, imputed credit hours may be used in determining a student's academic status.

### CREDIT FOR PRIOR LEARNING FROM OTHER INSTITUTIONS OF HIGHER LEARNING

Applicants for admission who have attended other institutions of higher learning may be admitted with advanced standing depending upon the courses completed and grades earned. Applicants for advanced standing should apply for admission in the same way as other applicants; but in addition, they must request the Registrar of all institutions of higher learning which they have attended to forward official transcripts of work completed to the College. SUNY Canton accepts credit for courses transferred with a grade equivalent to a "D" or above at SUNY Canton. Prior credits which apply to an earned Associate's degree, including grades of "D" and above, will be accepted in transfer and may be applied towards the total credits for a SUNY Canton bachelor's degree. This policy may exempt credits received in the core curricu-

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lum when program specific grade requirements supersede this policy.

The College has formalized articulation agreements with a number of higher education institutions. A complete listing of current transfer agreements may be found on the college website at <u>www.</u> <u>canton.edu/admissions/transfer/agreements.html</u>. Acceptance of satisfactorily completed credits taken at the prior institution is guaranteed upon transfer to SUNY Canton as specified in the applicable transfer agreement. Credit is awarded at the discretion of the School Dean.

Upon readmission, any new non-degree credit with a grade of D or better from a different institution of higher learning will be evaluated for transfer credit.

#### BY PROFICIENCY EXAMINATION

A complete Reference Guide to Earning College Credit by Examination may be found on the college website at

<u>www.canton.edu/career\_services/</u> <u>docs/exam\_reference\_guide.pdf</u>.

- 1. Published Examinations: Admission with advanced standing may be granted on the basis of satisfactory completion of published proficiency examinations. The College participates in the College Level Examination Program (Subject Examinations) and the Advanced Placement Program; the DSST examination (formerly DANTES); the International Baccalaureate (IB) examinations; and the Regents College Proficiency Examination Program sponsored by the New York State Education Department. Further, the College participates in selected Excelsior College Examinations (ECE).
- 2. Locally Developed Examinations: At the discretion of the school or departmental faculty, advanced standing may be granted for satisfactory completion of proficiency examinations developed by the College faculty and in accordance with the following policy:
  - a. Locally designed and administered exams are available only to students who are matriculated at SUNY

Canton or are participating in a CREST "Career Ready Education and Success Training" program or course.

- b. Such exams will consist of written and/or practical application tests as deemed appropriate.
- c. Any credit earned via such examinations will not be (a) counted as residency credit, included on official enrollment reports unless requested specifically, (c) included in a faculty member's reported workload, and (d) used in calculating the campus FTE credit report.
- d. Any credit earned must fulfill degree requirements or be related to a CREST course that could fill a degree requirement.
- e. Such exams will be administered prior to a student's enrollment in the equivalent course for which a proficiency exam is requested or at the end of a CREST course.
- f. Satisfactory completion of a locally designed and administered proficiency exam will be recorded on the student's transcript following evidence of progress toward an educational objective. In the case of CREST course, successful completion will be recorded on the student's transcripts for possible future use toward an educational objective.
- g. A student is not permitted to enroll in or repeat the equivalent course for which a proficiency exam has been satisfactorily completed.
- h. A student may not repeat the proficiency exam administered for a specific course or portion thereof if not satisfactorily completed.
- i. Proficiency exams shall be approved by the appropriate academic department and School Dean. Copies of all locally designed proficiency examinations will be placed on file with the Vice President for Academic Affairs and the appropriate School Dean.

j. Forty dollars (\$40) per credit hour will be charged for all locally designed and administered proficiency examinations.

#### FROM SECONDARY SCHOOL

The College may grant credit for selected courses completed at the secondary level. Transfer credit will be conditional upon evaluation of in-kind courses and experiences by the appropriate Dean of the School in which the credit will be granted. Approved secondary course work will match or exceed that offered on campus. The course must be subject to an articulation agreement. Students requesting credit must demonstrate superior performance and have the recommendation of the appropriate secondary school faculty member and endorsement of the high school principal.

#### PRIOR LEARNING NOT THE RESULT OF CREDIT-BEARING ACTIVITIES

Credit for Prior Learning may be granted to students enrolled in any program, at the discretion the appropriate Dean of the School in which the program is located.

NOTE: Students may apply for Prior Learning Credit for a course only if a proficiency exam or a CLEP exam does not exist for that course.

NOTE: Credit for Prior Learning cannot be granted for courses in which the applicant has ever been enrolled in at SUNY Canton.

The maximum number of Prior Learning credit that may be applied is 15 credit hours for an associate degree and 30 credit hours for a baccalaureate degree. Such credit will be evaluated according to the following procedure:

1. The student must apply for Prior Learning Credit during the first year of matriculation in the program. Applicants must complete the Application for Prior Learning Credit and submit the form to the Dean of the School in which the program is located.

- 2. The Dean, in consultation with other Deans as appropriate, will arrange for a Prior Learning Credit Advisor selected from the School's faculty to assist the students in preparing the necessary documentation in support of the number of credits requested. The portfolio must clearly evidence mastery of a preponderance of the learning outcomes as listed in the course out-line(s) in order for a request to be viable.
- 3. The student will submit a formal letter of request and a portfolio containing all documentation and pertinent adjunct supportive material to the Prior Learning Credit Advisor within the first ten weeks of the student's second matriculated semester. The student will be notified of the decision within five weeks after submitting the portfolio.
- The portfolio will be evaluated by one or more faculty members recruited by the Dean as content reviewers.
- 5. The Prior Learning Credit Advisor will provide the content reviewer(s) with a copy of the most recent appropriate course outline(s), including detailed learning objectives.
- 6. The content reviewers will submit their recommendations to their Dean. The Prior Learning Credit Advisor can serve as one of the content reviewers.
- 7. Following the decision of the Dean, a notice will be forwarded to the student, the Prior Learning Credit Advisor, and the Registrar regarding the amount of credit granted and the courses for which the credit will be counted in the student's program.
- Forty dollars (\$40) per credit hour will be charged for the review of the materials. This fee must be paid and registration procedures completed prior to the beginning of the review. Payment will be made at the One Hop Shop in the Campus Center. NOTE: It is the responsibility of the student to follow up and ensure that the form gets to the Dean. Student Accounts will not forward the form if the student is paying through CashNet.

- 8. Forty dollars (\$40) per credit hour will be charged for prior learning credit granted. This fee must be paid prior to the granting of credit. Payment will be made at the One Hop Shop in the Campus Center.
- Credit will be recorded as "CR" on the student's official transcript under the appropriate course number, but only following the student's satisfactory (2.00 GPA or higher) completion of one fulltime semester or its equivalent in the student's program.

# MILITARY TRAINING AND EXPERIENCE

The College may grant advanced standing for military training and experience as recommended by the American Council on Education. Where courses, service school experience, or subject matter exams are applicable to a curriculum in which a student is enrolled at this college, credit will be determined using the publication "Guide to the Evaluation of Educational Experiences in the Armed Services." In order to have your military transcripts evaluated, please utilize the Joint Service Transcript (https://jst.doded.mil/smart/signIn. do) website and have your military transcript digitally sent to the SUNY Canton Admissions office.

## MANNER OF RECORDING ADVANCED STANDING

Official transcripts of this college will include the appropriate number of credits granted for (1) courses transferred in from other higher education institutions, (2) proficiency examinations completed satisfactorily, (3) validated life experiences, and/ or (4) military training and experience as "CR" credit only and be excluded in the calculation of a student's cumulative honor point index.

# EARLY ADMISSION PROGRAM

Early admission will be granted to an applicant who has completed grade eleven

of an accredited secondary school, meets the admission criteria for the program applied for, has maintained a strong academic average, and is recommended for college by the principal or guidance counselor. A contract detailing specific arrangements for completing the requirements for high school graduation must be made between the student, the high school principal, and the Director of Admissions. For further information, please contact the Office of Admissions. Arrangements for this contract are the responsibility of the applicant.

Students may be eligible for New York State TAP awards prior to completion of high school graduation requirements pending successful completion of "Ability to Benefit" test, also known as "Accuplacer". Additional information about paying for college is provided by the NYS Higher Education Services Corporation. If a student will not have their high school diploma when they start at Canton and want to pursue a possible TAP award, they will need to take the Accuplacer. Scores would then be reviewed by the TAP certifying officer for aid consideration. Contact Sharon Tavernier at taverniers@canton.edu or by phone (315) 379-3954 to schedule the exam. Students seeking federal financial aid (in the form of grants or loans) will need to provide a letter signed by the high school principal stating that coursework will not be counted toward the high school diploma.

### SUNY UPSTATE MEDICAL UNIVERSITY COLLEGE OF HEALTH PROFESSIONS EARLY ASSURANCE PROGRAM

The SUNY Upstate Medical University Early Assurance Program with SUNY Canton is a joint admissions program whereby students enroll at SUNY Canton for two years, complete an associate degree, and are then guaranteed admission into one of the SUNY Upstate Medical University College of Health Professions upper division programs. An exception to this is the Doctorate of Physical Therapy which requires a bachelor's degree prior to entry into the DPT Program at Upstate Medical University.

The degree programs offered through the College of Health Professions Early Admission Program are: Medical Imaging Radiography (X-rays), Medical Imaging Sciences/Ultrasound, Medical Biotechnology, Medical Technology, Radiation Therapy, Respiratory Therapy, and Nursing.

This program is a unique opportunity for students with a demonstrated commitment to a career in the health professions and a strong record of achievement in high school. Students accepted into this program are required to have completed at least three years of Regents or honors level courses in math and science. Students applying to the Early Assurance Program should be in the upper quartile of their class. They must demonstrate a strong leadership background and show participation in extracurricular activities.

To apply for the SUNY Upstate Medical University College of Health Professions Early Assurance Program, students must complete the SUNY application for admission applying for Liberal Arts & Science: General Studies at SUNY Canton noting joint admission with SUNY Upstate Medical University at Syracuse. THE STUDENT DOES NOT COMPLETE THE SUNY APPLICATION FOR UPSTATE MEDICAL UNIVERSITY. The student must complete the SUNY Upstate College of Health Professions application (https://www.upstate.edu/ prospective/basics/about\_applying.php) for their program of interest. An admissions interview will be required, though not guaranteed. Please see the website for deadlines and admission requirements. Student Admissions at SUNY Upstate may be reached at (315) 464-4570 or admiss@ upstate.edu.

For further details, contact the SUNY Canton Office of Admissions, 315-386-7123 or 800-388-7123.

### Ex-Offenders/ Disciplinary Dismissal from College

Students are not required at the point of application to disclose prior felony conviction. The college is required to inquire if the student has a prior felony conviction if a student seeks access to campus housing, participation in clinical, field experiences or internships, or participation in a study abroad program. However, depending on the field of study, a felony conviction can prevent a student from earning a degree or a licensure. Potential students who have been dismissed for disciplinary reasons from a college will have their application reviewed by the Admissions Review Board. Copies of this policy are available from the Office of Admissions. Individuals who have been dismissed for disciplinary reasons from a college and who wish to apply are required to identify themselves as such and should request a copy of the policy. Individuals who do not disclose this information prior to admission may have their admission rescinded at the discretion of the Administration.

### ARTICULATION AGREEMENTS

#### 2+2 PROGRAMS

SUNY Canton has established articulation agreements with community colleges, whereby students, upon completion of an associate degree at the community college, can transfer into a SUNY Canton baccalaureate program.

ADIRONDACK COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Information Technology – Info Security, AS	Information Technology, B.Tech
Liberal Arts: Humanities and Social Science, Psychology Concentration, AA	Applied Psychology, BS
Nursing, AAS	Nursing, BS

BERGEN COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE			
Veterinary Technology, AAS	Veterinary Services Management, B.Tech			
SUNY BROOME COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE			
Nursing, AAS	Nursing, BS			
CAYUGA COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE			
Early Childhood, AAS	Early Childhood Care and Management, BBA			
Nursing, AAS	Nursing, BS			
CLINTON	SUNY CANTON			
COMM. COLLEGE	BACHELOR'S DEGREE			
Business Admin., AS	Finance, BBA			
Nursing, AAS	Nursing, BS			
COLUMBIA-GREENE COMM. COLLEGE	SUNY CANTON BACH- ELOR'S DEGREE			
Nursing, AAS	Nursing, BS			
	j č			
COLUMBUS STATE COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE			
Veterinary Tech., AAS	Veterinary Service Administration, BBA			
DUTCHESS COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE			
	<u> </u>			
Criminal Justice: Public and Private Security, AAS	Law Enforcement Leadership, B.Tech			
	Early Childle 1 C			
Early Childhood, AAS	Early Childhood Care and Management, BBA			
Liberal Arts and	Applied Psychology, BS			
Sciences: Humanities & Social Sciences:, AA				
Nursing, AAS	Nursing, BS			
	r			
ERIE COMMUNITY COLLEGE	SUNY CANTON BACHELOR'S DEGREE			
Computer Science, AS	Information Tech., B.Tech			
Criminal Justice, AS Criminal Justice: Law Enforcement, AAS	Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement			
	Leadership, B.Tech			

ERIE COMMUNITY COLLEGE	SUNY CANTON BACHELOR DEGREE			
Engineering Science, AS	Civil and Environmental Engineering Technology, B.Tech Industrial Technology Management, B.Tech Mechanical Engineering Technology, B.Tech			
Liberal Arts and Sciences: General Studies, AS	· · ·	blied Psychology, BS althcare Management, BS		
Nursing, AAS	Nu	rsing, BS		
Social Science, AA		plied Psychology, BS althcare Management,		
FINGER LAKES COMM. COLLEGE		NY CANTON CHELOR'S DEGREE		
Nursing, AAS	Nu	rsing, BS		
GENESEE COMMUNI COLLEGE Nursing, AAS	1	SUNY CANTON BACHELOR'S DEGREE Nursing, BS		
Nursing, AAS Veterinary Tech., AAS	1	Nursing, BS Vet. Services Mgmt., B.Tech		
Hillsborough Comm. College	SUNY CANTON BACHELOR'S DEGREE			
Cybersecurity, AS	Cybersecurity, BS			
HOLYOKE COMM. COLLEGE		UNY CANTON ACHELOR'S DEGREE		
Nursing, AAS Veterinary Technology, AAS	V	lursing, BS /eterinary Service dministration, BBA		
HUDSON VALLEY COMM. COLLEGE		SUNY CANTON BACHELOR'S DEGREE		
Nursing, AAS	N	lursing, BS		
JEFFERSON COMM. COLLEGE		NY CANTON CHELOR'S DEGREE		
Nursing, AAS Nursing, BS				
JOHNSON COLLEGE		NY CANTON CHELOR'S DEGREE		

MANOR COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Veterinary Tech., AS	Veterinary Services Admin., BTech

MOHAWK COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Nursing, AAS	Nursing, BS
MONROE COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Nursing, AAS	Nursing, BS
NASSAU COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Nursing, AS	Nursing, BS
NORTH COUNTRY COMMUNITY COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Nursing, AAS	Nursing, BS
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NORTH SHORE COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Nurse Education, AS	Nursing, BS
Veterinary	Veterinary Services
Technology, AAS	Management, B.Tech
NORTHCENTRAL TECH. COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Nursing, AAS	Nursing, BS
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ONONDAGA COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Nursing, AAS	Nursing, BS
ORANGE COUNTY COMM. COLLEGE	SUNY CANTON BACHERLOR'S DEGREE
Computer Information Technology -	Cybersecurity, BS
Networking, AAS Computer Science, AS	Cybersecurity, BS
Cybersecurity, AAS	Cybersecurity, BS
ROCKLAND COMMUNITY COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Cyber Security, AAS	Cybersecurity, BS
Math and Computer Science-Math Track, AS	Information Tech., B.Tech
Math and Computer Science-Computer Sci- ence Track, AS	Information Technology, B.Tech
Nursing, AAS	Nursing, BS

ST. JOSEPH'S SCHOOL OF NURSING	SUNY CANTON BACHELOR'S DEGREE	
Nursing, AAS	Nursing, BS	

SUFFOLK COUNTY COMM. COLLEGE	SUNY CANTON BACHELOR'S DEGREE
Nursing, AAS	Nursing, BS
Veterinary Science Technology, AAS	Veterinary Services Management, B.Tech

SUNY DELHI	SUNY CANTON BACHELOR'S DEGREE
Veterinary Science	Vet. Services Mgmt.,
Technology, AAS	B.Tech

SUNY ULSTER CTY.	SUNY CANTON
COMM. COLLEGE	BACHELOR'S DEGREE
Nursing, AAS	Nursing, BS
Veterinary	Veterinary Services
Technology, AAS	Management, BTech

SUNY Canton has also established articulation agreements with four-year colleges whereby a SUNY Canton student, upon completion of specified courses, can transfer to a participating 3+3 Masters program at a four-year college in a parallel program with three years remaining to complete the Masters degree program.

The colleges which participate with SUNY Canton in 3+3 programs are:

	SUNY CANTON BACHELOR'S DEGREE		
University at Buffalo	Legal Studies, BS		
School of Law	Applied Psych., BS		

SUNY Canton has also established articulation agreements with doctoral degree granting colleges whereby a SUNY Canton student, upon completion of the bachelor degree and specified courses, can transfer to a participating program at a doctoral degree granting college in a parallel program with five years remaining to complete the doctoral degree program.

The colleges which participate with SUNY Canton are:

COLLEGE	BACHELOR'S DEGREE CURRICULA
Ross University	Veterinary Technology, BS

### ARTICULATION AGREEMENTS WITH HIGH SCHOOLS

Currently, SUNY Canton has a signed agreement with the following High School. Students are encouraged to speak to their guidance counselor to learn the specifics about the agreement for their particular program or courses. We are continuously adding to our list of participating schools, therefore, students should check with their counselor to determine whether the high school has established an agreement since this printing.

High School		SUNY Canton		
District Name	Program	Curriculum	Course(s) & (Credits)	
Abraham Lincoln High School	Veterinary Science	Veterinary Sci. Tech., AAS <b>Or</b> Veterinary Technology, BS	VSCT 103 (2)	

### ARTICULATION AGREEMENTS WITH INTERNATIONAL COLLEGES

Currently, SUNY Canton has signed agreements with the following international colleges.

PK Fokam		SUNY CANTON BACHELOR'S I		
Management, BBA		Management, BBA		
Finance, BBA	Finance, BBA			
International Institute of Health Sciences (IIHS)	A	UNY CANTON SSOCIATE EGREE	SUNY CAN BACHELO DEGREE	
Physiotherapy	Physical Therapy Assistant, AAS		Health and Promotion	

### ARTICULATION AGREEMENTS WITH BOCES & CTE CENTERS

Currently, SUNY Canton has signed agreements with the following BOCES Centers. Students are encouraged to speak to their guidance counselor to learn the

specifics about the agreement for their particular program and BOCES Center. We are continuously adding to our list of participating centers, therefore, students should check with their counselor to determine whether a particular center has established an agreement since this printing.

BOCES/CTE		SUNY Canton		
Center Name	Program	Curriculum	Course(s) & (Credits)	
	Advanced Manufacturing	Mechanical Engineering Tech. AAS	MECH 299 (3)	
Broome-Tioga County BOCES	Business Management & Computer Careers	Computer Information Systems, AAS or Information Technology, B.Tech	CITA 110 (2), CITA 163 (3)	
6 /	CAD & 3D Animation	Air Conditioning Engineering, AAS	SOET 116 (3)	
	Graphics and Game Design	Game Design and Development, B.Tech	GMMD 102 (3)	
Capital Region BOCES	Engineering Technology	Mech. Engineering Technology, B.Tech	MECH 128 (3)	
	Auto Technology-Maintenance & Light Re-pair	Automotive Technolo-gy, AAS	AUTO 101 (2), AUTO 111 (1)	
Cattaraugus-Allegany-Erie- Wyoming BOCES	Criminal Justice I & II	Criminal Justice, AAS Criminal Investigation, B.Tech Homeland Security, B.Tech	JUST 101 (3), JUST 299 (3)	
	Early Childhood Education/Human Services	Early Childhood, AS	ECHD 200 (3)	
	Media Communications Technology	Graphic & Multimedia Design, B.Tech	GMMD 102 (3), GMMD 112 (3)	
	Digital Art & Design	Computer Information Systems, AAS Information Technology, BTech Graphic and Multimedia Design, BTech	CITA 111 (2) CITA 163 (3)	
	Early Childhood	Early Childhood, AAS Early Childhood Care and Mgmt., BBA	ECHD 121 (3)	
Delaware-Chenango- Madison-Otsego (DCMO) BOCES	Computer Repair & Networking Technician	Computer Information Systems, AAS Cybersecurity, BS Information Technology, BTech	CITA 170 (3), CITA 220 (3) CITA 221 (1)	
	Early Child Education	Early Childhood Care and Mgmt., BBA	ECHD 121 (3)	
	Automotive Mechanics	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	
Dutchess County BOCES	Computer Hardware Technician Technology	Computer Information Systems, AAS Cybersecurity, BS Information Technology, BTech	CITA 170 (3)	
bools	Early Childhood Education	Early Childhood, AS	ECHD 200 (3)	
	Early Childhood Education	Early Childhood Care and Mgmt., BBA	General Elective (3)	
	Animal Science I & II	Veterinary Science Technology, AAS Veterinary Technology, BS	VSCT 103 (2)	
	Criminal Justice I & II	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3) General Elective (3) (2) JUST 299 (6)	
Eastern Long Island Academy of Applied Technology/Eastern	Early Childhood	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
Suffolk BOCES		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3)	
	Engineering	Electrical Engineering Technology, AAS or BET	ELEC 165 (3)	
	Heating/Plumbing	HVAC Trades, AOS	HVAC 103 (3), HVAC 104 (2) HVAC 110 (3)	
	Welding/Metal Fabrication	Automotive Technology, AAS	AUTO 104 (2)	

BOCES/CTE		SUNY Canton		
Center Name Program		Curriculum Course(s) & (Credits)		
	Auto Technician Training	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1) AUTO 104 (2)	
	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3) General Elective (3)	
	Cybersecurity and Networking	Cybersecurity, BS	CITA 165 (3), CITA 220 (3), CITA 221 (1)	
Erie BOCES	Early Childhood Education	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3), ECHD 200 (3), General Elective (3)	
	Electronics and Computer Technology	Electrical Engineering Technology AAS or BTech	ELEC 101 (3), ELEC 109 (1), ELEC 161 (2), ELEC 165 (3), ELEC 166 (1)	
	Engineering and Robotics	Mechanical Engineering Technology AAS or BTech	Program Elective (3)	
	Health Careers	Health and Fitness Promotion, BTech	HEFI 299 (3)	
	Plumbing, Heating & Air Conditioning	Air Conditioning Maintenance and Repair, Cert	HVAC 110 (3), HVAC 103 (3) HVAC 104 (2)	
	Sports Science Careers	Health and Fitness Promotion, BTech	HEFI 299 (3)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2) AUTO 111 (1)	
Erie-2-Chautauqua- Cattaraugus	Criminal Justice	Criminal Justice, AAS, Criminal Investi- gation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech	JUST 101 (3) JUST 299 (3)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3)	
Franklin-Essex-Hamilton BOCES	Health Occupations	Healthcare Management, BS Individual Studies Health, AAS	HLTH 200	
	New Visions Game Design	Computer Information Systems, AAS Information Technology, B.Tech Cybersecurity, BS	CITA 152 (3)	
	Welding	Automotive Technology, AAS	AUTO 104 (2)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
Genesee Valley BOCES	Precision Machining/Metal Trades I & II	Automotive Tech., AAS or Mech.Eng. Tech., AAS, BTech	AUTO 104 (2)	
Greater Southern Tier BOCES	Animal Science	Veterinary Science Technology, AAS or Veterinary Technology, BA	VSCT 103 (2)	
Herkimer-Fulton-	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
Hamilton-Otsego (Herkimer) BOCES	Child and Family Services	Early Childhood, AS Early Childhood Care and Mgmt. BBA	ECHD 121 (3)	

BOCES/CTE		SUNY Canton		
Center Name Program		Curriculum Course(s) & (Credits)		
	3D Modeling and Design I & II	Mechanical Engineering Tech., AAS	Program Elective (3)	
		Mechanical Engineering Tech., BTech	CAD Elective (3)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
	Early Childhood, AS	Early Childhood Care and Mgmt., BBA	ECHD 121 (3), ECHD 200 (3), General Elective (3)	
Jefferson-Lewis BOCES	Electronic & Computer Tech.	Computer Information Systems, AAS or Information Technology, B.Tech	CITA 170 (3), CITA 220/221 (4)	
	Engineering and Design	Mechanical Engineering Tech., BTech	MECH 299 (3)	
	Gas/Diesel Mechanics	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
	Veterinary Practices	Veterinary Science Technology, AAS or Veterinary Technology, BS	VSCT 103 (2)	
	Welding Technology	Automotive Technology, AAS	AUTO 104 (2)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
	Carpentry I & II	Construction Technology Mgmt., AAS	CONS 112 (3)	
Madison-Oneida BOCES	Criminal Justice	Criminal Justice, AAS	JUST 101 (3), Gen. Elective (3)	
	Early Childhood Education	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3)	
	Health Related Careers I & II	Healthcare Management, BS	HLTH 200 (3)	
	Advertising Design/Multimedia	Graphic and Multimedia Design, BS	GMMD 101 (3) GMMD 102 (3)	
		Technological Communications, BS	TCOM 299 (3)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1), AUTO 104 (2)	
	Auto Body Collision and Repair Tech.	Automotive Technology, AAS	AUTO 104 (2)	
	Child and Family Development	Early Childhood, AS Early Childhood Care and Management,BBA	ECHD 121 (3)	
Monroe 2-Orleans (WEMOCO) BOCES	Computer Technology/Information Technology	Computer Information Systems, AAS Information Technology, BTech Cybersecurity, BS	CITA 170 (3)	
	Criminal Justice I & II	Criminal Justice, AAS Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech	JUST 101 (3) JUST 299 (3)	
	HVAC/Plumbing	HVAC Trades, AOS	CONS 151 (2), HVAC 110 (3)	
	Machining	Mechanical Engineering Technology, AAS, B.Tech	MECH 121 (3)	
	Welding	Automotive Tech, AAS	AUTO 104 (2)	
	Digital Design/Graphic Communications	Graphic & Multimedia Design, B.Tech	GMMD 102 (3)	
Nassau BOCES	Early Childhood Education	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3), ECHD 200 (3) General Elective (3)	
	EMT 2	Emergency Management, BS	3 EADM 399 Program Electives (9	

BOCES/CTE		SUNY Canton		
Center Name Program		Curriculum Course(s) & (Credits)		
	Advertising Design & Multimedia Productions	Graphic & Multimedia Design, BTech	GMMD 102 (3)	
	Auto Body Repair; or Auto Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
	Combination Welding	Automotive Technology, AAS	AUTO 104 (2)	
Oneida-Herkimer-	Early Childhood Education	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3)	
Madison BOCES	Emerging Technologies: Computer Repair/Networking/Cybersecurity	Computer Information Systems, AAS; or Information Technology, B.Tech	CITA 163 (3), CITA 170 (3), CITA 220 (3)	
		Cybersecurity, BS	CITA 165 (3), CITA 170 (3), CITA 220 (3)	
	Emerging Technologies: Computer Repair/Networking/Cyber Security	Cybersecurity, BS	CITA 165 (3), CITA 170 (3) CITA 220 (3)	
	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	
Onondaga-Cortland-	Early Childhood Education	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3)	
Madison BOCES	Graphic Communications	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 299(3)	
	Media Marketing	Technological Communications, BS	TCOM 299 (3)	
	Welding Technology	Automotive Technology, AAS	AUTO 104 (2)	
	Education and Management	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), Gen Elective (3)	
Orleans-Niagara BOCES	Graphic Communications	Graphic & Multimedia Design, B.Tech	GMMD 102 (3)	
	Auto Technology	Automotive Technology, AAS	AUTO 111 (1), AUTO 101 (2)	
Oswego BOCES	Cisco Networking	Computer Information Systems, AAS Information Technology, B.Tech Cybersecurity, BS	CITA 220/221 (4)	
	Computer Systems & Networking – A+ Computer Repair	Computer Information Systems, AAS Information Technology, B.Tech Cybersecurity, BS	CITA 170 (3), CITA 175 (1)	
	Automotive Service Center Technician	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
Otsego-Norther Catskills (ONC) BOCES	Health Occupations	Health and Fitness Promotion, BTech	HEFI 299 (3)	
(		Physical Therapist Assistant, AAS	2 bonus points on Admissions rubric	
	Carpentry	Construction Technology, AAS	CONS 112 (3)	
	Computer Graphics	Graphic & Multimedia Design, B.Tech	GMMD 102 (3)	
Putnam-Northern Westchester BOCES	Law Enforcement I & II	Criminal Justice, AAS Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech	JUST 101 (3), JUST 299 (3)	
	Nutrition 101 and Wellness and Nutrition	Health and Fitness Promotion, B.Tech	HEFI 299 (3)	
	Sports Medicine I & II	Health and Fitness Promotion, B.Tech	HEFI 299 (3)	
Questar III (Rensselaer- Columbia-Greene) BOCES	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3) JUST 299 (3)	

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
	Allied Health	Individual Studies: Health, AAS	HLTH 200 (3)
	Automotive Technologies	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1),
St. Lawrence-Lewis BOCES	Criminal Justice I & II	Criminal Justice, AAS Criminal Investigation, BTech Criminal Justice: Law Enforcement Leadership, BTech Homeland Security, BTech	JUST 101 (3) General Elective (3)
	Education & Human Services	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3)
	Health Careers	Health Science Career Studies or Healthcare Management,	HLTH 103 (3), HLTH 200 (3)
	Heating, Ventilation, AC & Refrigeration	Air Conditioning & Eng. Tech., AAS	MECH 103 (3)
	Metalworking Technologies	Automotive Technology, AAS	AUTO 104 (2)
Ulster BOCES	Digital Design and Programming	Game Design and Development, BS	GAME 110 (3), GAME 130 (3)
	AME Academy	Automotive Technology, AAS	AUTO 111(1), AUTO 101 (2), AUTO 104 (3)
	AME Academy	General Technology, AAS	SOET 116 (2)
Wayne-Finger Lakes BOCES	AME Academy	Mechanical Technology, AAS or Mechanical Engineering Tech. BTech	SOET 116 (3) MECH 121 (3)
	Animal Science	Veterinary Science Tech., AAS or Veterinary Technology, BS	VSCT 103 (2)
	Advertising/Graphic Design	Graphic & Multimedia Design, B.Tech	ARTS 101 (3)
	Architectural Design/CAD	Civil Engineering Tech. AAS, B.Tech Construction Technology Mgmt., AAS	SOET 116 (2)
	Carpentry	Construction Technology Mgmt., AAS	CONS 112 (3)
	Certified Personal Trainer	Health and Fitness Promotion, BTech	2 HEFI Electives (6)
Western Suffolk BOCES	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech CJ: Law Enforcement Leadership, BTech Homeland Security, BTech	JUST 101 (3), General Elective (3)
	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3
	HVAC	Mechanical Engineering Technology, AAS or BTech	MECH 103 (3)
	Medical Assisting	Individual Studies – Health, AAS Healthcare Management, BS	HLTH 200
	Physical Therapy Assistant	Physical Therapy Assistant, AAS	3 bonus points on Admission Rubric
	Welding	Automotive Technology, AAS	AUTO 104 (2)
	Auto Body Repair	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
Washington-Saratoga- Warren-Hamilton-Essex	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3)
BOCES (WSWHE) BOCES	Graphic and Visual Communications	Graphic & Multimedia Design, B.Tech	GMMD 102 (3)
	Heavy Equipment Maintenance and Operation	Automotive Technology, AAS	AUTO 101 (2), AUTO 102 (2), AUTO 111 (1)
	Welding	Automotive Technology, AAS	AUTO 104 (2)

### CONCURRENT Admissions (CON AP)

The Concurrent Admissions Program (ConAP) is a partnership between the Army Recruiting Command and over 1,900 participating colleges to mutually advance the goals of lifelong learning and post-secondary education for Future Soldiers. Concurrent with their enlistment in the Army, new soldiers are encouraged to apply for admission to SUNY Canton. Upon meeting satisfactory criteria for full or provisional admission, the soldier will be allowed to defer admission until completion of military service.

After completing a two-, three-, or four-year enlistment, the new veteran will be encouraged to enroll at SUNY Canton. This program also applies to soldiers enlisting in the Army Reserve.

Those interested in the CON AP program are encouraged to contact the SUNY Canton Coordinator of Veterans and Military Services.

### Air Force Reserve Officer Training Corps (AFROTC)

**AIR, SPACE, & CYBERSPACE STUDIES** Air Force Reserve Officer Training Corps (AFROTC) combines college study with military leadership, discipline, and training to produce officers and leaders for the United States Air Force and United States Space Force. Upon completion of the program and graduation with at least a bachelor's degree, students are commissioned as second lieutenants in the active duty Air Force or Space Force. A commission is an appointment as a military officer by the President of the United States.

#### CURRICULUM

AFROTC is normally a four-year program divided into two parts, the General Military Course (GMC) for freshmen and sophomores, and the Professional Officer Course (POC) for juniors and seniors. All cadets also complete Leadership Laboratory (LLAB) each semester. Students are eligible to enroll as active cadets as late as the fall of their sophomore year and would enroll in both the freshman and sophomore classes. All students are eligible to take the Aerospace Studies courses but LLAB and physical training (PT) are restricted to only those students pur-suing a commission.

#### GENERAL MILITARY COURSE (GMC)

The GMC involves a one credit hour course and a two-hour Leadership Laboratory each semester. The fresh-man curriculum introduces e students to the United States Air and Space Forces and provides an overview of the basic characteristics, missions, and organization of the Air and Space Forces. The sophomore curriculum picks up where the freshman curriculum left off and provides a fundamental understanding of both leadership and team building.

#### FIELD TRAINING

After successful completion of the GMC, cadets are scheduled to attend Field Training during the summer between the sophomore and junior year. Field Training is an intense, three-week, hands-on leadership challenge. Cadets are evaluated on their leadership ability, mastery of military customs and courtesies, and drill and ceremonies.

# PROFESSIONAL OFFICER COURSE (POC)

After successfully completing Field Training, cadets are sworn in to the POC and are enlisted in the inactive reserves while they complete their final two years of college. POC cadets are placed in leadership positions and are charged with running the cadet wing that is modeled after the organizational structure of the active-duty Air Force. The junior curriculum focuses on an in-depth study of leadership and management concepts. Special emphasis is placed on enhancing communication skills, and why they are important as a leader. The senior curriculum is designed to give the foundation for cadets to understand their role as military officers and how they are directly tied to our National Security Strategy. It is an overview of the complex social and political issues facing the military profession.

#### LEADERSHIP LABORATORY (LLAB)

LLAB is a hands-on leadership training program. During LLAB, cadets are instructed in skills they will need for a thriving military career. POC cadets are responsible for planning and executing LLAB, as well as other extracurricular activities like formal dinners and awards ceremonies. Cadets are challenged in the classroom and their jobs in the cadet wing require them to put the theories into practice. Additionally, cadets must partic-ipate in 2 hours of Physical Training (PT) per week during each semester.

#### **SCHOLARSHIPS**

Merit-based tuition scholarships are available to AFROTC cadets; however they are not required to join the program. If a cadet has not received a scholarship for their freshman or sophomore years, after completing Field Training they are awarded a leadership award that pays up to \$18,000 per year for tuition and fees. Below is a list of current scholarships.

TYPE 1 — Pays full tuition and authorized fees at any public or private institution.

TYPE 2 — Pays up to \$18,000 per year (or \$9,000 per semester) towards tuition and authorized fees at any public or private institution.

TYPE 7 — Pays full in-state tuition rate and authorized fees at in-state public institutions (this can for covers all of SUNY Canton's tuition and fees)

All scholarships include the following:

Monthly stipend during the academic year (up to \$500 per month)

Book allowance (\$450 per semester)

Any AFROTC scholarship can also be converted to a housing scholarship, which pays up to \$10,000 per year for on-campus housing.

For more details, contact the Air, Space, & Cyberspace Studies Department at det536af@clarkson.edu or 315-268-7989.

### ARMY RESERVE OFFICER TRAINING CORPS (AROTC) MILITARY SCIENCE

Army ROTC is a college program that produces Officers for the US Army. This program is available to SUNY Canton students by cross enrolling in the classes offered at Clarkson University. Students enroll in a series of classes and labs that teach problem solving, leadership theory, and decision making in a military context. There is a physical fitness component to the program and students are expected to meet fitness standards to complete the program. The goal of the department is to develop leadership and managerial ability, while preparing students to become Officers in the U.S. Army. An active extracurricular program provides many opportunities to participate in adventure training, intramural sports, and Army internships. Qualified students can compete for an opportunity to attend the Army Airborne School or Air Assault School. Army ROTC allows students flexibility to include ROTC in their various courses of study.

#### **BASIC COURSE**

#### (Freshman and Sophomore Years)

The Basic Course teaches rudimentary soldier skills and knowledge and provides students with sufficient military background to make informed decisions about continuing on the path to becoming an Army Officer. It also gives the Army ROTC instructors the ability to access the future potential of enrolled students. Most enrolled students in the Basic Course incur no military obligation and can withdraw at any time. Students who do decide to take the next step may compete for scholarships or pursue a non scholarship contract. All contracted Cadets receive a monthly stipend for participating in the class and incur a service obligation when they graduate.

#### PRIOR SERVICE/VETERANS

The Basic Course is normally a prerequisite for the Advanced Course; however, prior service personnel or members of the Reserve Forces who have completed basic training may enroll in the Advanced Course as juniors as long as they have achieved junior status.

#### **BASIC-CAMP**

Other interested students may qualify for the Advanced Course by attending a four-week Basic camp. Students applying through this route normally attend Basic Camp between the sophomore and junior years. This program is available to students who have at least two academic years remaining in their degree program, but did not participate in Army ROTC during some or all of their first two years of college.

#### ADVANCED COURSE

#### (Junior and Senior Years)

The Advanced Course places increased emphasis on tactical, technical, and leadership skills to prepare students for the Advanced Camp, normally attended the summer between the junior and senior years. The final year is spent on topics in military officership, and gives the students the opportunity to hold Battalion level staff positions.

#### **SCHOLARSHIPS**

The Army ROTC program has a limited number of scholarships available to qualified students. These are merit based scholarships and normally offered to students who are enrolled in the program. They are awarded based on merit and academic potential, not on need. Students can compete for three-year scholarships during their freshman year and two-year scholarships during their sophomore year.

General information about ROTC can be found at www.armyrotc.com and information about the program at SUNY Canton can be found at www.clarkson.edu/ armyrotc

To enroll or get more information contact the enrollment officer at 315 268-7695 or <u>armyrotc@canton.edu</u>. The following are estimated costs of attending SUNY Canton for 2023-24. *All costs are subject to change without notice.* 

TUITION	Fall 2023 SEMESTER	Spring 2024 SEMESTER	TOTAL
	#2 525 00	<i><b>#</b>2 <b>525</b> 00</i>	<b>#= •=</b> • • • •
NYS Resident		\$3,535.00	\$7,070.00
Excelsior Students		\$3,235.00	\$6,470.00
Out-of-State Resident (Bachelor)		\$8,490.00	\$16,980.00
Out-of-State Resident (Associate)	\$5,750.00	\$5,750.00	\$11,500.00
Out-of-State Residents in Online Program	15		
All Degrees	\$4,240.00	\$4,240.00	\$8,480.00
COMPREHENSIVE STUDENT FEE*	¢		
First Time Students	\$929.50	\$809.50	\$1,739.00
Continuing Students	\$809.50	\$809.50	\$1,619.00
ADDITONAL FEES			
Transcript Fee (billed each semester)	\$5.00	\$5.00	\$10.00
Graduation Fee (graduating students only	φ	\$25.00	\$25.00
Parking & Vehicle Registration Fee	\$188.60	φ29.00	\$188.60
(includes NYS sales tax, full year charged in Fall semester)	ψ100.00	_	φ100.00
Accident & Sickness Insurance	\$1,242.00	\$1,720.00	\$2,962.00
International Health Insurance	\$1,076.14	\$1,491.14	\$2,567.28
(foreign students only)			
MEALS**			
Smith, Mohawk, Heritage, Rushton (10 meals/wk	\$3,160.00	\$3,160.00	\$6,320.00
19 meals and \$200 Campus Cash)			
Kennedy Hall		\$2,525.00	\$5,050.00
(7 meals per week			
Commuter Meal Plan (optional)	\$875.00	\$875.00	\$1,750.00
(60 meals/semester and \$250 Campus Cash )		•	

#### HOUSING

Smith, Mohawk, Heritage, and Rushton l	Residence Ha	alls	
Double Room (standard)	\$4,425.00	\$4,425.00	\$8,850.00
Esports Double Room	\$5,190.00	\$5,190.00	\$10,380.00
Single Room	\$5,190.00	\$5,190.00	\$10,380.00
Kennedy Hall	\$5,825.00	\$5,825.00	\$11,650.00
Laundry Fee	\$55.00	\$55.00	\$110.00

\* See description below. \*\* Residential students are required to purchase a meal plan.

\*\*A "double room credit" billing model is used for students living in our four traditional residence halls. All students in Rushton, Mohawk, Heritage, and Smith Halls initially pay a room rate of \$5,190. Students who have a roommate will receive a pro-rated "double room credit" of \$255 at the end of the 5th, 10th and 15th weeks of each semester for as long as they have a roommate. If their roommate moves out, they will no longer receive these credits as they are now in a single room. Due to the higher cost associated with the Esports Wing, students are not eligible for a "double room credit."

### FEES

#### COMPREHENSIVE STUDENT FEE

The comprehensive Student Fee is charged to all degree students and consists of the following fees:

- **College Fee** *(mandatory)* Fee required by all State-operated campuses.
- **Athletic Fee** *(mandatory)* Supports all intercollegiate athletic programs.
- **Health Fee** (mandatory) Supports the campus health Center. Students can use the health center for minor illness/injuries with no additional charge.
- Educational Technology Fee (mandatory) Supports the campus technology infrastructure and continued improvement of computer systems, classroom technology, wireless connections and technical help.
- **Student Activity Fee** (mandatory) supports a wide range of activities that take place on campus for educational and entertainment purposes.
- **Transcript Fee** (mandatory) Covers cost of all transcript requests for the student now and in the future.
- Alumni Fee *(optional)* Supports the College Alumni Association. Alumni services include: scholarships, gatherings, alumni weekend, and the alumni newsletter. (Instructions for waiver of fee on college billing instructions.)
- **Recreational Facilities Fee** *(optional)* Provides unlimited use of the campus recreational facilities. (Instructions for waiver of fee on college billing instructions.)

#### LATE REGISTRATION FEE

Should a student fail to register by the appropriate deadline, a \$50 late registration fee will be assessed.

#### LATE PAYMENT FEE

Should a student fail to process a bill by the appropriate deadline, a \$40 late

payment fee will be assessed. This includes those checks used as payment of fees on or before a registration but returned by the bank as unpaid after registration day. A \$20 charge will be assessed for each check used for payment of fees which has been returned from a bank as unpaid.

#### **BILL PAYMENT**

Your student bill is required to be paid by the bill due date indicated on the semester bill. Bills received after these dates will be subject to a \$40 late payment fee and cancellation of class schedule and room assignment. If you wish to request a special deferment for payment, you should make arrangements with the Student Service Center BEFORE the bill due date. All deferments must be paid in full by the end of the semester for which it was made. Students not meeting the terms of their deferment may be subject to penalty during the semester. Penalties include, holds on accounts for transcripts, holds on meal plans and Roo Express credit, and possible suspension.

#### FINANCIAL AID REFUNDS

Refunds for those students who have a credit on their account from financial aid will begin with the fifth week after school begins. Refunds will be delivered with BankMobile Disbursements, a technology solution, powered by BMTX, Inc. Visit this link for more information: https://disbursements.bmtx.com/ refundchoices/. Students may check their

account statuses on their UCanWeb account.

#### **DROP/ADD FEE**

A fee of \$20 will be assessed for each Drop/Add Form processed beginning the second week of classes. Exceptions to this fee are noted in the Student Handbook.

#### IDENTIFICATION CARD REPLACEMENT CHARGE

An original identification card is provided at no charge. A \$20 replacement fee will be charged for all lost or damaged id cards.

# ACCIDENT & SICKNESS INSURANCE

Medical insurance coverage is mandatory for full time students not covered by other insurance but OPTIONAL for parttime students. If your enrollment status changes from full-time to part-time (for any reason), you are not charged automatically for domestic health insurance. As a part-time student, you must request coverage if you want it, in writing, at the Student Service Center. All full-time students are charged for health insurance unless a waiver is submitted online to the insurance company before the end of the second week of school. Waivers must be completed each semester as part of the tuition billing process.

International students attending the State University of NY are required to purchase the International Student Insurance. The plan utilizes the Campus Health Center as the primary care provider, meaning that students should use the Health Center first when possible to avoid large deductible charges.

### TUITION/FEE REDUCTIONS DUE TO WITHDRAWAL

TUITION

Semester charges reduced on a percentage basis as follows:

Cancellation During	Reduction
First week	100%
Second week	70%
Third week	50%
Fourth week	30%
Fifth week	0%

Full Semester Courses: The first that day that classes are offered, as scheduled by the campus, shall be considered the first day of the semester. The first week of classes for purposes of this section, shall be deemed to have ended when seven calendar days, including the first day of scheduled classes, have elapsed. This applies to all full-time students even if they have partial semester courses.

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Partial Semester Courses, including Online (Part time Students only): The charge reduction period shall commence with that course's start date. Charge reductions will be pro-rated, based on the tables below: (This applies to part-time students only)

7-week classes	Reduction
First week	100%
Second week	65%
Third week	0%
3-week classes	
First & second day	100%
Rest of first week	65%
Second week	0%

#### FEES

The following fees are non-refundable:

• College Fee, Orientation Fee, Alumni Fee, Placement Fee, International Health Insurance, Vehicle Registration Fee.

## ACCIDENT AND SICKNESS INSURANCE

Except for medical withdrawal due to a covered injury or sickness, any student withdrawing from school during the first 31 days of the period for which coverage is purchased shall not be covered under the policy and a full refund of the premium will be made. After such 31 days, all students will remain covered under the policy for the full period for which premium has been paid, and no refund will be allowed.

Insured persons entering the Armed Forces of any country will not be covered under the policy as of the date of such entry. A pro-rata refund of premium will be made for such person upon written request received by the company within 90 days of withdrawal from school.

#### MEAL TICKET REFUND

Refunds will only be allowed for withdrawal from school or academic dismissal. Refunds due to the removal of a student from the residence hall for academic reasons is at the discretion of College Association Tuition and Fees management. Refunds will not be allowed for disciplinary reasons.

The refund will be based on the approved proration schedule, and a \$25 fee for. The reduction will be based on the official date of withdrawal or dismissal as recorded by the Registrar's Office.

Students who advance register but do not subsequently attend the College will receive a full reduction of their entire dining meal plan charges. Transfers of funds from one student's account another student are not permitted.

#### HOUSING: RESIDENCE HALL

Upon official withdrawal from the College, residence hall reductions are on a percentage basis as follows:

Ca	ncellation During	R	educ	tion	
	First week		10	0%	
	Second week		70	0%	
	Third week		51	0%	
	Fourth week		30	0%	
	Fifth week		(	0%	
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Residence hall opening day shall be considered the first day of the semester. Seven calendar days later will be deemed the end of the first week for refund purposes.

#### LAUNDRY FEE

Non-refundable.

### TITLE IV REFUND POLICY

Under Federal Financial Aid rules, the college recalculates Federal\* financial aid eligibility for students who withdraw, officially or unofficially are dismissed or take a leave of absence prior to completing 60% of a semester. Recalculation is based on the percent of earned aid using the following formula:

Percent earned = Number of days completed up to the withdrawal date\*\*/ total days in the semester (including weekends and breaks under five days).

Federal financial aid is returned to the federal government based on the percent of unearned aid using the following formula:

Aid to be returned = (100% – percent earned) X the amount of aid disbursed toward institutional charges.

When aid is returned, the student may still owe a balance to the College. The student should contact the Student Service Center to make arrangements to pay the balance. Also note that students who cease attendance but do not officially withdraw will be considered an unofficial withdrawal and a recalculation of federal aid eligibility will be done assuming completion of only 50% of the semester unless a last date of attendance is known.

- \*Federal financial aid includes Federal Pell Grant, SEOG Grant, Direct Student Loan—subsidized and unsubsidized, and the Direct PLUS Loan. Students who cease attendance and do not officially withdraw will be considered an unofficial withdrawal and a recalculation of federal aid eligibility will be done using the 50% date or the actual last date of attendance whichever is later.
- \*\*Withdrawal Date is defined as the date the student began the withdrawal process, or the midpoint of the semester or last date of attendance for a student who leaves without notifying the College, whichever Is later.

### PAYMENT PLAN

To set up monthly payments, families can do so through CASHNet. This plan allows you to pay the balance of your semester bill with monthly installments over a 4- or 5-month period depending on when the plan is set up. There will be an initial enrollment fee. Instructions be found can on our billing on your UCanWeb eBill account, or by calling 877-821-0625.



SUNY Canton offers a comprehensive program of financial assistance to help students and their families meet the costs of a quality college education. Approximately 96 percent of incoming freshman attending SUNY Canton receive some form of financial assistance.

The following information is provided as a general reference to financial aid at SUNY Canton and is based on statutes, regulations and policies current at the time this Academic Catalog was prepared for publication. These descriptions are, however, subject to change. Thus, it is recommended that candidates for admission and current students contact the Financial Aid Office, Miller Campus Center, SUNY Canton, 34 Cornell Dr., Canton, New York 13617, telephone (315) 386-7616 or toll free at (800) 388-7123 or email at finaid@canton.edu.

### FINANCIAL AID OFFICE -One Hop Shop

The Financial Aid Office in the One Hop Shop at SUNY Canton exists to provide personal assistance to students and parents on a one-to-one basis from the time of initial inquiry until the completion of a student's program of study. Every effort is made to insure that qualified and deserving students are not denied the benefits of a SUNY Canton education on the sole basis of financial need. Financial aid at SUNY Canton is awarded based on financial need and merit, without regard to sex, race, age, color, creed, national origin, disability or handicap.

# FINANCIAL AID OFFICE MISSION

The mission of the Financial Aid Office is to:

- Provide personal assistance regarding the financial aid process to students and families on a one-to-one basis.
- Provide education to students and families on all financial aid options.

- Develop administrative processes designed to provide the best customer service and efficiency for students and families.
- Strive to ensure, to the extent possible, that students are not denied the benefits of a SUNY Canton education on the sole basis of need.
- Maintain a caring a highly knowledgeable staff to assist in this mission.

### Student/Parent Responsibility

The federal financial aid system is based on the belief that it is first the family's responsibility to contribute to the costs of the student's college education, to the extent that the family is financially able. Determining what the family can contribute is accomplished by having the student complete the Free Application for Federal Student Aid (FAFSA) which assesses the family income and assets.

If the determination is made that the family resources are not sufficient to meet the total cost of education, SUNY Canton may help meet the student's need through some combination of its own aid funds and those funds available from other public or private sources. If it is determined that the family's resources are sufficient to meet the yearly college costs, or additional help is needed, the student, although ineligible for regular forms of aid, may qualify for some non-need-based assistance. Nonneed-based aid and alternative methods of meeting college costs will be discussed later in this section.

### INDEPENDENT/ Dependent Status Determination

The criteria that is used to determine whether a student is considered dependent or independent differs for federal and state aid. If a student meets the federal independency criteria, then federal aid eligibility is based on the student's (and spouse's, if married) income from two years prior. If a student does not meet the federal independency criteria, then his/her federal aid eligibility is based on the student's and the parent's income from two years prior. Other factors, such as assets, family size and number of family members in college figure into the federal aid eligibility.

SUNY Canton adheres very closely to the federally-established independency criteria. We do recognize, however, that there are special cases in which students may not meet the federal independency criteria but may have extenuating circumstances. These students should contact the Financial Aid Office for further guidance.

Independency criteria for state aid is established in NYS law. The New York Higher Education Services Corporation (NYHESC) in Albany is the agency responsible for determining the student's dependency status for state aid.

Students over the age of 35 are considered independent for state aid. For students under the age of 35, the state criteria considers whether the student lived/lives with the parent(s), whether the student has been claimed as a tax exemption by the parent(s), and whether or not the student has/will receive financial support from the parent(s) in recent years.

Questions regarding dependency status for federal and/or state aid should be directed to the Student Service Center. Students should be ready to document the information they provide on the aid application concerning their dependency status.

### Types and Sources of Aid

There are three major types of financial aid: 1) Grants and scholarships, also known as gift aid because this type of aid, in almost all cases, does not have to be repaid; 2) loans, which must be repaid but typically not until the student has left school or dropped below half-time status; and 3) part-time employment, through which the student earns a wage by working on-campus.

There are four major sources of aid: 1) the federal government provides the largest source of funding; 2) the State, most states, including New York, sponsor state grant & scholarship programs for their residents; and 3) the College itself may be a source of aid, or with scholarship or loan funds that the College has raised. 4) private sources- there are several scholarship and loan programs available to assist students. Refer to the financial aid page of www.canton.edu for more information.

### Applying for Financial Aid

Students applying for financial aid at SUNY Canton should be aware of the following application process:

- —Each student must complete the following, as soon after October 1st of the year prior to anticipated enrollment: 1) the Free Application for Federal Student Aid (FAFSA), and 2) the New York State TAP Grant application. Both applications may be completed online at <u>https://studentaid.gov</u> or by using the myStudentAid app. For an electronic signature you and your parents will need to create an FSA ID. You can do this at any time before filing the FAFSA.
- -Out-of-state students should check with their state's higher education agency to determine if they need to complete a separate application to be considered for a grant from their home state.
- —Aid eligibility is based on income from the tax year two years prior to the FASFA year. Therefore, if applying for aid for the 2023-24 year, a family may be asked for signed copies of the 2021 income tax forms. Students and parents can link directly to the IRS database using the IRS Income Data Retrieval process for the tax information when completing the FAFSA.

- --Students should research the availability of private scholarships. Visiting a high school guidance office, local library, or the Internet can provide free access to information concerning private scholarships.
- -SUNY Canton funds a number of scholarships for freshmen and returning students. Freshmen who meet basic requirements will receive application instructions from Admissions and the Scholarship Committee. All admitted students with a scholarship application will be considered for scholarship funding and contacted by the Office of Admissions or Development Office if awarded a scholarship. Students will also be made aware of their scholarship application deadline. A listing of current College Foundation Scholarships is available at the end of this section. Questions concerning Scholarships should be directed to the scholarship@canton.edu.
- —Any outside financial aid awards that a student receives must be included in the award package. If aid adjustments are necessary loans will be reduced before grant aid or work in most cases.

### DEADLINES

Application deadlines from vary program to program. Since funding from the federal government is limited for the campus-based aid programs (Federal Work-Study, and Federal SEOG), these funds are awarded on a first-come, first-served basis, until funds are exhausted. To be considered for these funds, students should submit a FAFSA at studentaid.gov or using the myStudentAid app by January 1st. It will take one to three weeks for the processing agency to process the student's application and forward it to the Student Service Center. We strongly encourage all students to complete and submit their FAFSA before January 1st of each award year.

### BASIC ELIGIBILITY REQUIREMENTS

All students applying for federal financial aid must meet the following basic requirements:

- 1. You must be a U.S. citizen or eligible non-citizen (have an alien registration number).
- 2. You must have a high school diploma or its equivalent (ex., GED). Homeschooled students must have officially completed their program.
- 3. You must be enrolled as a regular student in an eligible degree program.
- 4. You must not be in default of any previous student loans or owe a repayment on federal grants.
- 5. You must maintain satisfactory academic progress in your degree program.

### NOTIFICATION OF Eligibility

Applications are reviewed by a financial aid advisor. In some cases, the Financial Aid Office will request additional information from the student and family (for example, we may request copies of income tax transcripts or other income verification). The student should respond immediately to any requests for information that he/she receives. Once the Financial Aid Office has received all necessary forms and documents from the student, the student's file is considered complete and ready for notification of aid eligibility.

Students are notified of their financial aid package availability by email and letter. Awards may be accepted or declined online on their student UCanWeb account. Please read instructions and Terms & Conditions carefully.

The Financial Aid Office will begin award notifications as soon as it becomes possible. The process continues as applications are received.

### SPECIAL CIRCUMSTANCES

If you feel that you have a special circumstance that needs to be taken into consideration for financial aid eligibility, we may be able to recalculate your eligibility within federal guidelines. You may download and complete a **Special Conditions Form** at www.canton.edu. Click on Financial Aid, then on Forms and Worksheets. If your special circumstance involves your dependency status for the FAFSA, you may also find the Request for Independence Consideration in the same area.

### Available Federal Programs

Students are automatically applying for these aid programs when they complete the Free Application for Federal Student Aid (FAFSA).

#### FEDERAL PELL GRANTS

The Pell Grant Program is an entitlement program. It is also a grant program, i.e., no repayment is required. Eligibility and award amount are based on need and determined by the U.S. Department of Education. The Pell Grant may be used for tuition, fees, books, and living expenses. All Pell recipients have a lifetime eligibility limit of 12 full-time semesters. As of 7/1/09 any student who whose parent/legal guardian died in Iraq or Afghanistan will be entitled to the full Pell award.

Currently, awards for eligible students can be as much as \$7,395.00. The amount of the award will be affected by costs of attendance and full- or part-time enrollment status. The Pell Grant does not duplicate the State awards.

Pell recipients must continue to make satisfactory academic progress in the program in which they are enrolled. Students who possess a bachelor's degree are ineligible for a Pell Grant.

Students must file the FAFSA to determine Pell Grant eligibility.

#### FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (FSEOG)

The applicant must have financial need and be eligible for a Pell Grant. FSEOG, like PELL, is a grant program, i.e., no repayment is required. Students who possess a bachelor's degree are ineligible for FSEOG.

Currently, typical annual FSEOG awards range from \$200 to \$1,500 depending on funding. Recipients must continue to make satisfactory academic progress in the program in which they are enrolled.

#### FEDERAL WORK-STUDY PROGRAM

Through the FWS Program, the College makes employment reasonably available to eligible students who have demonstrated that they are in need of financial assistance. In the event that more students are eligible for FWS than there are funds available, preference is given to students on a first-come, first-served basis. At least 7% of funds must be used for community service jobs both on and off campus.

The starting salary is usually set at minimum wage. Currently, a typical annual award is worth \$2,000 which means that the student would work approximately five - six hours per week to earn his/her full award.

FWS recipients must continue to make satisfactory academic progress in the program in which they are enrolled.

#### FEDERAL DIRECT STAFFORD STUDENT LOAN (SUBSIDIZED)

This is a program that allows students to borrow funds from the federal government. The first step in applying for a Stafford Loan is to complete the Free Application for Federal Student Aid (FAFSA) since students applying for a Stafford Loan need proof that they have first applied for the federal PELL Grant. The College will notify the student of his/her eligibility for a Stafford Loan on the award notice. (*Please note that not all students are eligible for a Subsi-*

#### dized Stafford Loan; the College's Student Service Center determines loan eligibility.)

To be eligible, a student must be a U.S. citizen or eligible non-citizen and be enrolled or admitted on at least a half-time basis. Once again, the student must demonstrate need for the loan as evidenced on a processed FAFSA.

A SUNY Canton student may be eligible to borrow no more than \$3,500 as a freshman and no more than \$4,500 at the sophomore level. Once full junior status is achieved in a bachelor's program you may borrow up to \$5,500/year. The interest rate is currently fixed at 5.50% as of 7/1/23. Principal and interest are deferred during the time that the student is enrolled on at least a half-time basis. Borrowers have up to ten years to repay and repayment begins six months after the student ceases to be enrolled on at least a half-time basis. Payment of the principal may be deferred for up to three years for certain categories of Public Health Service officers, the temporarily disabled, those in internships required before entering a profession, and Peace Corps or Vista volunteers.

All Federal Stafford Loan recipients are required to attend an entrance interview and complete an electronic promissory note before receiving the first Stafford Loan disbursement. Both can be done online at studentaid.gov. Before leaving the College, all Stafford Loan recipients are required to attend an exit interview. The purpose of these interviews is to inform the student of his/her rights and responsibilities concerning the loan, to be sure that the student is aware of what borrowing entails, to be sure that the student understands the consequences of not repaying the loan, and to be sure that the student is clear on the repayment terms of the loan and who the loan will be repaid to, as well as the amount of loan borrowed. Questions concerning loan entrance, exit interviews, or promissory notes should be directed to the Financial Aid Office.

### FEDERAL NON-NEED **BASED LOAN PROGRAMS** FEDERAL DIRECT STAFFORD STUDENT LOAN (UNSUBSIDIZED)

Most terms and conditions of the unsubsidized loan are the same as for the subsidized loan except that interest is a fixed 5.50% as of 7/1/23 and accrues while the student is in school. Loan limits for dependent students cover the cost of attendance minus any aid received, up to the limits of the subsidized Stafford Loan (that is, a dependent freshman cannot borrow more than \$3,500 in a combination of subsidized and unsubsidized, while a dependent sophomore cannot borrow more than \$4,500, and a dependent junior/senior cannot borrow \$5,500). An independent freshman cannot borrow more than \$7,500 between the subsidized and unsubsidized Stafford Loans. An independent sophomore cannot borrow more than \$8,500 between the subsidized and unsubsidized Stafford Loans. Independent juniors and seniors in the BT program can borrow up to \$10,500 between subsidized and unsubsidized loans. The total of the student's unsubsidized loan, and the other aid/resources that the student will be receiving, can never exceed the total cost of attendance. Accrued interest may be paid or added to the loan (capitalized) as agreed by the borrower and the federal government. The first step in being considered for an unsubsidized loan is to complete the Free Application for Federal Student Aid (FAFSA).

#### FEDERAL DIRECT PARENT LOAN FOR UNDERGRADUATE STUDENTS (DPLUS)

This is a program that allows parents to borrow funds from the federal government. Under DPLUS, the parent is the borrower and if eligible, (these loans are subject to a credit check) may borrow up to the difference between the yearly cost of attendance and the student's other yearly financial aid.

Interest on the principal is fixed at 8.05% beginning 7/1/23. Repayment of a DPLUS Loan begins 60 days following receipt of the loan's second disbursement. Parents may request a deferment of payments from the loan servicer until the student is out of school.

It is also important to note that the parent and student must be U.S. citizens or eligible non-citizens, and neither can be in default on a prior student loan or owe a refund on a federal grant in order to be considered for a DPLUS loan. In addition, the student must be: 1) accepted or enrolled in an eligible program leading to a degree or certificate; 2) be enrolled on at least a half-time basis; and 3) maintain satisfactory academic progress if currently enrolled. The promissory note for the DPLUS can also be done online through studentaid.gov.

### FEDERAL AID TO NATIVE Americans (BIA Grant)

To be eligible for consideration a student must: 1) possess one-fourth or more degree Indian blood and be certified by their Tribe, 2) be a member of a Tribe, 3) be enrolled (or accepted for enrollment) on a full-time basis in a program which will lead to a four-year degree, and 4) have a definite financial need after all other sources of financial assistance have been applied.

Application forms may be obtained from a liaison office of the U.S. Bureau of Indian Affairs. The application deadline is July 15 for the Fall Semester/academic year and October 15 for students beginning their studies in the Spring Semester. Please note that students should first complete the Free Application for Federal Student Aid (FAFSA). Students must reapply for federal Native American aid each year and must meet certain academic standards to continue to receive the grant.

### **AVAILABLE STATE** PROGRAMS **EXCELSIOR SCHOLARSHIP**

This program is available to NYS residents pursuing a two or four-year degree

program in SUNY or CUNY. Successful applicants must earn at least 30 credits per year\* toward their degree program and be on track for graduation. Awardees are required to reside in NYS once they have ceased enrollment for the amount of time that they received the award. They are not required to be employed but if so, must be employed within NYS. This scholarship is a "last dollar in" award so any grant or scholarship that is not a specifically a non-tuition award must count first to-ward tuition. Information is available at www.canton.edu/excelsior and application is available at www.hesc.ny.gov/excelsior. Students eligible for Excelsior will also have a corresponding Excelsior Tuition Credit.

\*Exceptions for EOP students or those meeting ADA disability definitions.

#### TUITION ASSISTANCE PROGRAM **GRANT (TAP GRANT)**

To apply, follow the procedure detailed in "Applying for Financial Aid."

The TAP Program is an entitlement program, and no repayment is required as it is a grant. To be eligible for consideration, the student must be: 1) a New York State resident (as defined by the New York Higher Education Services Corporation's residency policy) and a U.S. citizen or eligible non-citizen, 2) be enrolled on a full-time basis (at least 12 credit hours per semester required for student's curriculum). 3) certain students may be eligible if enrolled part-time. Eligibility for TAP is based on the family's New York State taxable income from two years prior and also considers how many family members, other than the applicant, will be enrolled in college on a full-time basis.

TAP awards at SUNY Canton ranged from \$500 to \$5,665 per year, for students who qualified. Students can receive a TAP award for no more than six full-time semesters of undergraduate study at the associate degree level or eight semesters at the bachelor's degree level. EOP students may have additional eligibility. Recipients must be in good academic standing in the program in which they are enrolled.

#### SUNY TUITION CREDIT

If a NYS Resident student's semester tuition is at least \$3,535 and they have a TAP award they will also receive a SUNY Tuition Credit.

#### OTHER AWARDS/SCHOLARSHIPS SPONSORED BY NEW YORK HIGHER EDUCATION SERVICES

The New York Higher Education Services Corporation sponsors the following awards for special populations:

- -Veteran Tuition Awards (VTA)
- —Child of Veteran Awards (CV)
- ---Military Enhanced Recognition Incentive and Tribute -(MERIT) Scholarship
- —Child of Deceased Police Officer/ Firefighter/Correction Officer Awards
- Memorial Scholarships for Children of Deceased Police Officers and Firefighters
- ----NYS Science, Technology, Engineering and Mathematics (STEM) Incentive Program

In addition to completing the FAFSA, students who wish to be considered for any of the above awards must <u>also</u> complete the New York State TAP Grant Application and NYS scholarship application. Typically, if a TAP award is received in addition to any of the above awards, the combined award can be no greater than the cost of tuition. Recipients must be in good academic standing in the program in which they are enrolled.

For more specific information concerning the above state awards, contact the Financial Aid Office or the New York Higher Education Services Corporation, (HESC) at http://hesc.ny.gov/.

## NEW YORK STATE AID TO NATIVE AMERICANS

Application forms may be obtained from the Native American Education Unit, New York State Education Department, Albany, NY 12230. The completed application should be forwarded to the Native American Education Unit, along with the supporting documentation required. This is an entitlement program, with neither a qualifying examination nor a limited number of awards, and repayment is not required. There are application deadline dates.

The award is a maximum of \$1,000 per semester for a maximum of four years of full-time undergraduate study (five years where a fifth year is required for completion of degree requirements). Awards are not provided for study in remedial programs.

Students are responsible for notifying the Native American Education Unit in writing of any change in student status. Students must also submit semester grades, at the end of each semester, showing satisfactory progress toward completion of degree requirements.

#### EDUCATIONAL OPPORTUNITY PROGRAM (EOP)

This program operates in the State University of New York and is designed to provide access to post-secondary education to educationally- and economically-disadvantaged students. It is a comprehensive program in which financial assistance is one possible component along with special counseling, tutoring, and remedial course work.

Application is automatic via the SUNY Application for Admission. An applicant must be:

- —A New York State resident or eligible under the NYS Dream Act;;
- Academically disadvantaged according to definitions promulgated by SUNY;
- —Economically disadvantaged according to guidelines approved by the Board of Regents and the Director of the Budget. Students who apply for the EOP Program will be required to provide documentation of total family income to ensure that they meet prescribed income

guidelines prior to admission in the EOP Program.

The amount of financial assistance and other support provided to EOP students is dependent on need as determined by SUNY Canton, using NYS regulations and budget approval.

#### EMPIRE STATE DIVERSITY HONORS SCHOLARSHIP PROGRAM

The SUNY Canton/Empire State Diversity Honors Scholarship program provides assistance to students who have demonstrated high academic achievement and have overcome a disadvantage or other impediment to succeed in higher education. Individuals selected to receive these scholarships must:

- -Be residents of New York State;
- -Have been accepted for enrollment or be enrolled in a degree program.
- Selection from each year's eligible applicants is made by the College Scholarship Committee in accordance with the following criteria:
- —Financial need;
- —If accepted for admission to the College, the prospective eligible student must have earned at least an 80% average for the first three and one-half years of high school;
- —If enrolled at the College, each recipient must have at least a 2.75 cumulative grade point average;
- -While it is the intent that the recipient will continue to receive such support while enrolled, support will be withdrawn if the students cumulative grade point average is lower than 2.50.

Further information concerning this program is available from the Financial Aid Office or the Development Office.

#### AID FOR PART-TIME STUDY (APTS)

This program provides tuition assistance for part-time undergraduates enrolled in degree or certificate programs in New York

State. To be eligible for consideration, a student must: 1) be registered for at least 3 but less than 12 semester hours; 2) be working toward an undergraduate degree or be enrolled in a registered certificate or approved degree program; 3) be in good academic standing; 4) be a New York State resident and a U.S. citizen or eligible non-citizen; 5) have tuition charges of at least \$100 per year.

Eligibility is based on the family's New York Taxable Income figure from two years prior. Dependency status for the APTS program considers whether the student was eligible to be claimed as a tax exemption by his/her parents in the prior tax year.

The amount of APTS awards range from \$75 to \$400 or more per semester depending on the College's yearly allocation from the State. An award amount cannot exceed the tuition charges.

Specific questions concerning the APTS award may be directed to the Financial Aid Office. Funding for this program is very limited so students are encouraged to apply early. Application can be found in the Part-Time Students link on the Financial Aid page of www.canton.edu.

# SCHOLARSHIPS AT SUNY CANTON

Most of the financial assistance available at SUNY Canton is awarded on the basis of an individual student's financial need as determined by universally applied formulas. However, there is an increasing number of awards through state and the Canton College Foundation funding which recognize special characteristics and accomplishments of our students and incoming freshmen.

## Scholarship Awarding Policy for State Funds

Committee Composition: The Scholarship Committee must be made up of the following:

2 Admissions representatives (1 Chair and 1 committee member), 2 Financial Aid representatives (1 records and financial aid reporter and 1 committee member), 2 Foundation representatives (1 Foundation liaison and 1 committee member) \*Committee composition restricts the membership of any individual whose campus role may show bias toward one specific group of students, (Ex. International Student Coordinator, Athletics Personnel, Admissions Athletics Liaison, Faculty Members).

#### **Awarding Policy:**

Only accepted students will be reviewed for scholarship.

All accepted students will receive an invitation email at both their canton.edu and personal email accounts with Instructions on how to log into Academic Works and complete the general scholarship application.

Students who have completed the general scholarship application will be given priority consideration; however, completing the general scholarship application does not guarantee the student will be awarded.

Scholarships will be awarded based on need with the consideration of criteria specific to each scholarship.

Review will begin at the end of February with an aim to award the majority of scholarships by the end of March.

Applicants who have completed the general scholarship application before the priority deadline of February 1st will be reviewed with precedence.

General applications will be reviewed by two independent reviewers and receive a score.

Applicants who achieve a score of 40 or higher on the Scholarship Rubric will receive priority for awarding.

Award recipients will be notified with an award email at their canton.edu email account noting the name and the amount of their award. The award email will outline the stipulations to maintain the award and the number of years/ semesters that the amount will be provided. The email will also indicate how the student must log into Academic Works to accept their award and they must accept their scholarship within 30 days of the email date. Once the student accepts their scholarship the award will be included in their financial package. If the student fails to accept their award within the 30 day period, the award will be canceled and awarded to another deserving student.

Available scholarships and their award criteria are listed herein.

#### STATE AWARDS:

#### Presidential Scholarship

- —Awarded to a first-time student
- —\$5,000 annual value
- -Recommended minimum HS GPA of 94
- -Campus residency required
- -Renewable up to four years with GPA

## requirement of 2.5

#### **Excellence Scholarship**

- -Awarded to a first-time student
- —\$3,600 annual value
- -Recommended minimum HS GPA of 92
- -Campus residency required
- —Renewable up to four years with GPA requirement of 2.5

#### Leadership Scholarship

- -Awarded to a first-time student
- -\$2,500-\$3,500 annual value
- -Recommended minimum HS GPA of 90
- -Renewable up to four years with GPA requirement of 2.5

#### North Country Educational Scholarship

- -Awarded to a first-time student
- —\$1,500-\$2,500 annual value
- -Recommended minimum HS GPA of 87 -Renewable up to four years with GPA
- requirement of 2.5

#### Grasse River Educational

#### Scholarship

- -Awarded to a first-time student
- ---\$1,000-\$2,000 annual value
- -Recommended minimum HS GPA of 85
- -Renewable up to four years with GPA requirement of 2.5
- —Need Eligible

#### 1906 Scholarship

- -Awarded to a first-time student
- —\$800-\$1,500 annual value
- -Recommended minimum HS GPA of 85
- Renewable up to four years with GPA requirement of 2.5
   Need Eligible
- -INCERT Eligible

#### Alumni Scholarship

- -Awarded to a first-time student
- —\$500-\$1,000 annual value
- -Recommended minimum HS GPA of 85
- -Renewable up to four years with GPA requirement of 2.5

#### Transfer Merit Scholarship

- —\$1,000 annual value
- —Recommended minimum transfer GPA of 2.5
- —Renewable up to two years with GPA maintenance of 2.5
- —Need Eligible

#### Part-Time Scholarship

- —\$75-\$200 per credit hour
- -Recommended minimum GPA of 2.5
- Renewable up to two years with GPA maintenance of 2.5

# CANTON COLLEGE FOUNDATION SCHOLARSHIPS:

#### AAUW Memorial Scholarship

- ---Non-traditional student, with preference to women
- ---Math/Science-related field (STEM related fields)
- —2.5 or better GPA
- -Leadership potential and community service

#### Alumni Association Scholarship

- -Returning student
- -Minimum 2.5 GPA
- -Service to college community
- —Financial need

#### Alumni Legacy Scholarship

- —Entering freshman student
- -Child or grandchild of alumnus
- -Academic potential, as demonstrated by high school performance
- —Financial need

#### Anderson-André Endowed Scholarship

- -Entering freshman or continuing student
- -Liberal Arts and Sciences: Chemistry option or Veterinary Science Technology curriculum
- —St. Lawrence, Jefferson, or Lewis County resident
- —Preference to graduates of Beaver River or Canton Central School

#### Timothy M. and Mary Lou Ashley Family Endowed Scholarship

- —Students in one of the following areas: Criminal Justice, Business Administration, or Liberal Arts
- To provide assistance to worthy individuals who appreciate the value of a quality education
- -Student from St. Lawrence County

#### Alice Westaway Bagley Endowed Scholarship

- —Nursing and allied health
- -St. Lawrence County resident

## Rachael M. and Leon E. Bagley Endowed Scholarship

- -Freshman student, may be retained
- -Preference to, but not restricted to, students from Madrid-Waddington or Edwards-Knox Central Schools

#### Baldwinsville High School Class of 1957 Scholarship

- —Entering freshman from C.W. Baker High School, Baldwinsville, New York
- —Air Conditioning Engineering Technology curriculum
- Other curriculums, if only one eligible Air Conditioning Engineering Technology student enrolls

#### -Students may retain scholarship

#### Patricia M. Barr '44 and Bernard P.

#### Raymo '32 Endowed Scholarship

- -Continuing student
- -Business curriculum
- -Graduate from Canton Central, Clifton-Fine Central, or Massena Central High Schools

#### James D. Bartholomew Endowed Scholarship

- —Entering freshman student
- Preference given to a graduate of Massena Central School or Madrid-Waddington Central School
- --Construction Technology: Management or a related engineering curriculum

#### Maryalice Grotkowski Blake '68

- Endowed Scholarship for Nursing —Enrolled or planning to enroll in two-year nursing curriculum
- -Preference to Ogdensburg Free Academy graduate
- —Financial need

#### Dr. Adelord S. and Sylvia H. Blanchard Endowed Scholarship

#### Endowed Scholarship

- —Returning student—Business curriculum
- —Preference to candidates intending to pursue a
- -Preference to candidates intending to pursue a baccalaureate degree in business

### Ronald J. Blanchard '68 Student

- Leadership Endowed Scholarship
- -First Generation college student
- Demonstrates leadership as officer/board member of campus club or advisory board member
- -Must have 2.5 GPA and student may retain scholarship

#### Leland Blevins Family Endowed Scholarship

- -Entering freshman student
- -Automotive Technology curriculum
- -Demonstrates potential for success

#### Bridge to Success Endowed Scholarship

- -Established by R. Peter Heffering `51
- Assist students who have exhausted all their options for scholarships, loans, and other funds
   No curriculum restrictions

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#### Goldie Burgess Endowed Scholarship

- -Returning senior student
- -Nursing curriculum
- —Minimum 2.75 GPA
- —Financial need

#### Bobbi Butler Burnham Endowed Scholarship

- —Liberal Arts associate or bachelor degree program
- —Preference will be given to anyone with a surname of Sharlow, Butler, or Burnham but not limited to those aforementioned names
- —The scholarship is renewable for the following year of study providing that the student has maintained a 3.0 grade point average

#### Agnes and John N. Burns Family Endowed Scholarship

- -Continuing student
- —Business and one is open curriculum
- —Preference to female students from Franklin,
- Jefferson, Lewis, or St. Lawrence County

#### Denice Glascock Button Women in Accounting Endowed Scholarship

- —Continuing female student
- -Enrolled full time in an Accounting program
- -Satisfactory academic progress
- -Committed to building a better community

#### Paul W. Calkins Endowed Scholarship

- -Entering freshman student
- -High school record exemplary
- -Business curriculum

#### Canton Area Zonta Club Scholarship

- -Returning senior student
- -Resident of Town of Canton or, secondly, St. Lawrence County
- -Single parent with potential for success

#### —Financial need

curriculum

curriculum

Scholarship

Nursing program

-Selected by the employer

#### Canton College Foundation North Country Academic Scholarship

- -Entering or continuing student in any curriculum
- -GPA of 2.5 or higher or 85 high school GPA

-GPA of 2.5 or higher or 85 high school GPA

----GPA of 2.5 or higher or 85 high school GPA

-Canton-Potsdam Hospital employee in the

Canton Fund Endowed Scholarship

-Entering or continuing student in any

Canton-Potsdam Hospital Guild

-Preference to non-traditional students

#### —Open to full and part-time students

#### Canton Fund Annual Scholarship —Entering or continuing student in any

#### Carkner Construction Endowed Scholarship

 —Student enrolled in the Construction Technology: Management or engineering curricula

#### Preston C. Carlisle Annual Scholarship —Student from St. Lawrence County

#### Dr. Mary Ann Caswell Endowed Scholarship

Preference given to students from St.
 Lawrence County
 Financial need

### The Centennial Endowed

Scholarship —No restrictions on year or curriculum

## Alden C. Chadwick Endowed Scholarship

-Continuing student

-Sports Management curriculum

#### The Chiavetta Catering Annual Scholarship

- —Preference given to students enrolled in
- business or psychology

—Financial Need

#### Varick A. Chittenden Book Scholarship

-Continuing student

-Exceptional North Country student

#### Clark-Guyette Internship Assistance Program Endowment

- -Students participating in non-subsidized internships
- -Preference given to St. Lawrence County students

#### Ed and Clara Cloce Endowed Scholarship

- —Demonstrates potential for success
- Preference to Automotive Technology curriculum

#### Stanley Cohen Sports Management Endowed Scholarship

- —Academic achievement
- -Sports Management curriculum
- —Financial need
- —U.S. citizen

#### College Association Admissions Scholarship

- Entering or continuing student in any curriculum
- —Minimum of 85 or 2.5 GPA

#### College Association Management Team Scholarship

—Annual scholarship supporting a student from the North Country area from the College Association Management Team

#### Conklin Family Nursing Scholarship

- —Nursing student
- -Preference to first generation student, or a veteran In the armed forces
- —Financial Need

#### Dr. Solomon Cook Endowed Scholarship

- -Native American
- --Preference to student from the Akwesasne St. Regis Mohawk Reservation or graduate of Salmon River Central School
- -High school average of B or better
- —Financial need

#### Coombs-Muscarella Endowed Scholarship

- —Entering freshman student
- -Active in extracurricular activities
- —Demonstrated leadership skills during high school

### William C. Cooper Endowed

#### Scholarship

- —Entering freshman student
- -Business or Computer Information Systems curriculum
- Resident of St. Lawrence or Otsego County
   Highly-motivated, industrious student

#### Corning Foundation Endowed Scholarship

- —Entering freshman student
- -Electrical Engineering Technology curriculum
- -Graduate of a St. Lawrence County high school
- -Preference to women and minorities

#### Criminal Justice Alumni Award

-Aid students in Criminal Justice field with expenses for internship

#### Criminal Justice Department Endowed Scholarship

- -Students enrolled in Criminal Justice, Criminal Investigation, Law Enforcement Leadership and Management, or Homeland Security
- --Selected by Criminal Justice Department Scholarship Selection Committee

#### Cross Connection Control Foundation Scholarship

- -Entering freshman student
- —Air Conditioning Engineering Technology curriculum

#### Evan M. Dana Endowed Scholarship

----Veterinary Science Technology or Liberal Arts and Sciences: Chemistry option curricula

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- —Good academic standing
- -Incentive, motivation

#### Anthony "Tony" E. Darcangelo Memorial Scholarship

- -Rome Free Academy student in two- or fouryear Business curriculum
- —Second preference to anyone from Rome Free Academy
- —Third preference to Business student from Oneida County
- —Financial need

#### Ethelyn B. Davis Endowed Scholarship

- Returning senior student
- —Nursing curriculum
- -Demonstrated compassion, thoughtfulness, concern for the patient's well-being
- —Academic achievement secondary

# The Day & Nite All Service Annual Scholarship

—HVAC Engineering Technology, Air Conditioning Maintenance and Repair, Heating and Plumbing Service, or Mechatronics curricula

#### William D. Demo Family Endowed Scholarship

- Entering freshman student and continuing student
- —Graduate of St. Lawrence or Franklin Counties; preference give to Brasher Falls Central School

#### Gerard '65 & Patricia Desormeau Family Endowed Scholarship

- —Entering or continuing student
- -Electrical Engineering Technology
- -Preference to Indian River School District
- —Jefferson, Lewis, St. Lawrence Counties can apply
- —Financial need

#### Rosa Dixon Allied Health Endowed Scholarship

- —Allied Health curriculum
- —Financial need

#### Stuart B. Dragon Endowed Scholarship

- —Entering freshman student
- -First preference to Clinton County resident
- -Secondly, any North Country resident

#### Professor Dr. Thomas and Virginia Duda Memorial Scholarship

-Two- or four--year non-traditional student

-Entering freshman from Clinton County

-Strong interest and passion for Business;

-Preference to Seton Catholic High School,

Plattsburgh High School, or other Clinton

leadership skills in student, community, or

—Minimum 2.0 GPA —Business curriculum

County school

religious activities

**Duken Family Scholarship** 

### Financial Assistance

#### David '80 & Tracy Elliott Endowed Scholarship

- -Entering or continuing student
- -Agribusiness or related agricultural program
- -Preference to St. Lawrence, Franklin, Jefferson, Lewis and Clinton Counties

#### Employee Assistance Program (EAP) Scholarship

- —Full- or part-time student who is an employee of SUNY Canton - State, College Foundation, or College Association
- —If no employees are eligible, spouse or dependent of SUNY Canton employee will be considered
- —Awarded by semester
- —Financial need

#### Eurto Family Endowed Scholarship

 —Non-traditional student majoring in a certificate, associate, or bachelor degree program

### Betty Evans Endowed Scholarship in

#### Memory of Perry Evans '75

- Entering or continuing student from an agricultural background who is enrolled in either a two- or four-year program
- —Preference will be given to students who have had experience in 4H or a member of FFA

#### Robert W. and Helen Flanders Farmer Endowed Scholarship

- -Entering freshman student
- -Graduate of Tupper Lake High School
- -High school record of good citizenship and academic achievement
- -Strong motivation to succeed in college

#### William J. and JoAnne M. Fassinger Endowed Scholarship

- -Transfer student from a New York State two-year learning institution
- -Enrolled in Criminal Investigation
- —Financial need

#### Daniel G. Fay Endowed Scholarship

- -Student from St. Lawrence County
- —Enrolled or planning to enroll in Accounting Program
- Demonstrate teamwork while being actively involved in student organizations and extracurricular activities in HS or college

#### George and Eileen Fay Endowed Scholarship

- —Entering freshman student
- -Graduate of Massena Central School or Canton Central School
- —High school record of good citizenship, extracurricular activities, and academic achievement

--Preference to Business curriculum --Financial need

#### Linda Lahey Fay Nursing Endowed Award

- —Graduating senior student
- —Assisted fellow students/faculty members
   —Awarded at Nursing Program Pinning Ceremony

#### Kevin Fear '87 Endowed Scholarship

—Assist a student who has a learning disability —Any curriculum

#### Fitch Campus and Community Leadership Scholarship

- —Demonstrates leadership in high school or current Institution of higher education and community. Evidence of leadership through demonstrated community engagement must be ongoing in order to retain
- -Preference given to an out-of-state student
- ---preference given to a student planning on pursuing bachelor's degree
- -demonstrates academic success by maintaining a minimum cumulative semester GPA of 3.5

#### Clement J. Flanagan Endowed Scholarship

- —Entering freshman student
- -Graduate of Canton Central High School
- -Involvement in high school/community
- activities
- —Financial need

#### Tod Flanagan Scholarship

- -Entering or continuing student
- —HVAC Engineering Technology, HVAC Trades or Electrical Engineering Technology programs
- —Financial need

#### Nicole Fleury Memorial Endowed Scholarship

- -Veterinary Science Technology major
- -Graduate from a Section X high school
- -Must demonstrate leadership, compassion, and a love for animals

#### The Fergal I. '80 and Colleen Foley Endowed Scholarship

—Emergency Management Curriculum —Preference to a US military veteran

# David A. Frary and Family Endowed Scholarship

- -Continuing student
- -Graduate of a St. Lawrence County high school

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- -Business curriculum
- -Financial need

#### Albert E. French Endowed Scholarship

- -Continuing student
- —Financial need

#### Gerlach Family Endowed Scholarship —Nursing student

#### Lawrence Germain Endowed Scholarship

- —Entering or continuing students
- -Veterinary Science Technology curriculum
- —Financial need

### Gilbert, Chadwick, and Christy

#### Investment Club Scholarship

- -Continuing student
- -Business curriculum

#### John A. Goetze Endowed Scholarship

- -Continuing student
- —Construction Engineering Technology or Engineering Science, or Civil Engineering Technology curricula

#### Cleo J. Golding Endowed Scholarship

- -Entering freshman student
- —Financial need

### Lewis and Martha Goldstein Endowed

- Scholarship in Engineering Technology —Enrolled or planning to enroll in engineering curricula
- -Good citizenship and community engagement
- —Financial need

#### Goolden Family Endowed Scholarship

- -Entering freshman student
- -Mortuary Science or Business curricula
- -St. Lawrence, Jefferson, or Franklin County resident
- -Preference to candidates from Madrid or Waddington
- -Leadership potential and ethical values

### Grace Family Nursing Scholarship

- -Student enrolled in the Nursing bachelor's degree program
- -Must be enrolled at least 6 credit hours
- —St. Lawrence County resident

-Entering freshman student

-Recommended by the Nursing faculty

Grosvenor '69 Annual Scholarship

or resident of Colesville, New York

-Enrolled or planning to enroll in the

Construction Technology A.A.S., Civil

Engineering Technology A.A.S., or Civil

B. Tech. programs. Should a student not

and Environmental Engineering Technology

-Graduate of Harpursville Central High School

—Financial need

be found from one of these programs, the scholarship may be awarded to a student enrolled or planning to enroll in the Veterinary Science Technology A.A.S., Veterinary Service Administration B.B.A., Veterinary Technology B.S., or Legal Studies B. Tech.

- -Second preference a student from Broome County
- -Financial Need

#### David V. Guccione Endowed Scholarship

- -Criminal Justice or Criminal Investigation degree
- -Senior Criminal Justice Investigation enrolled in David A. Sullivan Police Academy
- -Secondary consideration to a student enrolled in Correction Academy

#### Dr. Jonathan Gueverra Endowed Scholarship

- -Awarded to student in Business or Criminal Justice curricula
- -Either two- or four-year degree students

### Harriett Gushea/Massena Memorial

#### Hospital Nursing Endowed Scholarship -Massena Memorial Hospital staff member in

the Nursing program

#### Hahn-Kalberer Endowed Scholarship

- -Senior student, must be in two-year curriculum
- -Non-traditional, 23 years or older
- -Must have at least a 3.0 GPA
- -Full tuition
- -Separate application required

#### Haig Family Endowed Scholarship

-Continuing full-time student

#### John L. Halford, Sr. Endowed and Memorial Scholarship

- -Entering freshman student, to be retained with 2.5 GPA
- -Good academic standing
- -Awarded to a graduate of Gouverneur Central School who is enrolled in a four-year degree program
- -Financial need

#### John L. Halford, Sr., '49 Nursing

#### **Endowed Scholarship**

-Student enrolled in four-year Nursing program -Currently employed as a nurse in St. Lawrence County or originally from St. Lawrence County

#### Maurice B. "Mick" Harrington Scholarship Endowment

- -Continuing student in Business Administration or Sports Management
- -3.0 GPA to be eligible

#### Catherine Wells Hart Endowed Scholarship

- -Female student in a STEM degree; AS, AAS or BS-following programs within the Canino School of Engineering
- -Preference given to students from St. Lawrence, Essex, Clinton, Jefferson, Lewis, Hamilton or Warren County

#### Henning-Keeler Endowed Scholarship

- -Students in Liberal Arts/Humanities or technical program
- -Meritorious academic record
- -Separate application required

#### Heuvelton Central School Alumni **Endowed Scholarship**

#### -Entering freshman student

- -Graduate of Heuvelton Central School
- -Earned at least a "B" average through first 3-1/2 years of high school
- -Good relationship with teachers and peers
- -No history of drug or alcohol abuse
- -Financial need

### Hirschey Family Business and

#### Accounting Endowment

- -Student must be enrolled in a Business or Accounting curriculum
- -Resident of Jefferson, Lewis, or St. Lawrence County in that preferential order

#### Dr. Harry E. Howe Endowed Scholarship

- -Continuing student
- -Nursing curriculum
- -Minimum 3.0 GPA
- -Demonstrates nursing professionalism

#### Henry Lawrence Howe V Endowed Scholarship

- -Continuing student
- -Learning disabled
- -Preference to graduate from St. Lawrence County pursuing careers in technical fields, especially in computers or electrical/ electronics

#### Lloyd J. '92 and Paula King '80 Hurlbut **Endowed Scholarship**

-St. Lawrence or Jefferson Counties -Financial need

#### Paula Bouchard Jacques Endowed Scholarship

- -Continuing student
- -Must have earned "B" or better in Nursing 101
- -Assisted fellow students in learning
- -Demonstrated strong assessment skills, effective communication skills, and respect and caring for elderly client

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-Announced at Nursing Program Pinning Ceremony; awarded during following academic year or semester

### Charles W. Johnson Endowed

#### Scholarship

- -Entering freshman student
- -High school academic record meritorious
- -Preference accorded to Liberal Arts: General Studies/Undeclared Major or Graphic and Multimedia Design who indicates an interest in majoring in the media

#### Grace Jones-Vesper Business Scholarship

- -Continuing student
- -Business Administration curriculum
- -Must have maintained a B average
- Preference to a non-traditional student

#### Betsy B. Kaplan Memorial Endowed Scholarship

- -Continuing students in Veterinary Science Technology curriculum
- -To go to students who have demonstrated past involvement in animal welfare, work at a humane society or similar organization, or caring for abused animals in one's own home.

#### Jesse Kaufman Endowed Scholarship

- -Entering freshman student
- -Electrical Engineering Technology curriculum

#### Catherine M. Kelly Endowed Award for **Excellence in Psychiatric Nursing**

- -Presented annually by the Nursing faculty to a graduating senior Nursing student who has a B or better average
- -Demonstrates clinical excellence
- -Strong interpersonal relationship skills
- -A commitment to nursing of psychiatric clients

#### E.B. and Gladys Kennedy Endowed Scholarship

-Continuing student

-Continuing student

-Good academic standing

- -Commitment to community service
- -Financial need

#### Dr. Joseph L. and Dine Kennedy Endowed Scholarship

- -Student in a four-year degree program
- -Demonstrated high academic achievement in high school or while attending SUNY Canton

### Harry E. King Endowed Scholarship

- -Entering or continuing student
- -Air Conditioning Engineering Technology curriculum or Alternative and Renewable Energy Systems

Richard C. King Endowed Scholarship

-Veterinary Science Technology curriculum

### **Financial Assistance**

#### Lloyd and Josephine Kingston Endowed Scholarship

- -Entering freshman student
- —Business curriculum
- -St. Lawrence County resident
- Preference to graduate of Canton Central School

#### Walter R. Kingston Endowed

#### Scholarship for Automotive Technology

- —Entering freshman student
- -Automotive Technology curriculum
- -Preference given to Canton or St. Lawrence
- County students
- —Financial need

#### Lewis and Martha Goldstein Endowed

- Scholarship in Engineering Technology
- -Enrolled or planning to enroll in engineering curricula
- —Good citizenship and community engagement —Financial need

#### Ernest C. Krag Endowed Scholarship

- -Entering freshman student
- -Liberal Arts-Social Science curriculum
- —First preference to a student planning to pursue studies in government and history; second preference to a student from St. Lawrence or Franklin County; third preference to a Native American student

#### Edwin Krenceski Memorial Scholarship

- -Entering or continuing student
- —Electrical Engineering Technology curriculum —Financial need

#### Craig Larkin New Beginnings Scholarship

- -Entering or continuing student
- Enrolled in Homeland Security or Emergency Management
- Documented disability
- —Maintain 3.0 GPA

#### Aaron J. Lasher Endowed Scholarship

-Awarded annually to a deserving student

- -One-year Heating & Plumbing certificate, returning student in Air Conditioning Engineering Technology two-year program, or the Alternative and Renewable Energy Systems four-year program
- —Preference to Heuvelton Central School graduate, secondly to a St. Lawrence or Jefferson County graduate
- —Financial need

#### Garnett M. Lawrence Endowed Scholarship

- -Entering freshman student
- -Massena Central High School graduate
- —B average
- -Good relationships with teachers and peers
- -No history of alcohol or drug abuse

#### Gordon and Beatrice Lawrence Endowed Scholarship

- —Entering freshman student
- -St. Lawrence Central School graduate
- -B average through junior year of high school
- —Have good relationship with teachers and peers
- -Have no history of alcohol or drug abuse

#### Leadership Institute Endowed Scholarship

#### -Entering freshman student

- -Graduate of a St. Lawrence County high school, preference to Ogdensburg Free Academy or Massena Central School
- —85 high school average
- -Demonstrate leadership potential by
- participating in student organizations
- -Business curriculum

#### The Levato Family Endowed Scholarship

- —Any degree program
- -Community involvement

#### Liberty Utilities Scholarship

 Business or Canino School of Engineering Technology curriculum
 North Country resident

## Frederick C. and Karen Liebi Endowed Scholarship

- May be awarded to freshman or continuing student
- Awarded to Construction majors first, then to Canino School of Engineering Technology curricula.

#### C. Ernest and Dorothy B. Lowery Endowed Scholarship

#### —Continuing student

—Demonstrate academic excellence —Financial need

#### Albert F. and Agnes Powers Luck Endowed Scholarship

- -Entering freshman or continuing student
- —Preference accorded to students from Seton Catholic Central or Plattsburgh High School; second preference to a resident of Clinton, Essex, or Franklin County
- —Civil or Construction Engineering Technology curriculum

#### Joel Lynde-Strive for Excellence Award

- -Entering or continuing student
- Engineering program with preference to Air Conditioning Engineering Technology

#### Dr. Earl W. MacArthur Honors Scholarship

#### -Entering freshman

-Must meet two of the following categories:

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Top five percent of high school class; 93 or better high school average; combined SAT of 1250 or ACT of 28 or better

-Must maintain 3.25 GPA to retain scholarship

#### Joyce A. MacArthur/CTC Women

#### **Endowed Scholarship**

- -Continuing student
- -Outstanding scholar
- Demonstrates exemplary college or community service

#### Dale D. Major '70 Endowed Scholarship

—Resident of Verona, Vernon, or Sherrill —Financial need

#### Dr. Michael and Barbara Maresca Family Endowed Scholarship

- -Awarded to both an entering freshman and continuing student in the Nursing program
- Preference given to students demonstrating leadership skills and community service
- —Preference given to students from Canton-
- Potsdam Hospital and Massena Memorial Hospital areas
- —Financial need

#### Massena Alumni Endowment Scholarship

- —Entering freshman student
- -Enrolled in a two- or four- year program
- —Financial need

#### David R. Maynard Endowed Scholarship

- -Entering freshman student
- Academic and extracurricular high school activity meritorious
- —Financial need

#### Fulton and Anna McAllister Endowed Scholarship

- -Continuing student
- -Nursing curriculum

Excellence in Nursing

-Nursing curriculum

and initiative

-Graduating senior student

-Awarded at pinning ceremony

**Endowed Scholarship** 

-Financial need

-St. Lawrence County resident

-Demonstrated academic improvement

Virginia McAllister Endowed Award for

-Demonstrate academic and clinical excellence

Kenneth R. McDonald/Howland Pump

-Air Conditioning Engineering Technology or

-Either freshman or continuing student

Heating and Plumbing curriculum

-St. Lawrence County resident

#### Robert McKenty and Family Scholarship

- -Awarded annually to a student in a
- Construction-related program
- —Financial need

#### Merriman Family Endowed Scholarship

- -Entering freshman student
- -High school record, academics, and extracurricular activities with merit
- —Graduate of Colton-Pierrepont Central School, Norwood-Norfolk Central School, or Potsdam Central School
- —Financial need

#### Susanne Connick Merritt Endowed Scholarship

- -Returning student; must have completed two semesters of full-time study at SUNY Canton in a Business curriculum
- —Outstanding scholar
- -Participation in extracurricular activities on and off campus

#### Richard W. Miller Endowed Scholarship

- -Entering freshman and continuing students
- Electrical Engineering Technology curriculum or technical curriculum

#### Richard W. Miller Academic Excellence Award

- -Continuing student
- -Canino School of Engineering Technology
- —Academic excellence

#### Modell Family Endowed Scholarship

- Entering or returning student in Electrical Engineering Technology curriculum
   Preference to student from Onondaga County
- Donald M. Morgan Memorial Endowed

#### Scholarship

- —Continuing student who is a graduate from Knox Memorial Central School or Edwards-Knox Central School
- —Maintain a 2.75 cumulative GPA

#### Rosanna Mae Moser Endowed Scholarship

- —International student
- -Enrolled in a Business curriculum
- —Financial need

#### Peter Nevaldine Endowed Scholarship

- Entering freshman student or continuing student
- —Engineering Technology or one-year certificate program in Canino School of Engineering Technology

#### New York State Federation of Home Bureaus, Inc., in Honor of Audrey J.

### Hall Scholarship

- -Continuing full-time student
- -Early Childhood or Nursing curriculum
- -2.85 or better GPA

- —Resident of counties where there are organized chapters of New York State Federation of Home Bureaus, Inc.
- -Separate application needed

#### Allan P. and Catherine Barnett Newell Endowed Scholarship

- -Continuing student
- --North Country student from Clinton, Essex, Franklin, Jefferson, Lewis, or St. Lawrence Counties
- --First preference to, but not restricted to, Veterinary Science Technology majors
- —Evidence of leadership qualities, service to community, and participation in a variety of extracurricular activities will be viewed upon favorably in the selection process
- -The recipient must maintain a 3.0 GPA to retain the scholarship for a consecutive semester of study
- —Financial need

#### Elwood J. Nicholson, Jr. Endowed Scholarship

- -Entering freshman student
- Recipient shall be Engineering Technology and Science and performance in and out of classroom exemplary
- --Preference to Air Conditioning Engineering Technology/Heating and Plumbing Service

#### Robert A. Noble, Sr., Endowed Scholarship

- To further the talents of youth in engineering and nursing
- -Entering or returning senior student
- -Electrical Engineering Technology or Nursing curriculum
- –Vermont or North Country resident

#### Elsie Lucy (Cole) Norton Endowed Scholarship

- -Entering or returning student
- —Resident of St. Lawrence County
- —Preference to a student from the Canton area
- —Early Childhood program
- -Retain the scholarship if GPA is 3.0 or better

#### John G. A. and Chloe Ann R. O'Neil

#### Endowment

No restrictions

#### John P. Ouderkirk Endowed Scholarship

 Continuing student
 Bachelor's degree program in Alternative and Renewable Energy Systems, Mechanical Technology, Electrical Technology, or Civil and Environmental Engineering Technology
 Financial need

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#### Ornella T. Parker '14 Annual Scholarship

- -Resident of the Bronx, Brooklyn, Queens, Manhattan or Staten Island
- —Self-identified as black
- -Student leadership, extra-curricular or
- community organization Involvement
- —Financial need

#### David and Susan Penepent Annual Scholarship in Mortuary Scholarship

- -Non-traditional student and/or severe financial need
- Enrolled or planning to enroll in Mortuary Science

#### Dr. William F. Peters Tech Prep

- Endowed Scholarship
- —Entering freshman student
- -BOCES graduate
- -Preference to Tech Prep participants

#### Bruce Petrie Memorial Endowed Scholarship

-St. Lawrence or Oswego County student

#### Phi Theta Kappa Endowed Scholarship

- -Continuing student
- Must show leadership qualities and have participated in college and community activities
- -Must have at least a 3.75 cumulative GPA

#### Elaine Claxton Pidgeon Endowed Scholarship

- -Continuing student
- —Nursing curriculum
- -Demonstrates academic excellence

#### The Jonathan T. Pinckney '18 Entrepreneur Scholarship

- Preference given to a student who demonstrates an entrepreneurial spirit or creative business mind
- Preference given to a student interested in entrepreneurship

#### Plumbing, Heating, and Piping Contractors of Northern New York Endowed Scholarship

—Entering freshman student

**Endowed Scholarship** 

school community

-Entering freshman student

-Massena Central School graduate

- —One-year Heating and Plumbing curriculum
- —Resident of Jefferson, Lewis, or St. Lawrence County

Harry and Ella Winslow Podgurski

-Canino School of Engineering Technology

-Has been a positive member of the high

—Financial need

### **Financial Assistance**

## The Olive Porteous Annual Nursing Scholarship

### -Nursing Student

—Financial Need

#### Jean M. Poticher Endowed Scholarship

- —Entering freshman student
- -Resident of St. Lawrence County
- -Enrolled in a Business curriculum

#### Lorence F. Pries Endowed Scholarship

- -Continuing student
- -Electrical Engineering Technology curriculum
- -Participation in extracurricular activities

#### Promises Kept Scholarship

- -Incoming student
- —Self-Identifies as black
- —Financial need

#### Alexander Reed Automotive Equipment Scholarship

- -Awarded in the Spring semester

#### Bernard Creighton Regan Endowed Scholarship

- —Freshman or continuing student
- —Massena Central School graduate preferred; if not one available, then St. Lawrence County
- Electrical or Air Conditioning Engineering Technology
- —Financial need

#### Gerald E. and Corinne C. Rice Endowed Scholarship

- —Entering freshman or returning student
- -Canino School of Engineering Technology
- -Preference to non-traditional student

#### Joseph and Carolyne Rich Family Endowed Scholarship

- —Non-traditional student
- -Jefferson County resident
- —Human Services field Liberal Arts or Psychology
- —Financial need

# W. Stanley and Alice E. Richardson Endowed Scholarship

- -Continuing student
- -Enrolled in a Business curriculum
- -Student from St. Lawrence County
- -Meritorious academic record and motivation to succeed in business

#### Marjorie J. Rock Endowed Scholarship

- —Non-traditional Nursing student
- -Must have at least one year prior nursing experience
- —Resident of St. Lawrence County
- -Desires employment after graduation in the

#### North Country

#### Carol Sue (Morse) '53 and Paul A.

#### Rosenberg Endowed Scholarship

- -Two- or four-year program in human health care studies
- —Financial need

#### Rosser Family Endowed Scholarship

- Entering freshman or returning student in business, health-related, education-related, construction-related or public service
- —From either Western New York or Northern New York
- —Preference given to student from Orchard Park, Canton, or St. Lawrence Central High Schools
- -Renewable with 3.0 GPA
- -Awarded based on merit and character

#### Laura Rose Rozell '69 Endowed Scholarship

- -Second year student continuing studies in four year baccalaureate program
- —Accounting or related field
- -Highest GPA in Accounting determined by the Dean of SBLA or faculty

#### John F. Ruitberg Endowed Scholarship

- —Entering freshman
- -Student from St. Lawrence County
- -Business or Liberal Arts-Social Science curriculum

#### The Thomas '71 and Barbara (Gahren)

#### '71 Annual Early Childhood Scholarship

- —Early Childhood student
- —Financial Need

#### The Thomas '71 and Barbara (Gahren) '71 Endowed Early Childhood

#### Scholarship

- -Early Childhood student
- —Financial Need

#### Alex Sabo Mentoring Endowed Scholarship

- -Entering freshman
- —Financial need
- -Enrolled in two to four year program
- Applicants recommended by Massena High School Guidance Department
- -Enrolled in Finance or Business curriculum

#### The Saguaro Endowed Scholarship

- -Entering or continuing student
- —Any curriculum
- —Financial need

#### William and Beatrice Schermerhorn Endowed Scholarship

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#### -Continuing student

- ----Veterinary Science Technology curriculum
- Demonstrates a humane ethic and a personal commitment to animals

#### Seacomm FCU Financial Literacy Endowed Scholarship

- -Entering or continuing student
- —St. Lawrence or Franklin Counties
- -Studies financial literacy
- -Must have 3.0 GPA
- -Major or minor in Business field
- -Preference to Finance, Accounting, Business Administration or Management

#### Sheila Smith '82 Endowed Scholarship for Women In STEM

- -Entering or continuing student
- —Female student in a STEM-related program to include all programs in the Canino School, Veterinary Science Technology and Veterinary Technology
- -Must have a 3.5 GPA or 85 high school average

#### Margaret D. Sovie Endowed Scholarship

- Second-year Nursing student who has demonstrated a compassionate outlook and eagerness to become a registered nurse
- -Chosen by the consensus of the Nursing faculty
- —Second award to a graduate of Ogdensburg Free Academy enrolled in the Nursing curriculum

#### The John A. and Shirley Ann Spellacy Endowed Scholarship —Student enrolled or planning to enroll at

-Evidence of leadership and community

in the students' home community.

Bill and Peg Stalder Endowed

-Entering freshman student

-St. Lawrence County resident

St. Lawrence Federal Credit Union

-Deserving student from St. Lawrence County

St. Lawrence State Hospital School of

Nursing Alumni Association Endowed

-Empathy, leadership, patient advocacy

engagement, as demonstrated through

participation in campus organizations or

events, and/or volunteer work on campus or

of Business & Liberal Arts

-Financial need

Scholarship

Scholarship

Scholarship

-Continuing student

-Nursing curriculum

-North Country resident

SUNY Canton in any program in the School

### Financial Assistance

#### Stitt Family Endowed Scholarship

- -Entering freshmen student
- Preference given to Ogdensburg Free Academy or Heuvelton Central School graduates
- Secondary preference given to student from St. Lawrence County

#### Jay F. Stone Endowed Scholarship

- -Entering freshmen student
- -Air Conditioning Engineering Technology

#### John H. and Eunice B. Stone Endowed Scholarship

- Continuing student from Jefferson or Lewis County
- -Preference to part-time student
- —Financial need

#### David W. Sullivan Memorial Endowed Scholarship

- —Entering freshman student
- -Criminal Justice curriculum
- -Graduate of a St. Lawrence County high school
- -School or community service involvement

#### SUNY Canton/Empire State Diversity Honors Scholarship

- -Entering freshman or continuing student
- -High school average B or better
- —Native American, African American, or Hispanic
- -Recipients maintaining a 2.75 GPA may retain the scholarship for a second year of study

#### SUNY Canton Student Veteran's

#### Association and John L. Halford, Sr., '49 Endowed Scholarship

- —Veteran or spouse/child of a veteran who received an honorable discharge from any branch of the United States Armed Forces
- -Priority ranking for the award should be:
- -Purple Heart recipient
- -Combat veteran wounded in action
- -Spouse or child of a veteran killed in action
- -Combat veteran
- Veteran who served overseas but did not see combat action
- Veteran who served in the continental United States
- -Direct spouse or child of a veteran

#### W. H. Swart '51 - Veteran Recognition Endowed Scholarship

- ---Veteran honorably discharged from the US Armed Forces
- -Preference to combat veteran wounded in action or child of veteran killed in action
- —Unwounded combat veteran
- —Veteran graduate from Deposit Central High School
- ---Veteran who served overseas with no combat action

- ---Veteran who served in continental United States
- -Direct child, nephew, or niece of veteran

#### Daniel J. Sweeney '75 Delta Kappa

- Sigma Fraternity Leadership Endowment —Entering or continuing student
- Performs well academically and demonstrates leadership within their community, in athletics, in student government, or any other area
- —Strong financial need
- —Preference given to son/daughter of a brother of Delta Kappa Sigma

#### Simona Szafran Endowed Scholarship

- —Entering or continuing student
- Enrolled in Early Childhood Development program

### Mark Szafran Memorial Endowed

#### Scholarship for Students Overcoming Adversity

—Students who have shown great character, determination, and a strong sense of purpose through overcoming adversity and are committed to improving the lives of others, as evidenced through their volunteer activity, community involvement, and civic engagement, either on campus or in events and activities in their home communities.

#### Zachary R. Tartell '15 Nursing Scholarship

- -Continuing non-traditional student in 2-year Nursing curriculum with interest in cardiology or critical care
- -Preference to 3.0 GPA or higher

#### Myrna F. Thomas '79 Endowed Scholarship

- -Entering with GPA of 3.0 or higher
- —Financial need
- -Studying Business including Finance
- -Preference to students majoring in Accounting

# Tracey L. Thompson Endowed Scholarship

- -Undergraduate student
- —Financial need
- -underrepresented student
- ---preference to students who participate in campus organizations or events
- preference to student who has had challenging circumstances

#### Tiberio Family Endowed Scholarship in

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#### Memory of Lena Chadwick

- -Entering or continuing student
- —Student must be enrolled in a business curriculum, including Finance or Management

- --Preference will be given to students who are enrolled in Accounting
- -High school average must be a 3.0 or higher -Financial need

#### T. J. Toyota and Cloce Family Endowed Scholarship

- —Entering or continuing student
- -Automotive Technology curriculum
- Performance must demonstrate potential for success

#### Tougher Industries, Inc. Endowed Scholarship

- -Entering freshman student
- -Air Conditioning Engineering Technology
- curriculum —Financial need

#### Harold C. Town Endowed Scholarship

- —Entering freshman student
- -Graduate of Norwood-Norfolk Central School
- -Meritorious high school record

#### Carl W. Trainor Family Scholarship Endowment

- -Continuing student in the Mortuary Science or Health Science curricula
- —First preference to a resident of Boonville or Lewis County
- —Second preference to a North Country resident

#### Tuper Automotive Student Textbook Scholarship

- —Second year student
- -Enrolled in Automotive Technology
- Used to offset cost of required textbooks and supplies
- -Must walk at Graduation Ceremony

#### James M. and Charlene Tyler Endowed Scholarship

- -Continuing student who had challenges in high school but has excelled academically during first year
- —This is a merit award recognizing the change in the student's performance and accomplishment at SUNY Canton
- --Should the student's performance continue to excel, this scholarship is renewable if the student wishes to earn a bachelor's degree

#### Rosella Todd Valentine Endowed Scholarship

- -Business degree program
- -North Country resident

#### William K. Viertel Memorial Endowed Scholarship

- -Excellence in Math or Chemistry
- —Preference given to a student enrolled in an engineering related program. Secondary preference given to health science or business major.
- —Financial need

### William C. Vining and Dr. Judson R.

Vining Endowed Scholarship

### —Entering student in Nursing program

#### Arlington Walker Endowed Scholarship

—Continuing student

-Criminal Justice curriculum

-Resident of St. Lawrence County

#### The James '77 and Susan Waters Endowed Scholarship

-Continuing, entering, or transfer student

--Civil Engineering Technology A.A.S program or Civil and Environmental Engineering Technology Bachelors program

—Financial Need

#### John H. Wells Memorial Endowed Scholarship

- -Entering freshman or returning student
- —Air Conditioning Engineering Technology or Alternative and Renewable Energy Systems or Heating and Plumbing curriculum

#### Arthur S. Wheater Endowed Scholarship

- -Entering or continuing student
- -Preference to student from Town of Oswegatchie, Heuvelton, or Lisbon
- —Pursing Agriculture related curriculum or Veterinary Technology

#### Guilford White '68 Endowed Scholarship

- -Entering or continuing student in the Canino School of Engineering Technology
- —Preference to Civil Engineering Technology or Construction Technology: Management

—Financial need

#### Frederick S. and Barbara R. '53 & '70 Wilder Endowed Scholarship

—Non-traditional student from Northern New York in their second year of Nursing RN degree program or third or fourth year of Nursing Bachelor degree program

#### Gregg and Anne Coloton Williams '78 Endowed Scholarship

- -Entering or continuing student
- -No restrictions
- Demonstrated good citizenship by being in extracurricular activities and community service activities

#### Woodcock Family Endowed Scholarship

- -Continuing students
- -Financial need
- -Preference to students from St. Lawrence County, then Onondaga County
- —Mechanical Engineering Technology curriculum
- Additionally, to students in any curriculum with special preference to women

#### Woodside Family Endowed Scholarship

- Entering freshman or continuing student
   Air Conditioning Engineering Technology curriculum
- —Preference to students from St. Lawrence or Erie County
- -Financial need

#### Katherine Wyckoff '77 Endowed Scholarship

- -Either entering or continuing Nursing student
- -Preference to non-traditional student
- -Financial need

#### Zeta Alpha Phi Fraternity Student Leadership Initiative

- -Student involved in campus activities
- -Maintain 2.5 GPA
- —Financial need

### SATISFACTORY ACADEMIC PROGRESS

#### FEDERAL AID

(Federal Stafford Loans, Parent Loans, Work-Study, Pell Grant, Seog Grants)

Students receiving financial aid are required to maintain minimum program pursuit and academic progress standards in order to continue to receive assistance. Use the chart below for your degree program to determine your minimum requirements.

	ATTEMPTED CREDITS/REQUIRED GPA						
STATUS	1-23	24-35	36-47	48-59	60-71	72+	
Minimum GPA Requirement	1.25	1.5	1.75	2.0	2.0	2.0	
Percentage of Attempted Credits Successfully Completed	50%	50%	66.7%	66.7%	66.7%	66.7%	

Additionally, students are required to complete their degree with 150% of a normal timeframe. Attempted hours will vary with required program lengths, see examples below.

- Example 1: For a 60 credit hour degree program, you must complete it with 90 attempted hours. (90 attempted Credit Hours/60 Passed Credit Hours = 150%)
- Example 2: The Nursing Associate Degree requires 65 credit hours. 65 Passed Credit Hours x 1.5 (150%) = 98 credit hours may be attempted.

Total attempted hours will be used regardless of any program changes that have occurred (switching majors, etc.). Grades of "W" count towards total attempted hours. Repeated courses that were previously passed count only once. Remedial courses that are not credit-bearing do not count in the total attempted hours. Courses enrolled in each semester must be applicable to the students' current degree program.

#### FAILURE TO MEET MINIMUM STANDARDS (Please be aware that these are not the same as the Academic Recovery & Suspensions given out by the Dean's Offices.)

#### STEP 1 – FINANCIAL AID WARNING

A student who does not meet the required minimum standards will automatically be given a one-time warning semester. This gives the student an opportunity to correct any deficiencies without losing federal aid eligibility. If a student withdraws from college, they have not met academic progress requirements.

### **Financial Assistance**

#### STEP 2 - FINANCIAL AID **TERMINATION**

A student who fails a second time to meet the minimum standards will lose all federal aid eligibility. Eligibility can only be regained once they are again meeting the minimum standards. NOTE: If ALL courses taken while are warning are successfully passed with a 2.0 or better you can continue on warning.

#### WAIVER REQUESTS

If failure to meet standards is due to extenuating circumstances beyond a students' control, they may apply for a one-time waiver. All waiver applications must include full documentation and will be reviewed by the Financial Aid Director. Approval is not guaranteed. If approved the student will be given an academic plan to maintain eligibility.

An Academic Suspension from the Dean's Office overrides this eligibility criteria. Suspended students are ineligible for all financial aid.

#### **New York State Aid**

(TAP Grant, SUSTA Grant, APTS Grant)

Students receiving financial aid are required to maintain minimum program pursuit and academic progress standards in order to continue to receive assistance. Use the chart below to determine your minimum requirements. Note: Eligibility for all EOP funds is determined separately by the EOP Office.

- If you received TAP at another college, be sure to include that in the number of semesters you have received a TAP.
- To calculate the percentage of credits you have completed divide total attempted credits by total earned credits.

#### Certificate/Associate Degree Programs (Remedial Students\*)

Remedial Students are EOP Students or any student required to take at least 2 remedial courses with the first two semesters.

Semes- ters TAP Credit Received Hours		Cumulative GPA	Percentage of Credits Completed	
1	3	0.50	50%/6 credits	

Semes- ters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
2	9	0.75	50%/6 credits
3	18	1.30	75%/9 credits
4	30	2.00	75%/9 credits
5	45	2.00	100%/12 credits

#### Certificate/Associate Degree Programs (Non-Remedial Students)

Semes- ters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	6	1.30	50%/6 credits
2	15	1.50	50%/6 credits
3	27	1.80	75%/9 credits
4	39	2.00	75%/9 credits
5	51	2.00	100%/12 credits

#### **Bachelor Degree Programs** (Remedial Students\*)

Remedial Students are EOP Students or any student required to take at least 2 remedial courses with the first two semesters.

Semes- ters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	3	1.10	50%/6 credits
2	9	1.20	50%/6 credits
3	21	1.30	75%/9 credits
4	33	2.00	75%/9 credits
5	45	2.00	100%/12 credits
6	60	2.00	100%/12 credits
7	75	2.00	100%/12 credits
8**	90	2.00	100%/12 credits
9**	105	2.00	100%/12 credits

#### **Bachelor Degree Programs** (Non-Remedial Students)

Semes- ters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	6	1.50	50%/6 credits
2	15	1.80	50%/6 credits
3	27	1.80	75%/9 credits
4	39	2.00	75%/9 credits
5	51	2.00	100%/12 credits
6	66	2.00	100%/12 credits
7	81	2.00	100%/12 credits
8	96	2.00	100%/12 credits

For Disabled Students as defined by
ADA of 1990 (New as of 2015-16)
Certificate/Associate Degrees

Earned Credit Hours

111

Semes-ters TAP

Received

9

	0					
Semes- ters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed			
1	3	1.30	50%			
2	9	1.50	50%			
3	18	1.80	75%			
4	30	2.00	75%			
5	42	2.00	100%			
6	51	2.00	100%			
7	60	2.00	100%			

Cumulative

GPA

2.00

Percentage of Credits Completed

100%/12 credits

defined by

#### **Bachelor** Degrees

Semes- ters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	3	1.50	50%
2	9	1.80	50%
3	21	1.80	75%
4	33	2.00	75%
5	45	2.00	100%
6	60	2.00	100%
7	75	2.00	100%
8	90	2.00	100%
9	105	2.00	100%

#### FAILURE TO MEET MINIMUM **STANDARDS**

If a student fails to meet state academic progress requirements as outlined above at the end of the semester, they will lose eligibility for the next semester they attend. Eligibility will be regained once they meet the above standards. Additionally, students' who stop attending for more than one year may regain eligibility upon return for one semester (if over 4 prior semesters of TAP you must have a 2.0 overall GPA). Then you must meet academic progress criteria each subsequent semester.

• If a student withdraws from college, they have not met academic progress requirements (automatic).

• APTS recipients who fail to receive a 1.0 (D) in a semester will not be eligible for APTS the following semester, even if otherwise meeting progress requirements.

#### WAIVER REQUESTS

If failure to meet standards is due to extenuating circumstances beyond a students' control, they may apply for a one-time waiver. All waiver applications must include full documentation and will be reviewed by the Financial Aid Director. Approval is not guaranteed. If approved the student will be given an academic plan to maintain eligibility.

# IMPORTANT THINGS TO KEEP IN MIND

- Grades of "W" and transfer credits count towards total attempted hours.
- Remedial courses that are not credit-bearing, will not count in the total earned hours.
- Repeated courses that were previously passed do not count as earned hours for the semester.
- Courses enrolled in each semester must be applicable to the students' current degree program.
- Repeating any course in which a passing grade has already been received (D or above) will not count for TAP eligibility, unless the college catalog states a higher grade is required for the student's current curriculum. For Federal Aid a course that is passed may be repeated only once.

An Academic Suspension from the Dean's Office overrides this eligibility criteria. Suspended students are ineligible for all financial aid.



### Responsibilities

#### FACULTY RESPONSIBILITIES

Faculty members have the responsibility of ensuring an educational environment that promotes academic excellence. All individuals have the right to a positive secure environment, one in which persons can realize their potential as intellectual, social, political, economic and creative beings.

#### STUDENT RESPONSIBILITIES

It is the students' responsibility to know and abide by the requirements for their programs and courses published in college publications and course outlines. Further, it is the students' responsibility to utilize the college environment, resources and professionals therein to meet requirements which shall assist in both academic and personal growth.

### Scheduling, Attendance, Grades, Conduct

#### **SCHEDULING**

The Registrar prepares a master schedule for each session of the College. The normal college academic day is 8 a.m. to 10 p.m.

The Registrar arranges for and coordinates the registration of new and returning students for each semester. The Advising Center coordinates the registration of new students. Faculty advisors will assist students with appropriate selections to meet their program requirements; however, the responsibility for meeting all graduation requirements is that of the student. Following advising, continuing students schedule their classes for the subsequent semester through secure access to the online student information system (called UCan-Web). Should a student fail to register by the appropriate registration deadline date, a \$50.00 non-refundable late registration fee will be assessed. Students who do not register by the deadline may register for courses on a space-available basis. (Please note that only courses required for a student's current curriculum will be considered eligible for federal and state financial aid).

#### MAXIMUM STUDENT LOAD

Nineteen credit hours will constitute a maximum course load for fall, spring, and summer term semesters; seven credit hours is the maximum course load for winter term. Degree students may seek permission for additional hours from the Dean of the School in which the student is enrolled. Non-degree students may seek permission for additional hours for summer term from the Provost's Office, and for winter term, from the Director of Advising.

#### ATTENDANCE

Students are expected to accept full responsibility for meeting all of the academic requirements for every course in which they are enrolled. Attendance regulations are determined by the faculty of each department based upon their academic requirements for each curriculum and/or course. At the beginning of each semester, instructors of record will clearly state their attendance policy or participation policy in their course syllabi. Dismissal from a course may result from unexcused absenteeism or non-participation. A grade of "F" will be recorded for a student so notified unless the student makes a formal application for withdrawal from that course prior to the semester deadline for withdrawing without academic penalty, consistent with the college withdrawal policy. Course withdrawal requests are submitted in UCanWeb on the registration tab. Suspension from college may be imposed by the Provost/Vice President for Academic Affairs if absenteeism or non-participation has reached such proportions that further academic progress is not possible, with grades of "F" for courses not completed as of the suspension date.

#### ACADEMIC INTEGRITY POLICY

The State University of New York at Canton is dedicated to holding its academic community to the highest standards of academic integrity. We believe that in order for students to have successful careers in their chosen fields, they must master their own course work and not imitate or copy another person's ideas or work and claim it as their own. Academic integrity is essential to the success of the college's educational mission, and violations of this policy are considered a serious matter.

Students are therefore expected to comply with all academic integrity standards described in the SUNY Canton Code of Student Conduct, Rights, and Responsibilities (Code). These standards include issues of cheating and plagiarism. The Code is published in the Student Handbook, accessible from the SUNY Canton homepage. Breaches of our academic integrity standards will result in a variety of penalties depending on the severity of the problem.

Please see the Academic Integrity Policy at www.canton.edu/provost/pdf/ Academic\_Integrity.pdf for additional information.

# GRADING AND HONOR DEFINITIONS

A credit hour is defined as three hours work per week per semester in any combination of class, laboratory and outside study time.

#### PASSING GRADE

A, B+, B, C+, C, D+, D and P are passing grades. The grade considered satisfactory for completion of a course as a prerequisite for subsequent courses or activities will be determined by each department or program and stipulated in the course description.

#### GRADE POINT AVERAGE

The Grade Point Average is determined by dividing the total grade points earned by

the total academic credit hours attempted (not including W's, I's, P's, or Equivalent Credits). NOTE: A GPA Calculator can be found at this link: <u>https://www.canton.edu/</u> forms/student/

Letter	Grade Pts.
Grade	per Credit Hr.
А	4.00-Excellent
B+	3.50–Very Good
В	3.00-Good
C+	2.50–Above Average
С	2.00–Average
D+	1.50–Below Average
D	1.00 Minimally Passing
F	0.00–Failing

#### HONORS LISTS

At the end of each semester, Honors Lists will be prepared by the Registrar's Office and sent to the Office of Public Relations for distribution to the news media. Media releases will not include the names of students who have restricted the release of directory information pursuant to FERPA. Students who have earned cumulative grade point averages as listed below will be designated for Cum Laude, Magna Cum Laude, or Summa Cum Laude on their diplomas:

- Cum Laude ~ 3.250-3.499
- Magna Cum Laude ~ 3.500-3.749
- Summa Cum Laude ~ 3.750-4.000

**President's Honors Lists** will include the names of the full-time students who earn semester GPA's of 3.75 or higher. To be eligible, students must be enrolled in 12 or more credit hours. The President's Honors List includes students taking imputed or remedial-level courses and students taking pass/fail courses if fewer than 3-credit hours. When the pass/fail credit hours exceed 2-credit hours due to specific program requirements, a student can be named to the President's Honors List, as long as they have an additional minimum 10 hours of graded coursework.

**Dean's Honors Lists** will include the names of full-time students who earn semester GPA's of 3.25 - 3.75. To be eligible, students must be enrolled in 12 or more credit hours. The Dean's Honors List includes students taking imputed or remedial-level courses and students taking pass/ fail courses if fewer than 3-credit hours. When the pass/fail credit hours exceed 2-credit hours due to specific program requirements, a student can be named to the Dean's Honors List, as long as they have an additional minimum 10 hours of graded coursework.

**Part-Time Academic Honors Lists** will include the names of part-time, matriculated students who earn semester GPA's of 3.25 or higher. To be eligible, students must complete 6 or more credit hours. The Part-Time Academic Honors List includes students taking imputed or remedial-level courses and students taking pass/fail courses if fewer than 3-credit hours. When the pass/ fail credit hours exceed 2-credit hours due to specific program requirements, a student can be named to the Part-Time Honors List, as long as they have an additional minimum 4 hours of graded coursework.

Note: Students who receive any incomplete grades at the completion of a semester are not included in the Dean's/President's/ Part-Time honors lists. If a student is eligible for an honors list once the grade is changed, the appropriate honor will be notated on the student transcript. However, because the change will occur after the deadline, media releases will not include the names of students who are eligible for an honors list.

#### PASS/FAIL POLICY

The Pass/Fail Policy is intended to better serve our students who want to take an elective course without risking a negative effect on their GPA. Earned grades of A-D will appear on the student's academic transcript as a "P" (Pass); earned grades of F will remain an "F" (Fail). The "P" (Pass) grade is not calculated in the GPA, but counts towards program pursuit for financial aid purposes. It is understood that the Pass/ Fail Policy is NOT designed to be used as a "lifeline" for students in jeopardy of doing poorly in courses.

- 1. Number of Courses Allowed to Choose Pass/Fail
  - Maximum number of 4 courses at SUNY Canton for a Baccalaureate Degree
  - Maximum number of 2 courses at SUNY Canton for an Associate's Degree
  - NOTE: Courses in which students took a Pass Grade Option during COVIDrelated semes-ters (Spring 2020, Fall 2020, Spring 2021) are excluded from the maximum number of courses allowed above
  - NOTE: Courses which are normally designated as Pass/Fail courses are excluded from the maximum number of courses allowed above
  - Only one Pass/Fail Option per semester is allowed
- 2. Deadline to Request a Pass/Fail Option
  - The deadline for students to request a Pass/Fail Option is 3 weeks from the date the course begins for full 15-week courses
  - The deadline for students to request a Pass/Fail Option is 1 week from the date the course begins for any course which is NOT a regular, full 15-week course
  - The deadline dates will be published on the Academic Calendar
  - Once the request for a Pass/Fail Option is approved and processed by the Registrar, the student is not permitted to revert the grade back to the standard A-F grading scale

# 3. Courses Excluded from Pass/Fail Option

- Students may not request a Pass/Fail for any courses in their major, regardless of whether or not their program is accredited
- Students may not request a Pass/Fail for any courses in their minor
- Students may not request a Pass/Fail for any General Education Requirement (GER) courses
- Students may not request a Pass/Fail

for their First Year Experience (FYEP) course

- Students may not request a Pass/Fail if they are repeating a course
- 4. Criteria for Requesting a Pass/Fail Option
  - Students must have completed one full semester at SUNY Canton
  - Students must be in Good Standing and have a minimum 2.0 GPA in order to request a Pass/Fail

#### MIDTERM GRADES

- 1. At midterm, faculty members will submit student grades via UCanWeb (the online student Information system) for all courses they are teaching or supervising.
- 2.Faculty members will report midterm grades using the same letter grade designations used for final course grades.
- 3. All mid-term grades are available to students electronically through secure access to UCanWeb. Students receiving grades of D+, D, or F will have a flag raised in RooSuccess. Students should seek out their instructors/academic advisors to identify the problem, seek additional support services (tutoring labs), and make the necessary improvement.

#### STUDENT GRADES

The permanent record is the official academic record and is permanently filed in the Registrar's Office. Only personnel authorized by the Registrar may have direct access to permanent records. See Transcripts section for details on how to request grades be released to a third party.

Final and mid-term grades are available to students online through secure access to UCanWeb. Final grades may be withheld from any student who has a delinquent college obligation.

#### **INCOMPLETE GRADES**

An incomplete final grade may be assigned by a faculty member in cases

when, for valid extenuating circumstances (illness, accident, etc.), all of the required work has not been completed but is otherwise satisfactory. (Unexcused absence from the final exam and/or failure to turn in a final project or paper are NOT extenuating circumstances), Except in unusual cases, the delinquent work should not exceed 10-20 percent of the total required work. An Incomplete Grade Contract must be completed in full, including all signatures, prior to receiving a grade of ("I") Incomplete.

Responsibility for making up incomplete work lies with the student. Incomplete work must be made up by the due date posted on the academic calendar subsequent regular term semester. Alternate arrangement (shorter or longer time frame) can be implemented if agreed upon by the instructor and student and approved by the Dean of the School. If the work is not completed according to the agreed upon plan, the incomplete grade will be recorded as "F" on the student's record.

#### WITHDRAWAL FROM COURSES

Following the course change period students may withdraw from credit courses without academic penalty (receiving a grade of "W") under the following conditions, unless dismissed for deviant academic conduct:

-In order to maintain the academic integrity of the institution, the academic focus of the students and adequate student academic progress toward a degree, a matriculated full-time student may not drop courses below a 12-credit hour load while a semester is in progress. In case of exceptional circumstances beyond the student's control and with the written approval of the Dean of the School in which the student is enrolled. a student may drop below the limit to part-time status. Students are encouraged to consult with the Financial Aid Office in the One Hop Shop and the Residence Life Office to determine the

impact of this academic decision before dropping to part-time status.

- --Withdrawal from a course is requested via a Course Change Request available in UCan Web under the Registration tab. The request must be approved by the student's academic advisor and/ or academic Dean. A \$20 fee will be added to the student's account and must be paid at the Student Accounts Office in the One Hop Shop or via the online payment portal which is available on the SUNY Canton webpage (Quick Links > Online Payment). The course withdrawal will not be official until all required permissions have been completed.
- —Withdrawal is allowed under the above conditions prior to the last ten class days of the semester. In courses less than a semester in length, withdrawal is allowed prior to completion of 85 percent of the class meetings.
- —A matriculated part-time student may not withdraw from any course unless exceptional circumstances exist and the above procedure is followed.
- -Non-matriculated students are required to pay a \$20 course change fee. No permissions are required.
- —Approvals of the advisor, and/or School Dean do not necessarily indicate approval of the action, but signify that counseling has occurred and the student is fully aware of the consequences of course withdrawal.
- —Failure to attend class or merely giving notice to an instructor is not an official withdrawal.
- —A grade of "W" (Withdrawn) will be recorded and will not be used in calculating GPA. When all approvals have been completed, the official withdrawal will be confirmed by the student by returning to the Course Change Request Outcome Page in UCan Web and submitting requested changes.

Students who receive financial aid are reminded that their aid is based on the number of credit hours they maintain. A loss of aid may occur if a student drops below a certain credit hour level (e.g., from full-time to part-time). Students should consult with the Financial Aid Office - Student Service Center prior to any decision to withdraw from courses

#### LEAVE OF ABSENCE

Full-time, matriculated students facing circumstances that will interrupt their course of study at SUNY Canton, but wish to return to the College within one year, may apply for a Leave of Absence. A leave of absence preserves admitted status in the student's current degree program at the time leave begins. This means that the academic requirements that are in place when the student leaves are "frozen" and allows students to continue to claim their current catalog year. It also allows students to register without being readmitted and maintains access to SUNY Canton email during their time away.

A leave of absence is normally granted for a maximum of 2 consecutive semesters or the total period of active duty for those called to active military service. Students may return to the campus following the leave by contacting their Dean's Office to select classes. If the leave of absence expires, the student must apply for readmission, and meet any new admission or degree requirements that are in place upon return to the College. A Leave of Absence can be initiated by the student through UCanWeb, under the Miscellaneous Student Requirements tab. To be considered for a leave of absence, students MUST meet the following eligibility criteria:

- Be a full-time, matriculated student
- Have a SUNY Canton cumulative GPA of 2.0 or greater at the end of the student's last semester.
- One or more semesters must have been completed at SUNY Canton.
- Have good student conduct standing.

**Note:** Permission of the Program Director is required for students in select programs. Programs needing specific approval include:

- Nursing AAS
- Dual Degree Nursing Program (DDNP)
- Veterinary Technology BS
- Veterinary Science Technology AAS
- Physical Therapist Assistant AAS
- Practical Nursing

#### **REPEATING COURSES**

Students may repeat courses. If higher, the grade earned in the repeated course shall be substituted for the original grade in computing the GPA. Repeating courses may affect TAP awards. Students should consult the Financial Aid Office prior to registering to retake a course. Repeated courses must be taken at SUNY Canton for the course grade to be calculated in your SUNY Canton GPA. Repeated courses taken at another institution where a grade of C or better is earned, will be transferred back for credit only and the SUNY Canton grade will be excluded from the student's GPA; to clarify, the student will receive transfer credit, but the grade will not transfer.

#### TRANSCRIPTS

SUNY Canton's transcripts are processed through Parchement. Students will request their transcript(s) through their secure UCanWeb account. SUNY Canton will cover the cost of the actual transcript(s) from the \$5 transcript fee that students are charged each semester. Students can choose to have a paper or an electronic transcript sent. However, it is the student's responsibility to pay the handling fee associated with having their transcript(s) sent. The handling fee includes valuable notifications that alert students of any potential problems that may prevent their transcript(s) from being sent. In addition, students will have the ability to track the delivery status of their transcript(s). Expedited shipping is also available for an additional fee.

#### FINAL EXAMINATION

There will be a final examination period at the end of each semester. This period must be used by the professor for a comprehensive final examination, the last unit test, or some other activity of academic merit.

#### COURSE AUDIT

With permission of the instructor, a person may audit any credit course offered by the College. A maximum of two courses may be audited in one semester, unless a waiver is obtained from the Provost. An individual may not audit the same course in two consecutive semesters. The Course Audit Form, which is available at https:// www.canton.edu/media/pdf/Course\_Audit. pdf, must be completed and returned to the Registrar's Office. Course audits require a registration fee of \$50 per course, but are free of charge for those 60 years of age and over. Individuals may not begin auditing a course until the registration process is completed as described on the course audit form. Once the individual has elected to audit a course, one cannot subsequently change the audit to credit. No credit is granted for audited courses. A grade of AU (audited course) will appear on the student transcript; this grade will not be calculated in the student's GPA. The course auditor will abide by the conditions agreed to by the instructor and auditor as stated on the course audit form. Auditors must adhere to the Student Code of Conduct as published on the college web site, in the Student Handbook and in each course syllabus. Permission to audit may be revoked for disruptive or inappropriate behavior. Campus student services (i.e. Academic Support Services, Counseling, etc.) are not available for course auditors.

# WITHDRAWING FROM THE COLLEGE

Students wishing to withdraw from

College must submit a Request to Withdraw this semester through UCanWeb. The student is responsible for responding to and understanding any information sent to them during the withdrawal process. Failure to respond constitutes understanding and acceptance of the consequences of withdrawing. The deadline to withdraw from courses is posted on the Academic Calendar.

Non-Matriculated Students must complete the Course Change Request available in UCanWeb and act on the request within the posted deadlines.

#### MEDICAL WITHDRAWAL

A college withdrawal form or letter signed by the student or legal guardian must be submitted to the Vice President for the Student Affairs/Deans of Students to initiate the process. No medical withdrawals will be considered after the last official day of the semester as designated on the College calendar. Extenuating circumstances beyond the student's control may warrant an extension beyond the end of the semester.

Students wishing to return to the College must meet with the Director of Health Services (medical) or Director of Counseling (mental health) and provide documentation from their health care provider regarding their sustainability to return and to determine if any additional accommodations, such as modified living arrangements or additional support services, are required. The academic transcript will reflect a grade of "W" to indicate a student has withdrawn. The Vice President for Student Affairs/Dean of Students will forward copies of the conditions of withdrawal to the College Registrar, School Dean's Office, Admissions, Counseling Center, and Health Services. Re-registration is not guaranteed. Each student must apply for re-admission.

#### ACADEMIC FORGIVENESS POLICY

The intent of this policy is to allow students who previously accrued a SUNY Canton academic record with a substantial number of grades below the 1.00 level of D to be "forgiven" for their earlier performance, if they meet certain criteria.

Academic Forgiveness in this context means that the student's previous college work shall be treated as if it had been transferred to SUNY Canton from another college: none of the grades received would be counted in the current GPA, but the student would receive credit for any courses in which he/she earned a D or above. All General Education requirements completed during prior attendance would continue to count as requirements met, but only courses with a D or higher grade would be included in credits earned toward the degree, at the discretion of the School Dean.Students wishing to apply for the privilege of Academic Forgiveness must meet the following criteria:

- 1. The student must not have taken any coursework at SUNY Canton for a minimum of two calendar years at the time of proposed readmission.
- 2. The student must complete the Academic Forgiveness Application Form at the time of application for readmission. The application will include a reflective summary of why he/she should be considered for the privilege.
- 3. The student will not have attempted more than two semesters of coursework at SUNY Canton prior to readmission if enrolled in an associate degree program, or more than four semesters of coursework if enrolled in a bachelor's degree program. Students must complete at least one half of their degree requirement credits at SUNY Canton after forgiveness is granted.
- 4. The student is not eligible to receive Academic Forgiveness until he/she has completed a full-time semester of at least 12 credit hours as a readmitted student. In this probationary semester,

the student must receive at least a C in every course and is not permitted to withdraw from any courses.

- 5. The student will be placed on academic recovery for this first semester after readmission.
- 6. Upon completion of the probationary semester, if all requirements for Academic Forgiveness have been met, the School Dean will notify the Registrar so that the student's academic record may be modified.
- 7. If approved for Academic Forgiveness, a notation to this effect will be made on the student's SUNY Canton transcript and a new cumulative GPA will be calculated for all work beginning with the semester of readmission. This new GPA will be printed on the official transcript and used for computing the student's academic standing, and for meeting the minimum GPA requirement for graduation. All previous SUNY Canton work will continue to be listed on the transcript with the original grades received.
- Academic Forgiveness may be granted only once in a student's college career at SUNY Canton.
- 9. Academic Forgiveness does not override state and federal financial aid regulations and satisfactory academic progress standards. Also, repeating courses previously passed may not count toward full-time enrollment for financial aid purposes. Students should contact the Financial Aid Office in the One Hop Shop for information on their eligibility if considering applying for Academic Forgiveness.

Students applying for Academic Forgiveness must also apply for readmission. See page 11 for more details.

### General Education Requirements

The General Education Program at SUNY Canton is designed to provide students, throughout their college years,

with a broad set of coherent and focused educational experiences aimed at enabling them to acquire knowledge and skills that are useful and important for all persons, regardless of their jobs or professions. General Education goes beyond the acquisition of the skills necessary to be competent in a field of specialization. It involves the discovery, evaluation, and transmission of essential knowledge that prepares students to lead fulfilled lives and to assume roles as creative and contributing members of society.

In accordance with the SUNY Board of Trustees Policy on General Education, all entering freshmen must meet specific General Education requirements. Faculty and students will periodically be required to engage in assessment activities to ensure that the General Education learning outcomes are being met. At SUNY Canton, students enrolled in the Associate of Arts (AA) or Associate of Science (AS) degree must complete seven of the ten Knowledge and Skills Areas of General Education in order to transfer seamlessly to another SUNY college to earn a baccalaureate degree. These may be completed in separate courses, although some courses may satisfy more than one General Education Requirement. Nevertheless, in order to meet graduation requirements, students enrolled in a SUNY Canton baccalaureate degree program must complete 30 credit hours of general education which must include Mathematics (GER 1) and Basic Communication (GER 10) as well as at least three credits each in at least five of the following academic areas - Natural Science, Social Science, American History, Western Civilization, Other World Civilizations, Humanities, the Arts and Foreign Languages. (See individual baccalaureate degree requirements for exceptions to this mandate.) All students will fulfill competency outcomes in Critical Thinking and Information Management, which are infused throughout the curricula. Courses meeting specific General Education knowledge and skill areas are so designated in the

course description section of the academic catalog. Students should work carefully with their advisors to ensure they are fulfilling the SUNY General Education Requirements (GER) in order to transfer seamlessly to another SUNY college or to meet SUNY Canton baccalaureate graduation requirements.

## SUNY GENERAL EDUCATION REQUIREMENTS

## I. KNOWLEDGE AND SKILL AREAS (GER 1-10)

- 1. Mathematics
- 2. Natural Sciences
- 3. Social Sciences
- 4. American History
- 5. Western Civilization
- 6. Other World Civilizations
- 7. Humanities
- 8. The Arts
- 9. Foreign Language
- 10. Basic Communication

#### **II. COMPETENCIES**

- 1. Critical Thinking (Reasoning)
- 2. Information Management

### GRADUATION REQUIREMENTS

# GRADUATION DEGREES AND CERTIFICATES

The College is authorized to grant the Bachelor of Technology (B.Tech.), Bachelor of Science (BS), and the Bachelor of Business Administration (BBA) degree, each requiring a minimum of 120 credit hours. In addition, the College grants four associate degrees, each requiring a minimum of 60 credit hours; the Associate in Applied Science (AAS), Associate in Science (AS), Associate in Arts (AA), and the Associate in Occupational Studies (AOS). Finally the Certificate degree, which requires a minimum of 30 credit hours.

The College reserves the right to make modifications to a prescribed curriculum.

Students failing to graduate due to failure, deficiency of grade points or credit hours, may be granted the degree after successful completion of the work either at SUNY Canton or another accredited college within seven years of departure. These hours must have the prior approval of the School Dean or Department Chairperson. All courses transferred will be recorded as "T\_" (with the grade earned at the previous college: e.g., TA, TB+, TB, TC+. etc.). Note: The commencement program is created once a year for May commencement ceremonies. The list of graduates is based on students who completed degree requirements in the prior August, December, January, and those who anticipate completing requirements in May. Students may petition their academic Dean for permission to participate in the current year's commencement ceremony without meeting degree requirements by the May deadline. Outstanding credit requirements will be at the discretion of the Dean. Please be aware that students are not permitted to have their names published in the commencement program in the same major within the past two years.

#### BACCALAUREATE DEGREES

- A student must be matriculated in a SUNY Canton curriculum for a minimum of 30 semester credit hours of graded course work earning a minimum GPA of 2.00 for all such credit hours taken. 15 credits must be taken in the major, or acceptable cognates as determined by the department at SUNY Canton. Individual programs may have additional graduation requirements.
- 2. The successful completion of the prescribed curriculum. Upper division courses must comprise 45 semester credit hours, 24 of which must be taken within the major.
- 3. The successful completion of a writing intensive course taught within the prescribed curriculum.
- 4. The earning of an overall GPA of 2.00 unless otherwise prescribed.

- 5. Payment of all financial obligations to the College are required before diplomas will be released, but the degree will be conferred upon completion of all degree requirements.
- 6. Liberal Arts & Sciences Requirements:

a. Bachelor of Technology (B. Tech.) This degree is intended to prepare students for careers in a variety of professions and serves both freshmen and transfers from the Associate in Applied Science degree programs. The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 semester credit hours, 30 of which must be in the liberal arts. Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.

b. Bachelor of Business Administration (B.B.A.) This degree is intended to prepare students for careers in a variety of professions and serves both freshmen and transfers from the Associate in Applied Science degree programs. The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 semester credit hours, 30 of which must be in the liberal arts. Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.

c. Bachelor of Science (B.S.) The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 se-mester credit hours, 60 of which must be in the liberal arts. Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.

#### ASSOCIATE DEGREES

1. A student must be matriculated in a SUNY Canton curriculum for a minimum of 15 semester credit hours of graded course work, earning a minimum GPA of 2.00 for all such credit hours taken. 15 credits must be taken in the major, or acceptable cognates as determined by the department at SUNY Canton. Individual programs may have additional graduation requirements.

- 2. The successful completion of the prescribed curriculum.
- 3. The successful completion of a writing intensive course taught within the prescribed curriculum.
- 4. The earning of an overall GPA of 2.00 unless otherwise prescribed.
- 5. Payment of all financial obligations to the College are required before diplomas will be released, but the degree will be conferred upon completion of all degree requirements.
- 6. Students matriculated in a baccalaureate program for a minimum of fifteen semester credit hours of graded coursework, earning a minimum GPA of 2.00 for all such credit hours taken, may be granted an associate degree in a related curriculum, without matriculation in that curriculum, upon completion of all associate degree requirements and application to the School Dean for the associate degree program.
- 7. Liberal Arts & Sciences Requirements:

a. Associate in Applied Science -A.A.S. This degree, intended to be used primarily for occupationally oriented curricula, may at times be appropriate as a transfer degree to certain types of specialized baccalaureate programs such as Bachelor of Business Administration, Bachelor of Education, Bachelor of Engineering, or Bachelor of Engineering Technology. The course of study will be an organized curriculum with a minimum of 20 semester credit hours drawn from the liberal arts and sciences areas comprising of work distributed in the humanities, the natural sciences and mathematics,

and the social sciences. The 20 semester credit hours will be distributed with balance among the three major areas. Not less than 30 semester credit hours will be concentrated in an area appropriate for employment at a subprofessional or middle management level in a recognized group of occupational fields.

b. Associate in Science - A.S. This degree may be used for certain occupationally oriented curricula but is primarily designed to serve scienceor professionally-related programs which lead to transfer to a baccalaureate degree program. The course of study leading to this degree should be an organized curriculum composed of courses in the liberal arts and sciences. At least 30 semester credit hours will be offered in the humanities, the natural sciences and mathematics, and the social sciences. The exact balance within these 30 semester credit hours is not specific, but there must be a reasonable distribution of work in the three categories as well as appropriate depth in one.

c. Associate in Arts - A.A. This degree will be used primarily for transfer programs which lead to a baccalaureate degree program. The course of study leading to this degree will be an organized curriculum composed primarily of courses in the liberal arts and sciences. At a minimum, there will be 48 semester credit hours taken in the humanities, the natural sciences and mathematics, and the social sciences. The exact balance within the 48 semester credit hours among these three major fields is not specified, but there must be a reasonable distribution of work among these three categories as well as depth in one.

d. Associate in Occupational Studies - A.O.S. The course of study leading to this degree should be an organized curriculum of post-secondary level education leading to occupational competence. The program requires two academic years (or a minimum of 60 semester credit hours) for completion and may consist solely of course work in the specialized area and related work thereto. General education may be optionally included but will not be considered to contribute toward program registration. Such programs should have a distinct identity of their own, independent of courses of study leading to the Associate in Applied Science degree.

#### CERTIFICATE PROGRAMS

- 1. A student must be matriculated in a SUNY Canton curriculum for a minimum of 12 semester credit hours of graded course work, earning a minimum grade point average of 1.75 for all such credit hours taken. Individual programs may have additional graduation requirements.
- 2. Successful completion of all required courses.
- 3. A minimum GPA of 1.75, unless otherwise specified in the section describing that Certificate in the catalog.
- 4. Payment of all financial obligations to the College are required before diplomas will be released, but the degree will be conferred upon completion of all degree requirements.
- NOTE: Successful completion of a Certificate Program does not automatically qualify a student for admission to a degree curriculum. In order to be admitted to a degree curriculum, the graduate of the Certificate Program must achieve a record that indicates a reasonable probability of success in the new curriculum and be recommended by the faculty.

#### **GRADUATION WITH HONORS**

Honors for the Commencement Program are based on cumulative GPA to December 31 of the year prior to commencement. Cum Laude GPA not less than 3.25 Magna Cum Laude GPA not less than 3.50 Summa Cum Laude GPA not less than 3.75

Upon program completion, students who have earned cumulative GPA's as listed above will be designated for Cum Laude, Magna Cum Laude, or Summa Cum Laude on their diplomas and transcripts.

#### AWARDING TWO BACCALAUREATE DEGREES

In order to qualify for a second baccalaureate degree from SUNY Canton, a student must satisfactorily complete at least 30 semester credit hours beyond the first degree requirements and also meet the specific curriculum requirements of the second program. All of the subsequent work should be taken in an essentially different area of specialization.

A student who wishes to earn a second baccalaureate degree at SUNY Canton must have written approval of course requirements by the appropriate School Dean. When the required courses are completed, the School Dean will notify the Registrar that the student is to be certified for the additional degree. No student may be awarded two degrees within the same minimum time span.

#### AWARDING TWO ASSOCIATE DEGREES

No student may be awarded two associate degrees simultaneously within the same minimum time span. In order to qualify for a second associate degree from SUNY Canton, a student must satisfactorily complete at least 15 semester credit hours beyond the first degree's requirements and also meet the specific curriculum requirements of the second program, all of the subsequent work to be taken in an essentially different area of specialization.

A student who wishes to earn an additional associate degree at SUNY Canton must have written approval of course requirements by the appropriate School Dean. When the required courses are completed, the School Dean will notify the Registrar that the student is to be certified for the additional degree.

#### DOUBLE MAJOR POLICY -BACCALAUREATE DEGREES

Students who are pursuing undergraduate baccalaureate degrees may pursue double majors, which is defined as the awarding of one degree with more than one major. All program requirements for both majors must be completed satisfactorily and concurrently (i.e., a student cannot graduate from SUNY Canton and return later to complete coursework for a second major). The student will designate the "first major" and the "second major" (e.g., "first major" is Applied Psychology and "second major" is Forensic Criminology). The diploma can accommodate up to two majors; transcripts will state the completion of two majors (Applied Psychology and Forensic Criminology) and any additional credentials, such as minors and/or micro-credentials.<sup>1,2</sup>

Students pursuing a baccalaureate degree may designate a second major after completing 30 credits and before completing 90 credits in the first major with an unambiguous GPA of 2.000 or greater (no grades of incomplete or missing grades). The designation of a second major will be completed using the SUNY Canton Change of Major form. Course of study must be approved by both programs. The first and second major Department Chair / Director will need to sign the form to verify all qualifying criteria has been met. The catalog year of the second major will be matched to the year of the first major (e.g., if the first major is catalog year 2021-2022, the second major will be backdated to catalog year 2021-2022). If the student wishes to update both to a new catalog year, they will add this request to the comment section of the form or submit an update catalog form.

In most cases, the student may find it necessary to complete more than the minimum 120 credits for graduation. Their second major must include at least 15 Upper Level credits of difference in the coursework (i.e., not overlap with primary major requirements or overlap with the requirements of a minor or concentration). Beyond the 15 credits not in common, all other courses may apply to both majors (e.g., a student double majoring in Forensic Criminology and Applied Psychology may "double count" statistics applying the credits toward both majors). The writing intensive course is a major requirement within each major; therefore, students with double majors will usually complete two writing intensive courses.

Academic departments that offer more than one major may choose to develop a policy to prohibit students from declaring multiple majors within their programs. Any such policy proposal must be submitted to Academic Standards for review and approval.

<sup>1</sup>Students should be fully aware of any financial aid implications before designating a primary major. Students may need to declare the second major as primary major for periods of time to ensure financial aid continues to apply. Students should be aware that pursuing more than one major may require additional time to graduation and additional costs.

<sup>2</sup>Students wishing to complete a dual degree (awarding of two baccalaureate degrees) must follow the SUNY Canton approved policy.

### COMMENCEMENT

The commencement program is created once a year for May commencement ceremonies. The list of graduates is based on students who completed degree requirements in the prior August, December, January, and those who anticipate completing requirements in May. Students may petition their academic Dean for permission to participate in the current year's commencement ceremony without meeting requirements by the May deadline. Outstanding credit requirements will be at the discretion of the Dean. Please be aware that students are not permitted to have their names published in the commencement program in the same major within the past two years.

#### MAJOR & MINOR DEGREE REQUIREMENTS AND CATALOG YEAR

Majors: Students are enrolled into a catalog year based on the date of admission to their declared program. Students may keep this initial catalog year for up to five years for Certificate/ Associate's degree programs and up to seven years for Bachelor's degree programs. After which the catalog year may be reset to the current catalog year. Students who change programs or have a break in matriculation will be re-admitted to the current catalog year. If program requirements change while the student is enrolled, the student has the right to continue to claim the requirements for the year that they were last admitted to the program. Exceptions may be approved by the academic Dean.

Minors: Students will follow the published requirements in place at the time they declare the minor, which may be different from the catalog year used for the major. If minor requirements change while the student is enrolled, the student may choose to complete established requirements or change to the new requirements. Exceptions may be approved by the academic Dean

#### MICRO-CREDENTIALS

Micro-credentials are a collection of courses or competencies that verify, validate, and attest that one or more specific skills have been achieved through credit-bearing courses and/or non-credit activities. Microcredentials differ from traditional degrees and certificates in that they are offered in shorter or more flexible time spans and are more narrowly focused than a traditional associate's or bachelor's degree. Microcredentials may be offered within a discipline area or inter-disciplinarily. Students and outside community members who wish to obtain or to certify that they have completed a more focused study pertaining to a particular skill may obtain a microcredential from SUNY Canton.

### ACADEMIC INFORMATION

#### STUDENT CLASSIFICATION

FULL-TIME STUDENT: one who is enrolled for 12 or more semester hours of credit.

**PART-TIME STUDENT:** one who is enrolled for less than 12 semester hours of credit.

MATRICULATED STUDENT: a student who has made formal application to and has been admitted into the College as a degree or certificate seeking candidate.

NON-MATRICULATED STUDENT: a student who has not made application for nor has been admitted into the College as a degree or certificate seeking candidate.

**FRESHMAN:** a student who has earned 0–29 credit hours, all of which must be a part of a degree program offered by the College.

**SOPHOMORE:** a student who has earned 30–59 credit hours, all of which must be a part of a degree program offered by the College.

JUNIOR: a student who has earned 60–89 credit hours, all of which must be a part of a degree program offered by the College.

**SENIOR:** a student who has earned 90+ credit hours, all of which must be a part of a degree program offered by the College.

#### ACADEMIC REQUIREMENTS— RE-REGISTRATION

To register for the second or any subsequent semester, a full-time matriculated, degree student must achieve the following standards (see chart below) or have the approval of the Dean of the School in which the *student* is registered.

	ATTEMPTED CREDITS/REQUIRED GPA						
STATUS	1-23	24-35	36-47	48-59	60-71	72+	
Good Standing	1.5	1.75	2.0	2.0	2.0	2.0	
Academic Jeopardy/ Warning	1.25 - 1.49	1.5 - 1.74	1.75 - 1.99				
Academic Recovery	0.5 - 1.24	0.75 - 1.49	1.50 – 1.74	1.50 – 1.99	1.65 – 1.99	1.75 – 1.99	
Suspension	0.0-0.49	0.0-0.74	0.0 - 1.29	0.0 - 1.49	0.0 - 1.64	0.0 – 1.74	

\* Imputed credit ~ Courses designated as remedial/developmental cannot be awarded academic credit, and therefore do not count towards overall GPA or earned hours towards a college degree. However imputed credits are included when determining a student's academic status for their first semester only.

\* Students in academic jeopardy/warning are considered to be maintaining minimum satisfactory academic progress and are eligible to re-register.

\* Students on Academic Recovery have failed to achieve the minimum GPA but are allowed to re-register if they comply with the conditions specified in the Academic Recovery Contract. This program offers an opportunity for students to im-prove their academic standing.

Any student who is suspended from College for academic reasons will have two options: 1) Submit an academic appeal and detailed plan for success by the stated deadline, or 2) complete a minimum of six credit hours and achieve a GPA of 2.5 or higher. Students are permitted to take these credits at SUNY Canton as a nondegree student or this coursework may be taken at another institution. Financial aid and campus housing are not available for SUNY Canton non-degree students. Students may then apply for readmission to SUNY Canton after one semester has passed via the Readmission Request Form in UCan Web. Permission to re-register is not guaranteed and will be granted only after approval by the appropriate School Dean.

A student suspended for multiple violations of the Academic Integrity Policy will also be required to complete a minimum of six credit hours and achieve a GPA of 2.5 or higher. Students are permitted to take these credits at SUNY Canton as a nondegree student or this coursework may be taken at another institution. Financial aid and campus housing are not available for SUNY Canton non-degree students. Students may then apply for readmission to SUNY Canton after one semester has passed via the Readmission Request Form in UCan Web. Permission to re-register is not guaranteed and will be granted only after approval by the appropriate School Dean.

Academic Recovery is a privilege and not a right. Students placed on academic recovery who fail to meet all requirements of the program may be immediately suspended. A student suspended mid-semester for violating Academic Recovery may appeal ONLY if there are documented extenuating circumstances by emailing the Provost at provostoffice@canton.edu. The decision of the Provost is final.

Students suspended or expelled from the college for disciplinary reasons will receive grades earned for all courses completed. Students who voluntarily withdraw from College will be permitted to re-register with the concurrent written approval of the Director of Admissions and the School Dean of the requested curriculum. Students who are suspended or expelled from SUNY Canton or any other college/university for behavioral matters are required to meet with the Admissions Review Board before a decision of admission will be made.



### TAKING AN Online Course

In an online course, students connect with their teacher and classmates via the computer using the Internet. Course materials, tests, assignments, and discussions are delivered via the college's learning platform called Brightspace. Students can chat with their instructor virtually, collaborate with other students, and participate in classroom discussions in their online

courses. Online courses provide students with the flexibility and convenience of studying anytime, anywhere in an interactive and innovative learning environment.

### **COURSE EXPECTATIONS**

SUNY Canton's online courses provide the same quality experience as our traditional campus-based courses and have the same credits and requirements as faceto-face courses. All of SUNY Canton's online courses and academic programs are designed to produce the same learning outcomes as traditional courses. To ensure quality, online courses undergo a rigorous course review process before they are offered online.

The majority of online classes are not self-paced and active online participation is often mandatory. Additionally, many online courses have extensive reading and writing demands.

### REQUIREMENTS

Students in online courses are required to be responsible for their learning. Strong time-management skills and study habits are essential in this learner-centered environment.



To participate in an online course, students need to have access to a working computer and connection to the Internet. Broadband connection is preferred. Students should check the course syllabus for broadband requirements before registering for a course. Additional technical requirements include:

- Microsoft Windows or Apple Mac OS
- The latest browser available (Firefox, Chrome, Microsoft Edge, or Safari)
- Internet Explorer <u>is not</u> compatible

### LEARNER SUPPORT

SUNY Canton is dedicated to helping students achieve their educational goals by supporting and promoting initiatives that enhance student accessibility and academic excellence in online learning environments. SUNY Canton online students have access to the same advisement, registration, financial aid, library, academic and support services as on-campus students. Our library provides online tutorials on Internet research and links to databases and electronic journals. Tutoring Services and Student Accessibility Services offer tutoring, academic assistance, and various resources and materials online. Learner resources and support services are available online through the www.canton.edu website.

On a technical level, SUNY Canton's Information Services offers on-going technical support to students during normal institutional working hours for hardware, software, and course management issues through their Help Desk at helpdesk@ canton.edu. Additional technical support is provided through the SUNY Online Help Desk at 1-844-673-6786. UCanWeb provides access to various student services such as financial aid, registration, course schedules, grades, and unofficial transcripts.

### ACCREDITATION

SUNY Canton is approved to offer distance learning through the Middle States Commission on Higher Education (MSCHE). Some programs are SUNY and SED approved to be offered online. See individual academic programs for more information. Academic support services enhance the educational opportunities for all students at SUNY Canton. For complete descriptions and current contact information, go to <u>www.canton.edu/academic support</u> <u>services</u>. Access to academic support services is included in the tuition for SUNY Canton students.

### PLACEMENT TESTING

SUNY Canton requires new matriculated students to take the Accuplacer placement exam unless exempt as determined by standardized test scores, such as Regents exams, ACT or SAT tests. Transfer students must demonstrate a "C" or better in a college-level English course to be exempt.

Students required to complete a placement test will be notified via their SUNY Canton Email address and receive a notification on their New Student Checklist via UCanWeb. SUNY Canton provides all placement exams virtually. To request a test voucher, or practice test items, visit <u>www.</u> <u>canton.edu/testing</u> or contact the Advising Center at (315) 379-3954

### DEVELOPMENTAL STUDIES

Developmental education courses allow students the opportunity to build competencies in reading, writing and mathematics that are essential to college success. Placement in these courses is based on test results, admissions referral and/or faculty referral. The developmental studies faculty works closely with students and their curriculum advisors to encourage growth in academic skills and the exploration of personal and vocational goals. Students are given the opportunity to demonstrate their potential for success in the academic environment.

# Advising and First-Year Programs

Advising and First-Year Programs is part of the Ready Center in Miller Campus Center 224. The office is charged with helping students adjust to college level learning and responsibility. The office can assist with:

- Advising new students and providing them with an understanding of degree requirements and scheduling.
- Coordinate the First Year Experience (FYEP 101) class and experience
- Provide information on the academic rules and resources
- Provide degree worksheets. advice on degree completion and assistance navigating DegreeWorks
- Assist students considering a change in major to understand their unique situation
- Assist students in preparing to meet with their faculty advisors and plan a schedule
- Referrals to appropriate faculty advisors, dean's offices or other campus resources.
- Work with Academic Recovery students to help them return to good academic standing
- Administer the Accuplacer placement exam.
- Coordinate outreach on flags raised by instructors in RooSuccess

See <u>www.canton.edu/advising</u> for more details or for additional contact information.

# Collegiate Science & Technology Program

SUNY Canton's Collegiate Science & Technology Entry Program (CSTEP) is a scholars program designed to prepare minority and economically disadvantaged students for careers in scientific, technical, engineering, mathematical, health-related and licensed professions.

The program, which is part of a statewide effort to address the issue of minority under-representation in the STEM and Licensed professions, emphasizes academic preparation and achievement, and career awareness. CSTEP provides students with a unique college experience that combines academic services and activities with a variety of networking and career-advancement opportunities. Participants share invaluable social interaction and congenial support with fellow students, as well as receive customized strategies for success in both professional and per-sonal aspects of life. Space is limited so students are encouraged to apply early. The CSTEP Office is located in Nevaldine Hall South 131.

### EDUCATIONAL OPPORTUNITY PROGRAM

The Educational Opportunity Program (EOP) is committed to the recruitment, retention and graduation of students who normally would not be afforded the chance to pursue a college education. Students are admitted who meet specific academic and financial criteria and who demonstrate the potential for post-secondary success. All new EOP students are required to participate in an extended EOP orientation/ summer programs in August In addition to the regular campus orientation required of all Incoming students. EOP provides academic support services, personal counseling, tutoring and financial assistance. Space is limited so students are encouraged to complete their academic and financial applications early.

### TRIO STUDENT SUPPORT Services Program

The TRiO Student Support Services (SSS) program is federally funded and provides enhanced academic assistance to eligible students. To be eligible, students

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must meet specific academic and financial criteria. The goal of the program is to help students successfully complete their post-secondary education and encourage them to pursue a baccalaureate degree. SSS provides a variety of support services to about 200 students each year, including study skills, time management, academic and transfer counseling and tutorial assistance in math, and science. Students are required to complete mandatory financial literacy modules. Newly admitted TRiO students may also have the opportunity to participate in a summer program. Please contact the director at 315-386-7406 with any questions.

### LEARNING COMMONS

The Learning Commons includes Southworth Library and the Betty J. Evans Tutoring Center. Also located in the facility are the Information Services Help Desk and Cyber Café. Collectively, we are committed to providing students with access to resources and support that assist in meeting their academic goals. The Learning Commons features individual and group study spaces, silent zone study spaces, printers, and scanners. The building is equipped with wi-fi, and provides access to laptops, iPads, and other technology. The Café offers breakfast and lunch dine in or take out options and features Star Bucks coffee. The Learning Commons offers extended hours of operation including late-night and weekend hours as well as 24/7 access during final examinations. Services and resources are available virtually as well as on campus.

### Southworth Library Services

- Information Literacy Instruction
- Textbook Loan Program
- Research databases, materials, and support
- Print and e-Book collection
- Interlibrary Loan Program

- Circulation items including academic reserve items
- 24/7 librarian chat
- Extended borrowing privileges through the Associated Colleges including SUNY Potsdam, Clarkson, and St. Lawrence

### Betty J. Evans Tutoring Center

The Tutoring Center holds International Tutor Training Program Certification through the College Reading and Learning Associa-tion (CRLA) and is staffed professional and peer tutors, as well as faculty volunteers. The Tutoring Center provides students out-side-the-classroom learning opportunities by offering a variety of educational resources.

- Writing Center
- STEM Lab (Science, Technology, Engineering, and Math)
- Business & Accounting Lab
- Late-night and weekend tutoring

### STUDENT ACCESSIBILITY SERVICES

The Office of Student Accessibility Services is committed to and supports the mission of SUNY Canton in the inclusion of all students who can benefit from full and equal access to educational advancement and student life.

In accordance with Section 504 of the Rehabilitation Act of 1973, Section 508, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Act Amendments of 2008, the college community endeavors to make reasonable adjustments in its policies, practices, services, and facilities to ensure equal access for students with disabilities. SUNY Canton will also strive to ensure that an otherwise qualified individual with a disability will not, on the basis of that disability, be subjected to discrimination under academic programs, services and activities offered by the College.

The mission of the Office of Student Accessibility Services is to provide academic accommodations for all qualified students who have documentation of a learning disability, mental health diagnosis, or a physical disability. It is the initial responsibility of the student to identify her/himself as having a disability, request accommodations, and submit complete and valid documentation of their diagnosis. The student must register with the Office of Student Accessibility Services in order to request and receive accommodations. Accommodations will be determined on an individual basis and based on the student's current presenting documentation. The Office of Student Accessibility Services will coordinate, assist, and advocate for students requesting academic accommodations, non-academic auxiliary aids, or services with the appropriate academic or professional campus office. Personal care needs are the responsibility of the student.

For additional information regarding Student Accessibility Services and our documentation guidelines, please call (315) 386-7392 or visit us at www.canton.edu/accessibility/. Campus Life

The educational experience at SUNY Canton consists of both academic efforts in the classroom and developmental opportunities through programs offered by the Division of Student Affairs. Overall, the Division is concerned with the quality of life of each student and provides programs and services which . . .

- —Promote student development by encouraging positive and realistic selfappraisal, intellectual development, physical fitness, the capacity to appreciate cultural and aesthetic differences, the capacity to work independently and interdependently, and to make appropriate personal and occupational choices;
- Assist students in overcoming personal, physical or educational problems;
- Identify environmental conditions that may negatively influence welfare of students and take steps to overcome such conditions.

The Student Affairs staff has a major responsibility for the quality of student life on the Canton campus. The staff works closely with students through the services available in the Counseling, Health Services, Intramural Sports, Diversity, University Police, Student Activities, Involvement, and Leadership (SAIL), and Residence Life Offices.

### NEW STUDENT ORIENTATION PROGRAMS

The College recognizes the social and academic adjustments which must occur for entering college students to be successful. To enable new students to move with ease and confidence from the home/high school, SUNY Canton provides an orientation program as a total campus endeavor. All new students are expected to participate in orientation and it is mandatory for all new students who will be attending at least one course on campus. During orientation, students get a sense of the academic expectations, meet faculty, staff and administrators, experience campus life and have a chance to meet other new students as well as student leaders.

### COUNSELING CENTER

The Counseling Center supports the mission of SUNY Canton and the Division of Student Affairs by contributing to the improvement of both mind and character of our students. By responding to the personal and psychological needs of the student body, we strive to support their independence and emotional well-being, assisting them in negotiating the complexities of college and successfully preparing them to meet the challenges of the future.

The Counseling Center provides professional and confidential counseling services to assist students in achieving their personal and academic goals through consultation with organizations, faculty, staff and administrators. Collaboration with departments on and off campus contributes to accurate response, assessment, and/or referral.

The Counseling Center provides individual and group counseling, crisis intervention, outreach, educational presentations, and leadership training. The Center is dedicated to maintaining an open atmosphere on campus, honoring the numerous social and cultural contexts represented by our students.

The Counseling Center plays an integral role in promoting a safe and positive environment which values the unique contribution of all individuals and establishes a foundation conducive to learning and developing a healthy lifestyle.

### **Residence** Life

### **Residence Halls**

At SUNY Canton, we consider on-campus living an important part of your education—in fact, it's an education in itself. Living in one of Canton's five residence halls means that your life here will include far more than classroom and lab work... it means that SUNY Canton will be your home for 9 out of 12 months for the next few years.

Canton's five halls—Heritage, Mohawk, Rushton, Smith and Kennedy Hall-are located along the Grasse River near classroom buildings, the library Commons, the gym, other recreational facilities, and Chaney Dining Center. It is about a ten minute walk over the footbridge to downtown Canton. The residence halls provide you with a living environment that is clean, safe, and pleasant at an affordable price.

Rooms are attractively furnished with beds, desks, chairs, dressers, blinds, and large closets or armoires. Three rooms are clustered around an adjoining bath in Heritage, Rushton, Mohawk and Smith. In Kennedy Hall, each apartment has at least one full bath. While we provide the basics, you may desire to add a touch of home with such items as rugs, posters, desk lamps or plants.

SUNY Canton is proud to offer non-gendered inclusive housing. Kennedy Hall is open to all genders and features 303+ beds of suite-style housing. We are also happy to work with students living in the other residence halls to accommodate special requests related to gender identity and/ or sexual orientation. If you would like more information or would like to discuss your living space just give us a call at 315-386-7513.

### LIVE ON CAMPUS?

SUNY Canton provides students with a pleasant affordable residential experience that assists you in getting the most out of College. Have you thought about why you should live on campus? Here are some of the advantages:

#### CONVENIENT:

Living five minutes from your classes, computer lab, Learning Commons, gym, or fitness center can't be beat in the heart of winter. Having your food prepared for you, your parking lot plowed, your heat, electricity, cable paid for, and your friends just down the hall, all make your college experience more comfortable. No more getting up at 5:30 a.m. to clean the snow off your car so you can make the commute for your 8:00 a.m. class.

#### **INTERNET ACCESS:**

Recognizing the role that the Internet plays in the educational and social lives of college students all residence halls feature high-speed wireless internet.

#### IT'S WHERE THE ACTION IS:

When you talk to friends who have gone to college, they first think back to the fun they had in the Residence Halls. From the pizza parties, the intramural champion teams, the late night study groups, the floor trips and activities, to the lifelong friends that you will make, the residential experience is a must.

#### SAFE:

Your personal safety on campus is a priority for us. Our campus is well lit, patrolled and secure with electronic front door access systems, room combinations, and blue light system. This allows you to spend more time doing the things that are important to you, right here on campus. This means no driving home after a long day of classes and studying and affords you one of the best opportunities to pursue your education.

### LIFE-STYLE OPTIONS

Numerous life-style options have been developed to assist you in finding just the right match for your "home-away-fromhome." They are:

All-Female Floors – These floors will be reserved for female students only.

- Non-Themed Housing These rooms are in co-ed wings and do not have a centralized theme. These rooms are suited best for students who are not interested in living in theme housing, but are looking for a more traditional-styled college living experience.
- Honors Floor This floor is designed for those students who are interested in academic honors programs at SUNY Canton and excelled academically in high school.
- **Team Roo!** This is a special interest floor for those participating in college athletics, intramurals, or those who are simply athletically inclined or enjoy sports.
- **Esports** This is a special interest floor for those interested in gaming (such as video game systems like X-Box, Wii, PS3), board games and card and Esports.
- Kennedy Hall This newer, state-of-theart residence hall that offers apartmentstyle housing opened in Fall 2011 for upperclassmen students only. Eligibility requirements include, but are not limited to: grade point average, class year, and disciplinary record.
- The Pet Wing This housing option is designed for students who enjoy sharing their living space with animals. It is not a requirement that a student possess an animal to live on this floor, however, students who have allergies to any kind of animal are strongly discouraged from living in this area due to the various animals that live on these floors. Residents are permitted to bring small, caged pets from home with the prior approval of the Residence Hall Director. We're sorry, but at this time we do not permit dogs (of any size), birds, spiders, or snakes in this living environment. You will be notified during the summer months if you are approved to live in this housing option. This wing is also designated as Alcohol Free.
- The Dog Floor This new housing option allows students to bring an approved dog

to live with them. More details will be forthcoming.

All rooms are attractively furnished, costing you less than the average apartment per month. They come with standard room furniture and Wi-Fi. For the room rate per semester, the price can't be beat. It is the policy of the State University of New York that all residence halls are smoke free. No smoking will be permitted in any residence hall.

### MANDATORY HOUSING POLICY

Every student in full-time attendance at SUNY Canton, other than married students, single parents, students residing with parent or guardian, students 21 years of age or older, students taking only online classes who will be living 60+ miles from Canton and will not be participating in on-campus activities, such as athletics and Greek Life, and students living in collegeapproved Greek housing are required to live on-campus, or be released from that requirement by the Director of Residence Life. Any student who is officially enrolled in a bachelor's degree program and is in their junior or senior year with 60+ earned credit hours can be released. Due to the higher tuition rates paid by outof-state and international students release requests not meeting the above criteria will be considered on a case-by-case basis for these students. All other cases will be reviewed on an individual basis, and a judgment will be made by the Director of Residence Life as to whether the severity of the hardship warrants a release. In addition, all students who live on-campus in college housing must contract one of the available meal plans with the College Association.

### How Do I SIGN UP?

To apply for a residence hall room, all you need to do is return the housing application with your life-style and roommate preferences and the appropriate deposit. You can also apply online through your UCanWeb account. If you have any ques-

### **Campus Life**

tions or need a housing application, feel free to call us at (315) 386-7513, e-mail us at reslife@canton.edu, or visit us at: www. canton.edu.

### **INFORMATION SERVICES**

Information Services are available to every student attending the College. PC opportunities are located around the campus, providing all students with the opportunity for virtually unlimited use of PCs. All public PC labs use Microsoft Windows-based PCs connected to printers and the internet via the campus Local Area Network (LAN).

SUNY Canton participates in the Microsoft Campus Licensing Agreement. All students have access to standard software packages as listed on our website, www.canton.edu/it/. Many additional software listings are also available and can be found on the same site. Additional assistance for faculty, staff and students is available at the Help Desk. Each student receives an e-mail account.

The campus strongly supports distance learning opportunities for students. Many instructors make use of Internet-based instructional materials and testing, and some courses are taught entirely online.

### HEALTH SERVICES

The SUNY Canton Davis Health Center strives to provide exemplary health care to its students during the entirety of their enrollment. As a team of health care professionals, the Davis Health Center is dedicated to providing culturally competent medical care, educational programs and student advocacy which will enhance a student's wellbeing and empower a student to become a well-informed consumer of health care throughout their lifetime. The Davis Health Center is staffed by a physician, physician assistants, nurse practitioners, nurses, a wellness program coordinator, and support staff. The Health Center promotes healthy lifestyle choices as well as provides acute care for students with illnesses and injuries. The health center offers select in-house laboratory tests free of charge, along with send out laboratory tests collected by in-house phlebotomy services. In addition, there are laboratory and x-ray facilities available in Canton as well as the hospitals in Potsdam and Ogdensburg. Referrals and consultations with local medical specialists are available when necessary.

All students enrolled in six or more credit hours must complete the SUNY Canton Health History and Immunization Form. The SUNY Canton Health History and Immunization Form can be found and completed online through the student patient portal at: <u>https://canton.medicatconnect.com/home.aspx</u>

The completed form should be submitted to the Davis Health Center 30 days prior to the first day of classes. The physical exam is optional except for students who are:

1. International students

2. Enrolled in Nursing, Physical Therapist Assistant, and Early Childhood Education Programs.

Please note these programs have additional health requirements, so please review the form carefully.

**Note for athletes:** All students who anticipate trying out for intercollegiate athletic teams need to complete only one health/immunization/physical form which is the Athletic Pre-Participation Physical Exam Form. The form can be found and completed online through the student patient portal at: <u>https://canton.medicatconnect.com/home.aspx</u>.Athletes will not be allowed to try out or practice with a team until the Athletic Pre-Participation Physical Exam Form is completed.

### **I**MMUNIZATIONS

New York State Public Health Law 2165 requires students attending colleges and universities to demonstrate proof of immunization against measles, mumps and rubella (MMR). All students who are

registered six or more credit hours will be required to show written proof of MMR immunity to the Davis Health Center prior to the first day of classes. **Exemptions** to this requirement are:

- -Students born before January 1, 1957;
- ---Students who hold genuine and sincere religious beliefs which are contrary to immunizations (documentation required);
- —Students for whom immunization is medically contraindicated (documentation required);
- ---Students taking all classes online and not living on campus;
- ---Students who are part-time taking less than six credit hours.

New York State Public Health Law (NYSPHL) 2167 requires institutions, including colleges and universities, to distribute information about meningococcal disease and vaccination to all students attending college six or more credit hours. The law also requires that these students, whether they live on or off campus, acknowledge in writing that they have either:

- —A record of meningococcal meningitis immunization within the past five years; OR
- -An acknowledgement of meningococcal disease risks and refusal of meningococcal meningitis immunization signed by the student or student's parent or guardian if under age 18.

Failure to comply with either of these mandatory health requirements within 30 days from the start of classes will result in suspension from the College.

### INSURANCE

The College does not insure students against medical expenses which may result from an illness or accident while pursuing their activities at the College. Full-time students are mandated to have medical insurance, either under a policy held by the student or parent/guardian, or through a health and accident policy available through the College. The insurance policy provided through the College provides medical coverage, including preventative services benefits such as screenings, exams and immunizations as specified by the Affordable Care Act (ACA).

An Insurance brochure outlining the insurance coverage is available online at: <u>http://www.canton.edu/health\_center/</u> <u>insurance.html</u>. All international students are required to purchase SUNY Medical Insurance for International Students. Information about the International Student Insurance can be found online at: <u>http://www.canton.edu/health\_center/</u> <u>insurance.html</u>

### OFFICE OF DIVERSITY AFFAIRS

The Office of Diversity Affairs operates in unison with the college by providing students quality cross-cultural programs, needed services, and engaging leadership development opportunities.

#### OUR GOALS:

- Identify the needs of students from under-represented ethnic and social groups.
- Provide counsel for students from underrepresented ethnic and social groups regarding personal, academic, and social concerns.
- Identify, promote, and provide educational cross-cultural awareness programs.
- Identify, promote, advise, and provide leadership programming for students from under-represented ethnic and social groups.
- Provide or refer students to receive appropriate advocacy.

The services and programs available through our office and through networked referrals include:

• Programs/ Events/ Speakers

- Sensitivity Training
- Student Leadership Development
- Mediation between Individuals/ Groups
- Classroom Presentations
- Provide Resources Regarding Culturally Diverse Issues
- Personal Counseling
- Mentoring/ Tutoring/ Advising
- Advocacy

### CAREER COACHING, Employment and Continuing Education

The Career Services Office is a dynamic office that students should visit long before they get ready to graduate and look for a job. While the Office does help students prepare their job search documents and brings many employers right to the campus to interview students, the Office also provides coaching and resources to help make sure they are on an academic/career path that is right for them. We encourage first year students to make an appointment to build their college resume and identify career goals.

Stop in to the office or log on to <u>www.</u> <u>canton.edu/career</u>, and check out the many resources available to students on topics like

- Job opportunities
- Internships
- Professional etiquette
- Starting a business
- Cover letters and resumes
- And more!

#### **EMPLOYMENT**

The Career Services Office coordinates in-person and virtual career fairs. Even if students are not ready to look for a job, a Career Fair is an excellent opportunity to talk to employers, get advice and make helpful connections.

Career Services can assist students in

drafting resumes and cover letters, planning a job search and preparing for interviews. Students can even look for and apply to jobs listed specifically for SUNY Canton graduates on the Career Services recruiting website: Handshake.

Many employers come to campus to conduct on-site interviews. Below are a few of the companies for which SUNY Canton students have gone to work:

- Siemens Building Technologies
- BreconRidge
- New York State Police
- Day & Nite All Service
- LC Drives
- Novelis
- St. Lawrence Health System
- IBEW
- Champlain Valley Physicians
   Hospital

Recent graduates have taken jobs as far away as Florida and Texas.

#### CONTINUING EDUCATION

SUNY Canton has created a number of 1-, 2- and 4-year programs that allow you to continue your education. If, however, you decide to follow an educational path not offered at SUNY Canton, the Career Services Office can help you find a school that will meet your career goals. From personal advising to online resources, we can help you identify the school that will best be able to build on your SUNY Canton education. The Career Services Office can assist students researching options of graduate school and will help them prepare their application documents.

# RECREATION AND ATHLETICS

SUNY Canton has a total of 15 NCAA Division III varsity teams, Including teams for men and women in golf, lacrosse, ice hockey, soccer, cross country and basketball. The Kangaroos also sponsor women's

### **Campus Life**

volleyball, women's softball and men's baseball. SUNY Canton Athletics also has varsity cheerleading and esports.

SUNY Canton competes In North Atlantic Conference with teams from New York, Vermont and Maine. Teams play colleges throughout the northeast, including Pennsylvania, Connecticut, New Hampshire and Massachusetts. Women's hockey will begin competing in the SUNYAC during the 2023-24 academic year. Men's hockey will begin competing in the SUNYAC in 2024-25.

Coaches work diligently to recruit top student-athletes to fill highly competitive spots on team rosters. If you hope to try out for a sport or would like more information, particularly regarding eligibility, we strongly encourage you to contact the appropriate coach or athletic department. Contact and other information can be found on the official SUNY Canton athletic website (www. rooathletics.com).

#### THE ROOS HOUSE IS HOME

In July 2011, SUNY Canton opened its new \$42 million athletic facility nicknamed Roos House. The building features a threecourt field house, indoor baseball/softball practice capability with year-round dropdown batting cages, new 5,000 sq. ft. fitness center, lap pool, ice rink, indoor golf cages, state-of-the-art athletic training room, dedicated team locker rooms and a dedicated study area for student-athletes with wireless computer access.

In 2008-2009, men's and women's soccer played their first full seasons on the college's lighted synthetic turf field and baseball played its first games on their new baseball field. A new press box was recently constructed for the turf field, while new dugouts were recently completed for baseball and softball. SUNY Canton's newly constructed Esports Arena is among the finest esports facilities In the northeast.

SUNY Canton also offers a wide variety of intramural and free recreation programs. Whether you're looking for individual activities like a jog around the beautiful, on-campus cross-country trail, a workout at the Fitness Center, or a Zumba or aerobics class, there is something for you.

#### FITNESS CENTER

The SUNY Canton Fitness Center is open to all students seven days a week. It features all new Precor equipment including circuit weight machines, free weights and racks, and a variety of state-of-the-art cardiovascular machines including treadmills, elliptical machines, steppers and bikes. Most cardiovascular machines have television viewing capabilities.

#### **INTRAMURALS**

If you're looking for more of a competitive, structured recreational activity, the Intramural Department offers leagues in flag football, basketball, dodgeball, softball, volleyball, floor hockey, indoor soccer, badminton, and a variety of other weekend tournaments and activities. Programs are subject to change throughout any given year.

### CLUBS /ORGANIZATIONS AND ACTIVITIES

The Richard W. Miller Campus Center is the focal point for extra-curricular and co-curricular activities for the college community. It is part of the educational program as well as the social life of the College. The Miller Campus Center and Office of Student Activities, Involvement, and Leadership staff encourages students to participate in social, cultural, educational and recreational activities in order to enrich their out-of-class life, to benefit their personal growth and development, and to educate them for the wise use of leisure time.

The College sponsors many clubs/organizations and activities. Student groups are easy to organize. Some 70 clubs/organizations serve academic, professional and cultural interests, and all clubs welcome students from throughout the college. Participation in student government comes through the Student Government Association, the College Activities Board, and the Residence Hall Councils.

Students are also very involved in the design of the Paysonian yearbook. A sample of the clubs/organizations and activities:

- African Student Union
- American Society of Civil Engineers
- Environmental Change Organization
- Elite Rhythm
- Gaming Club
- Greek Council
- IEEE Student Branch at SUNY Canton
- Phi Theta Kappa (academic honor society)
- Outdoor Adventures Club
- Road 2 Riches
- SUNY Canton Emergency Medical Services
- SUNY Canton Veterinary Technician
   Association
- Society of Women Engineers

### Student Government Association

The Student Government Association is the governance voice of the students and provides a means of cooperation and unity among the students, faculty, staff and administration.

SGA is divided into three branches, the executive, legislative and judicial. The executive power is vested in a president, vice president, budget director, secretary and CAB president. The Senate, the legislative branch, is made up of student representatives from each club/organization or appointed by the SGA President. The Judicial Board is responsible for interpreting the constitution and for hearing cases in accordance with the Code of Student Conduct.

### College Activities Board

The College Activities Board is the major entertainment and activities group for the campus, and all enrolled students are invited to participate in CAB activities. CAB is responsible for special weekends, films, coffeehouses, recreational tournaments, concerts, cultural, educational and social programs, and special events.

# STUDENT JUDICIAL AFFAIRS

Most students find it relatively easy to adjust to the privileges and responsibilities of campus citizenship. For those students who find this process more difficult, the College provides such counsel as the student needs to gain insight and confidence in adjusting to college life. In some cases, when a student is unable or unwilling to assume his or her social responsibilities, it becomes necessary to impose disciplinary action.

The Code of Student Conduct is published yearly in the Canton *Student Handbook*, which can be viewed online at www.canton.edu/student\_affairs/pdf/handbook.pdf. It is the obligation of all students to familiarize themselves with the regulations printed in the handbook.

### UNIVERSITY POLICE DEPARTMENT

The SUNY Canton University Police Department is the law enforcement agency for the campus. The goal of the Department is to work with the campus community in an effort to create a safe environment. Keeping in mind the specialized needs of a college campus, the University Police take an active role in the educational process; its educational, informational and awareness programs strive to enlist the assistance and cooperation of all members of the academic community in the promotion of practical and responsible community safety. The Department takes pride in its serviceoriented approach which reflects a high degree of sensitivity toward the campus environment, student issues and campus community concerns.

The University Police Department is open 24 hours, seven days a week and can be reached by dialing 7777 from any campus phone or (315) 386-7777 from a non-campus phone. Among the services provided are:

- -Motor Vehicle Accident Investigation, VTL Corrections Forms completion, firearms registration and storage;
- Loan of motorist aids such as jumper cables, gas, booster pack and performing vehicle unlocks;
- —A Crime Prevention Office providing free bicycle registration and personal property registration using Operation Identification;
- —The campus lost and found department.

Students are permitted to have motor vehicles on-campus, provided all such motor vehicles are registered with the University Police Department, and the vehicle registration fee has been paid. Motor vehicle registration can be accomplished in UCanWeb survey and at the One Hop Shop. Students are required to abide by all parking regulations. A copy of the regulations can be found at <u>www.canton.</u> <u>edu/university.police/parking.html</u>.

Temporary Parking Permits may be obtained at the University Police Department.

#### JEANNE CLERY DISCLOSURE OF CAMPUS SECURITY POLICY AND CAMPUS STATISTICS ACT

SUNY Canton crime statistics filed with the United States Department of Education can be located at <u>http://www.canton.edu/</u> <u>clery\_act</u>. You can obtain a copy of these statistics by contacting the University Police Department at 315-386-7777. The United States Department of Education website is: <u>http://ope.ed.gov/security/index.asp</u>.

### The College Association

The College Association, Inc. (CA) is a not-for-profit educational corporation that supports student success, the campus community, and educational mission of SUNY Canton through a diverse set of auxiliary functions. Core services that are currently provided include campus dining programs, retail operations, express mart / convenience store, spirit shop, catering, vending, laundry services, eCampus textbooks, campus IDs, flexible spending, as well as student government accounting and banking services. CA also handles additional contractual services in support of the college including, fleet vehicles and the domestic student health insurance policy.

The College Association's activities and business services are conducted with oversight by a Board of Directors consisting of faculty, administrators, and students. The Board of Directors approves policies, provides oversight to management activities, and maintains fiduciary duties. The corporation operates in accordance with SUNY guidelines, and with campus policies, procedures, and expectations.

### CAMPUS MINISTRY OFFICE

The Campus Ministry Office, staffed by local volunteer clergy, strives to minister to the campus community (students, faculty, administration and staff) by creating a physical, personal and spiritual presence within a caring environment. It stimulates and fosters spiritual development and growth by tending to the emotional, physical and intellectual well being of each person within the campus community. The office provides opportunities for worship, outreach, mentoring and spiritual guidance in collaboration with other campus committees.

- Interfaith prayer services
- Connects with the local churches, temples, mosques and synagogues

- Advisors for faith-based student clubs
- Service projects (i.e., community service, Fall "Make a Difference Day," Spring "Clean-Up, Fix-Up Day" and Blessing of the Brains)
- Confidential spiritual guidance
- Educational programs
- Recreational and social events
- Provide resource contacts and/or assistance for those with critical needs.

The CARES (Character, Acts of Kindness, Respect, Environment and Spirituality) Committee, composed of members of the campus community, serves as both an advisory board to the Campus Ministry Office and assists with programming.

### CHURCHES

Canton students are welcomed to services at the many churches in the area. In Canton, there are various Christian churches of both Roman Catholic and Protestant denominations. In the nearby vicinity, there are Jewish synagogues and a mosque. For a list of individual denominations/churches, please see the Campus Ministry webpage, www.canton.edu/ campus\_ministry/.

### STUDENTS UNABLE BECAUSE OF RELIGIOUS BELIEFS TO ATTEND CLASSES ON CERTAIN DAYS

(As required by Section 224-A New York Education Law)

- 1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he is unable, because of his religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.
- 2. Any student in an institution of higher

education who is unable, because of his religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements.

- 3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.
- 4. If classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.
- 5. In effectuating the provision of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section.
- 6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his rights under this section.

7. As used in this section, the term "institution of higher education" shall mean schools under the control of the board of trustees of the State University of New York or of the Board of Higher Education of the City of New York or any community college.

### Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act permits current or former students to inspect and review their educational records. Students wishing to review their records should complete the request form available in the Registrar's Office identifying the record(s) they want to inspect. The Registrar will make arrangements for access within 45 days of the request and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar, the student will be advised to whom the request should be addressed.

Students are also accorded a right to challenge the contents of their educational records to insure that the records are not inaccurate, misleading or in violation of rights to privacy or other rights. In order to request the College to amend a record that he or she believes is inaccurate or misleading, a student should complete the request form available in the Registrar's Office, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The Act also provides the right to withhold the release of personal information except as provided by law and College

#### **Campus Life**

policy. SUNY Canton may disclose those items designated as directory information from a student's education record unless directed otherwise by the student in writing. SUNY Canton has designated directory information to include: student's full name, local address and telephone number, campus e-mail address, home address and home telephone number, date of birth, major field of study, dates of attendance, degrees and awards received, date(s) of graduation, participation in officially recognized sports and activities, and the most recent previous educational institution attended.

Students have the right to restrict the disclosure of the items designated as directory information. If students exercise this right, such information will not be released without their written consent except as provided by law and College policy. Nondirectory information such as grades, GPA and Student ID number are not released for any student, except directly to the student, without express written consent. Students wishing to restrict the release of the items identified as directory information must notify the Office of the Registrar in writing by the first Friday of the academic term in which the information is not to be disclosed. Such restriction will remain in effect unless rescinded in writing by the student. Students should be aware that restricting the release of directory information will prevent the College from providing enrollment and graduation information to prospective employers, insurance companies, and lenders without written authorization. It will also prevent inclusion in any news releases of the Dean's List or other honors, as well as graduation lists for publication.

A student may choose to waive their FERPA rights and allow academic information to be shared with persons of their choice by assigning a proxy(ies) in UCan-Web. This allows SUNY Canton to share academic information from the student's educational records with the person(s) the student assigns as a proxy. The proxy must provide the student's SUNY Canton ID and the correct password. This access is available through UCanWeb under the miscellaneous Student Requirements tab.

An exception permitting disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit and personal health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or college agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Inquiries or complaints may be filed with the Family Educational Rights and Privacy Act Office, Department of Health, Education and Welfare, 400 Maryland Avenue, S.W., Washington, D.C. 20202-4605.

Copies of the Family Educational Rights and Privacy Act are available at the Office of Student Affairs, Miller Campus Center 229, and the Office of the Registrar, Miller Campus Center 012.

# **Program Offerings**

Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

		SUNY	
BACHELOR DEGREES	PAGE	Code	Code
Agribusiness Management, BBA		2645	
Applied Psychology, BS	69	1965	2099
Civil & Environmental Engineering	70	2/00	0025
Technology, <i>B. Tech</i>		2488	0925
Crime Analysis, B.S Criminal Investigation, <i>B. Tech</i>		3006 1359	2105 2105
Criminal Justice:	/ 2	1339	210)
Law Enforcement Leadership, <i>B. Tech</i>		1911	2105
Cybersecurity, <i>B.S.</i>		2698	0701
Early Childhood Care & Management, BE		2699	0506
Electrical Engineering Technology, B. Tech.		0216	0925
Emergency Management, BS		1864	0599
Esports Management, BBA	78	2991	0599
Finance, BBA	79	0282	0504
Forensic Criminology, BS	80	2994	2209
Funeral Services Administration, B. Tech		1525	1202
Game Design and Development, BS		2638	0799
Graphic and Multimedia Design, BS		2026	0605
Health and Fitness Promotions, <i>B. Tech</i>		2254	1299.3
Health Care Management, <i>BS.</i>		0253	1202
Homeland Security, <i>B. Tech</i>		2335	2105
Industrial Technology Management, <i>B. Tech</i> Information Technology, <i>B. Tech</i>		1935 2045	0925 0799
Legal Studies, <i>BS</i>		0818	2199
Management, <i>BBA</i>		1645	0506
Mechanical Engineering Technology, B. Tec		0235	0900
Nursing, BS		0291	1203.10
Nursing Dual Degree, AAS/BS		2373	1203.00
Sports Management, <i>BBA</i>		0182	0599
Technological Communication, BS		2673	0699
Veterinary Service Administration, BBA		2535	1202
Veterinary Technology, BS	97	2278	1299
ASSOCIATE DEGREES			
Apprentice Training: Industrial Trades, AA	<i>S</i> 98	0473	5301
Automotive Technology, AAS		0525	5306
Business: Accounting, AAS	100	0630	5002
Business Administration, AAS, AS		0632/067	
Civil Engineering Technology, AAS		0517	5309
Computer Information Systems, AAS		0581	5101
Construction Technology: Management, AA		1162	5317
Criminal Justice, AAS		0640	5505
Early Childhood, <i>AS</i>		1327	5503
Electrical Engineering Technology, AAS		0699	5310
Engineering Science, AS		0530	5609
General Technology, <i>AAS</i> HVAC Engineering Technology, <i>AAS</i>	109	$\begin{array}{c} 2208 \\ 0444 \end{array}$	5301 5317
HVAC Trades, AOS	110	2953	5317
Individual Studies, AAS		0688	5699
Liberal Arts and Sciences: General Studies, AA,		0250	5649
Mechanical Engineering Technology, AAS.		0230	5315
Nursing, AAS		0495	5208.10
Physical Therapist Assistant, AAS		0489	5219
Veterinary Science Technology, AAS		0521	5402
,			

#### **CERTIFICATE PROGRAMS**

Gainful Employment information is available at: www.canton.edu/academics/g		
Electrical Construction & Maintenance	0955	5317
Practical Nursing119	0938	5209.20

ACADEMIC MINORS	PAGE	HEGIS
Accounting		
Aging in Society		
Applied Physics		
Applied Psychology		
Chemistry		
Corrections		
Criminology		
Criminal Justice Administration	121	
Cybersecurity		
Early Childhood Studies	122	
Economics		
Environmental Technology		
Finance	123	
Forensic Science		
Fraud Examination		
Gender Studies		
Graphic and Multimedia Design		
Healthcare Management		
History		
Homeland Security		
Hospitality Management	124	
Legal Studies	124	
Management Information Systems		
Marketing Management		
Mathematics	125	
Sociology		
Sustainability		
Veterinary Services Administration		
Wellness	126	
Writing and Communications		
writing and Communications	120	
MICROCREDENTIALS		
Campaigning and Community Advocacy	y127	
Child Care		
Cybersecurity and Recovery In Healthca	re127	
Cybersecurity Principles		
Data Science		
Death Investigation		
Drone Surveillance		
Emergency Management		
Forensic Accounting		
Forensic Anthropology		
Forensic Drug Testing		
Healthcare Leadership	128	
Investigative Analysis		
Medical Coding		
Network Security		
Nursing Home Administration		
inuising mome Auministration	129	
OTHER PROGRAMS		

#### OTHER PROGRAMS

67

Environmental Science & Forestry, 2+2130	0250/various
Forest Technology, 1+1	0620/1086
Police Academy	
SUNY Canton Corrections Academy	
UB School of Law Degree (3+3) - B.S. + J.D. 133	
Upstate Medical Univ. Early Admissions Program	.133 0250

### About This Major:

Are you looking for a career in management? Consider Agribusiness Management. Want to explore the potential of food and agriculture industry? Think of Agribusiness as a career option. SUNY Canton's Agribusiness Management BBA degree is designed to create future entrepreneurs, thanks to a rigorous curriculum that focuses on the agriculture and food industry, including modern day farming.

The agriculture industry constantly evolves to meet the changing needs of society. Crop management, production and distribution are all critically important as the world's population continues to grow. Success in the field requires an advanced understanding of technology and entrepreneurship.

### STUDENTS WILL LEARN:

- Accounting
- Finance
- Marketing
- Strategy
- Operations
- Human Resources
- Economics
- Ethics
- Communications

### Students In This Major:

- Are educated in all of the functional managerial skills
- Use cutting-edge case studies to hone analytical skills

### CAREER OPPORTUNITIES:

The employment opportunities cover a broad range, including major employers and also entrepreneurships. Graduates are working in:

- Technical sales representatives
- Food brokers
- Accountants

- Financial managers
- Market analysts
- Fruit and vegetable marketing representatives
- Sales managers
- Small animal health care distribution
- International business specialists

#### **Admission Requirements:**

Refer to the table of high school course prerequisites for admission.

- Students must be prepared to take ENGL 101 (Composition and the Spoken Word).
- Transfer students must meet re-registration requirements to be considered for admission.

#### **Program Requirements:** CURRICULUM (2645)

SEMESTE	RI	CREDITS
AGMT 100	Introduction to Agribusin	ness3
BSAD 100	Introduction to Business.	4
CITA 110	Intro. to Information Tec	hnology3
ENGL 101	Composition and the Spo	oken Word
	(GER 10)	3
FYEP 101	First Year Experience	1
	Mathematics Elective (G	ER 1)
	Recommended MATH	111 3-4
		17-18
CEMECTE	יד מי	

#### SEMESTER II

ACCT 101	Foundations of Financial	
	Accounting	4
ECON 101	Macroeconomics (GER 3)	3
ECON 105	Survey of American Economic	
	History	3
MATH 141	Statistics	3
Natural Scien	nce (GER 2)	3-4
		16-17

#### SEMESTER III

ACCT 102	Foundations of Managerial
	Accounting3
ECON 103	Microeconomics
BSAD 203	Marketing
BSAD 215	Small Business Management3
	Other World Civilization (GER 6)3
	$\overline{15}$

#### SEMESTER IV

BSAD 201	Business Law I	3
FSMA 210	Introduction to Finance	3
	Humanities (GER 7)	3

Foreign Language (GER 9)	
(Spanish recommended)	3
General Elective	<u>3</u>
	15

#### SEMESTER V

	Agricultural Policy	3
AGMT 320	Agricultural Markets and Price	
	Analysis	3
BSAD 301	Principles of Management	3
BSAD 310	Human Resource Management	3
ECON 314	Managerial Economics	3
	C	15

#### SEMESTER VI

AGMT 310	Agribusiness Management3
AGMT 330	Farm Business Management3
AGMT 385	Agriculture Law3
BSAD 322	Advertising and Promotion3
LEST 388	Environmental Law3
	15

#### SEMESTER VII

	Management Communications3
BSAD 345	Technological Innovations &
	Entrepreneurship3
	Program Elective
	U/L Program Elective
	U/L Program Elective
	15

#### SEMESTER VIII

AGMT 410 Internship AND/OR
U/L Program Elective(s) 3-12
AGMT 450 Capstone in Agribusiness
Management
15

\* Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Upper Level Program Electives: ACCT, BSAD, ECON, FSMA, LEST

### **About This Major:**

The Applied Psychology B.S. degree program trains students in the knowledge and skills needed for a rewarding career in the helping professions. This degree prepares its graduates for:

- · Non-licensed entry level positions in human and social service settings;
- Advancement from current positions to positions that require a bachelor's degree
- Application to graduate level education in Social Work, Mental Health Counseling, Psychology, Applied Behavior Analysis, and Law, among other disciplines.

#### Disclaimer

As with other baccalaureate programs in Psychology, the completion of this baccalaureate degree will not qualify the holder to apply for, be hired for, or perform the duties related to, employment involving the provision of services that may only be provided by licensed psychologists or other licensed mental health professionals with advanced training. Please refer to relevant statutes in the states you may be interested in practicing in.

### **PROGRAM OPTIONS**

PROGRAM OPTIONS

Our unique approach includes the traditional focus on psychological research and theory in a liberal arts context, but includes a strong, real-world applied focus. The Applied Psychology program at SUNY Canton currently offers:

- B.S. degree
- Double Major option
- Minor option
- Addiction Treatment Training Certificate
- Online, in-person, or combined format

### **CAREER READY AT**

#### GRADUATION:

Our mission is to provide students with the skills needed to help people of diverse backgrounds and with varied life issues.

Students in the Applied Psychology program work with children and families, individuals with developmental disabilities, older adults, and those seeking drug and alcohol services, among others.

Graduates will be prepared to work in a variety of entry-level human service positions - interviewing, problem-solving with other professionals, and providing intervention services under professional supervision.

#### **CAREER OPPORTUNITIES:**

According to the U.S. Department of Labor, Bureau of Labor Statistics, employment in entry-level human services jobs requiring a Bachelor's degree is projected to grow faster or much faster than the average for all occupations, with a 10-percent anticipated increase through 2031.

For students who want to go further, we can also prepare you for advanced study in Psychology, Counseling, Human Services, Habilitation and Rehabilitation, and Social Work.

#### **Admission Requirements:**

- High school prerequisites may be found at www. canton.edu/academics/prerequisites.html
- Transfer students must have a minimum GPA of 2.0 OR a two-year degree.

#### **PROGRAM REQUIREMENTS:** CURRICULUM (1965) PLEASE CONTACT US FOR MOST **CURRENT INFORMATION**

#### **REQUIRED COURSES CREDITS**

nu Quinu	D COCHOLO CHEDII
Semester I	
HUSV 100+	Human Services Forum
	Composition & the Spoken
	Word (GER 1& 2)
PSYC 101+	Introduction to Psychology (GER 7)
	General Elective (Math)
HUSV 201+	Intro. to Human Services*
	History Elective (GER 9 or 10)
	16-1
Semester II	
ABAP 245+	Introduction to Applied
	Behavior Analysis
SOCI 101+	Intro to Sociology(GER 7)
PSYC 225+	Human Development
	BIOL 101, 117, 150 & Lab+
	Science Elective (GER 5)
	Humanities Elective (GER 6)
	1
Semester III	
PSYC 275+	Abnormal Psychology. (GER 7)
SSCI 181+	Alcohol Drugs & Society(GER 3)
MATH 141+	Statistics* (GER 4)
	General. Elective ( any GER )
	General. Elective
	1
Semester IV	
PSYC 308+	Personality and Individual
	Differences
	+ Arts/Language Elective
	(GER 8 or 11)
HUSV 310+	Working in Human Service Agencies
+	Program Elective
+	Program Elective
	15-1
AS or AA GR	AD Total Credits: 62-6
Semester V	
SSCI 370	Research Methods

Cultural Psychology (GER 3)......3 PSYC 300 HUSV 315 Mental Health Practice ......3 Semester VI Counseling Skills & Procedures ......3 PSYC 410 PYSC 320 PSYC 315 Crisis Intervention......3 **PSYC 340** Program Elective......<u>3</u> 15 Semester VII HUSV 421\*\*\* Practicum I......3 15 Semester VIII

U/L Pr. Elective	3
U/L Program Elective	3
U/L General Elective	
General Electives	3
General Elective	
	15

#### BS GRAD Total Credits for Degree 122-124

L/L Program electives include: ABAP, ECHD, HUSV, PSYC, SOCI, and designated SSCI courses. U/L Program electives include: 300/400 HUSV, PSYC, SOCI, SSCI courses

\*MATH 141 is a prerequisite for SSCI 370; may use first semester General Elective for MATH 141 pre-requisite if necessary

\*\*Writing Intensive course

\*\*\*Applied learning course

1

3

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<u>3</u> 5

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6

4

3

+ Courses to be used to meet Liberal Arts Associate's Degree. Student must take Science with a lab. for the Associate's degree.

Professional & Ethical

HUSV 305

# Civil & Environmental Engineering Technology–*B. Tech.*

The Civil & Environmental Engineering Technology (C&EET) curriculum provides students with a Bachelor of Technology (BTech) degree that meets the demands of today's industry.

Students receive hand-on training and the background necessary to be competitive and successful in civil and environmental engineering technology. Flexibility with program electives allows students to study in areas of structural analysis and design, water and wastewater testing and treatment, environmental remediation, geotechnology, construction and project management, surveying, and AutoCADD/ REVIT drafting and BIM. Graduates have the opportunity to pursue graduate study.

### STUDENTS IN THIS MAJOR:

- Master the knowledge, techniques, skills, and modern tools in civil and environmental engineering technology.
- Select and apply engineering, technology, science, mathematical skills to applications, problems and design.
- Conduct experiments, analyze, interpret, and apply experimental results.
- Have knowledge of construction and earth materials; their properties, use, manipulation, and testing procedures.
- Proficient in common water, wastewater, and soil collection and testing procedures.

#### **CAREER OPPORTUNITIES:**

Employment opportunities span the range of industry and commerce. Opportunities include:

Structural/Environmental/Construction Engineering and Technology, Civil/Environmental Engineer, Engineering Assistant, Structural Design and Detailers, Assistant Project Manager/ Engineer/Environmental Engineer, Surveyor, Environmental Technologist, QC Engineering Technologist, Groundwater Engineer, Municipal Water/Wastewater Treatment Plant Operator, Geotechnical Engineer, Construction Project Estimator, Construction Inspectors and Residential & Commercial/General Contractors. Recent graduates have started their career with companies like Kiewit Corporation, Parson, GHD, Atlantic Testing Laboratories, Cives Steel Company and the United States Navy. Graduates have also gone on to graduate school for Master of Science/Engineering degrees in both Civil Engineering and Environmental Engineering.

#### CAREER OUTLOOK

- Employment opportunities for civil and environmental engineering technicians are expected to increase by 6% and 5%, through 2028 due to the growth and repair of infrastructure (highways, bridges, dams, etc).
- Employment in environmental technology is expanding because of the increased awareness of environmental issues, and more stringent regulations.

#### **Admission Requirements:**

- Freshmen will meet all general admission requirements to SUNY Canton.
- Students should have completed four years regents level high school math and be ready for Pre-Calculus (MATH 123) and College Physics I (PHYS 121/125). Students not meeting these criteria will be required to take prerequisite math courses.
- Students with a two-year college degree in a related program area will be evaluated and awarded maximum credit. They must have a minimum grade point average of 2.00. Other transfer students will be evaluated on case-by-case basis.

### **PROGRAM REQUIREMENTS:**

#### (CURRICULUM 2488)

SEMESTE	RI	CREDIT
ENGS 101	Intro to Engineering	2
SOET 116	Intro to Computer Drafting	g2
CONS 101	Elementary Surveying	4
MATH 123	Pre-Calculus <sup>1</sup>	4
PHYS 121/1	31 College/Univ. Physics I	3
	35 College/Univ. Physics I I	
	-	16

#### SEMESTER II

ENGS 201	Statics
	GER (6, 7, 8, 9, 10, 11) <sup>3</sup> 3
MATH 161	Calculus <sup>1</sup> 4
PHYS 122/1	32 College/Univ. Physics II
	36 College/Univ. Physics II Lab1
ENGL 101	Composition and the Spoken Word .3
	17

#### SEMESTER III

CONS 203	Advanced Surveying	3
	Strength of Materials	
	Strength of Materials Lab	
	Civil Engineering Materials	
	Calculus II <sup>1</sup>	
	College Chemistry and Lab	
	0 ,	18

#### SEMESTER IV

#### SEMESTER V

CONS 336	Structural Analysis	3
SOET 250	Intro to 3D CADD and BIM	2
	GER (6, 7, 8, 9, 10, 11) <sup>3</sup>	3
	CONS Course <sup>4</sup> (CONS 386 or	
	CONS 385)	4
	Program Elec. <sup>6</sup>	3
	0	15

#### SEMESTER VI

ECON 370	Engineering Economics	3
	Construction Management	
	CONS Course <sup>4</sup> (CONS 387 or	
	CIVL 384)	3
	Program Elec. <sup>6</sup>	3
	Design Elective <sup>5</sup>	<u>3</u>
	0	16

#### SEMESTER VII

SOET 377	Engineering Ethics1
	CONS Course <sup>4</sup> (CONS 386 or
	CONS 385)4
CONS 476	Pre-Capstone1
	Program Elec. <sup>6</sup> 6
	GER(6, 7, 8, 9, 10, 11) <sup>3</sup> <u>3</u>
	14

#### SEMESTER VIII

CONS 477	Capstone Project3
	Engineering Safety1
	CONS Course <sup>4</sup> (CONS 387 or
	CIVL 384)4
	Program Elec. <sup>6</sup> <u>6</u>
	14
	Total Required Program Credits = 125

<sup>1</sup> Students starting with Calculus I, will take Calculus I, Calculus II, Differential Equations, and a fourth math class of their choosing and with advisement.

#### <sup>2</sup> Writing Intensive

<sup>3</sup> GER = General Education Elective. Students must accomplish 7 separate GER categories: GER 9 6, 7, 8, 9, 10, or 11. One of which must be the Diversity GER (GER 3). Depending on Program Elective selection students may need to take one or more 300/400 level GER courses in order to reach 45 upper division credits.

<sup>4</sup> CONS Course: Four (4) courses are required by all students in the program. These courses are: CIVL 384 Engineering Geology, CONS 385 Hydrology & Hydrogeology, CONS 386 Water Quality, and CONS 387 Water & Wastewater Treatment. They are being referred to as CONS courses because they will be offered on a rotational basis, every other year depending on enrollment.

<sup>5</sup> Design Elective: All students must take at least one civil structural design course (CONS 304, CONS 324, or CONS 370).

(UUNS 304, UUNS 324, or CONS 370).
<sup>6</sup> Program Electives is provided below.
Students wanting to focus more on structural civil engineering technology must take a total of 6 Program Electives and are strongly advised to take CONS 222.
Students wanting to focus on environmental engineering technology must take a total of 5 Program Electives, two of ubich must be CHEM 155 and BIOL 150, and they are strongly advised to take CONS 232.
Students wanting to factives, two of ubich must be CHEM 155 and BIOL 150, and they are strongly advised to take CONS 350 and MATH 141. It's advised that CHEM 155 taken In Semester 4. if possible, and that BIOL 150 be taken in Semester 5 or sooner if possible. Students must be sure that enough 300400 level courses are taken to fulfill the minimum requirement of 45 upper division course. Students focusing on environmental engineering will likely have to take a 300-1400-level GER. Course selection must be under advisement of and with approval of the assigned academic program advisor or department chair.

department chair. Approved Program Electives: CIVL 381, CIVL 480, CIVL 3XX, CIVL 4XX, CMGT 200, CMGT 300, CMGT 301, CMGT 304, CMGT 305, CMGT 308, CMGT 322, CMGT 323, CMGT 389, CMGT 403, CMGT 410, CONS 111, CONS 112, CONS 222, CONS 226, CONS 364, CONS 376, CONS 372, CONS 335, CONS 350, CONS 366, CONS 366, CONS 370, CONS 372, CONS 375, CONS 432, CONS 472, CONS 485, CONS 470, CONS 477, CONS 372, CONS 422, AREA 110, AREA 110, AREA 310, AREA 320, AREA 322, AREA 324, AREA 340, AREA 137, AREA 424, CHEM 155, CHEM 301, CHEM 302, BIOL 150, BIOL 209, EADM 201, ENGS 102, SOET 314, SOET 352, SOET 353, SOET 374, SOET 400, SOET/BSAD 430, LEST 388, MATH 141, MATH 341, MATH 351, MATH 361, MATH 371, MATH 401, MATH 461, MECH 301, MECH 341, MECH 342

NOTE: Civil & Environmental Technology students must meet seven of the ten and have a total of 30 credits for the General Education Requirements. There are a total of 125 program credits.

Student Learning Outcomes can be found at www.canton.edu/csoet/cet/.

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The four-year, undergraduate Bachelor of Science in Crime Analysis combines a core concentration in crime analysis with select courses in data analytics, cyber security, and geographic information systems. Through-out this program, students identify solutions to crime problems and learn to formulate crime prevention strategies. Additionally, students learn crime mapping and the application of statistics to understand the techniques available to map crime and provide predictive analytics to criminal justice agencies. Applying spatial analysis and mapping, quantitative assessment, and using standard software packages, individuals who complete the program will be prepared to understand investigative techniques and data in order to provide criminal justice agencies with tactical, operational, and strategic crime analysis products. Students will also be prepared to enroll in and pass the New York State Division of Criminal Justice Services crime analysis certification examination.

### STUDENTS IN THIS MAJOR:

- Receive training in spatial & data analysis
- Learn components associated with the NYS crime analysis certification exam
- Complete classes toward a minor, including Forensic Science, Criminology, or Homeland Security

### CAREER OPPORTUNITIES:

- Crime Analyst
- · Criminal Justice Research Analyst
- Law Enforcement
- · Intelligence Analyst
- Criminal Justice Policy Analyst
- Public Policy and Administration

#### **Admission Requirements:**

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

# Recommended preparatory courses or their equivalencies are:

JUST 232 Intelligence Analysis JUST 233 Crime Analysis MATH 111 Survey of Mathematics OR MATH 121 College Algebra MATH 141 Statistics

### **PROGRAM REQUIREMENTS:**

#### (CURRICULUM 3006)

SEMESTER I		REDITS
JUST 233	Crime Analysis	3
ENGL 101	Composition & Spoken Wor	3
	MATH Elective (GER 4)	3
	Liberal Arts Elective	
	(GER 7, 8, 10,11)	3
	American History Elective (C	GER 9)3
	·	15

#### SEMESTER II

JUST 232	Intelligence Analysis3
CITA 110	Introduction to Info Technology3
MATH 141	Statistics (GER 4)3
	Natural Science (GER 5) 3-4
	Liberal Arts Elective (Any GER)3
	15-16

#### SEMESTER III

GMMD 101 Intro to Media Studies (GER 6)	3
Liberal Arts Elective	3
Liberal Arts Elective	3
DEISJ Elective(GER 3)	3
General Elective	3
	15

#### SEMESTER IV

MATH	Math Elective (GER 4)3	
	Liberal Arts Elective3	
	Liberal Arts Elective3	
	General Elective	
	General Elective	
	15	

#### SEMESTER V

JUST 421	Cyber Criminology3
JUST 380	Civil Liberties & Homeland Sec3
	Liberal Arts Elective3
	Liberal Arts Elective3
	General Elective3
	15

#### SEMESTER VI

JUST 347	Res Methods in Criminology & CJ3
JUST 314	Ethics in CJ*
JUST 423	Intelligence Led Policing3
	U/L Liberal Arts Elective
	U/L Liberal Arts Elective3
	15

#### SEMESTER VII

JUST 402	GIS: Crime Mapping	3
CYBR 365	Digital Forensic Analysis	3
JUST 425	Law Enforce. Intell. Systems	3
	Liberal Arts Elective	3
	Liberal Arts Elective	3
JUST 429	Intro to Culm. Exp1	l
	16	5

#### SEMESTER VIII

LEST 450	Trian Courts & Rules of Evid3
JUST 430	Culminating Experience in CJ OR
	(4) U/L Program Electives
	15

Students in the Criminal Investigation, B. Tech. program are required to earn a "C" or better in JUST 430.

- \* Fulfills writing intensive requirement.
- U/L = Upper Level Courses (300/400)
- GER = General Education Requirement
- **NOTE:** Crime Analysis students must meet seven of the ten General Education Requirements and have 30 total GER credits.
- **Student Learning Outcomes** can be found at www.canton.edu/sci\_health/ci/.

The Bachelor of Technology in Criminal Investigation provides a unique alternative to traditional criminal justice programs. This degree focuses on developing the necessary knowledge and skills required in criminal investigations. Students can opt to complete an internship with an agency in the Criminal Justice field or complete 5 Upper Level JUST courses

### STUDENTS IN THIS MAJOR:

- Receive advanced training in criminal investigation.
- Learn to analyze forensic evidence, preserve crime scenes, collect and process evidence.
- Complete classes toward a minor, including Forensic Science or Criminology.

### CAREER OPPORTUNITIES:

- Police Officer
- Federal law enforcement agencies
- Autopsy Technician/Medical Investigator
- Military police
- Crime Scene Technicians
- Forensic Scientist

### **Admission Requirements:**

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

# Recommended preparatory courses or their equivalencies are:

JUST 101	Introdu	iction to	Criminal	Justice
	-			

- JUST 110 Criminal Law
- JUST 111Criminal ProcedureJUST 203Criminal Investigations
- JUST 209 Law Enforcement Communications
- JUST 210 Introduction to Forensic Investigation

MATH 111 Survey of Mathematics OR MATH 121 College Algebra

### **PROGRAM REQUIREMENTS:**

#### (CURRICULUM 1359)

SEMESTE	ER I	CREDITS
JUST 101	Intro. to Criminal Justice	3
ENGL 101	Composition & Spoken V	Word3
	MATH Elective (GER)*.	3
PSYC 101	Introductory Psychology.	3
Liberal Arts	Course (Any GER)	3
		15-16

#### SEMESTER II

JUST 112	Criminal Law & Procedure	3
SOCI 101	Introduction to Sociology	3
	Lower Level Program Elective1	3
	Natural Science w/Lab (GER)	4
	Humanities Elective (GER)	3
	$\overline{10}$	6

#### SEMESTER III

- JUST 201 Critical Issues in Crim. Justice\* ......3
- JUST 209 Law Enforc. Communications......3
- PSYC 275 Abnormal PSYC **OR**

#### SEMESTER IV

JUST 203	Criminal Investigations	3
JUST 210	Intro. to Forensic Invest	3
	Lib. Arts Elective (any GER)	3
	General Elective	3
	General Elective	3
		18

#### SEMESTER V

JUST 300	Forensic Photography	3
JUST 303	Investigative Interviews	3
	Upper Level General Elective	3
	General Elective	3
	General Elective	3
		15

#### SEMESTER VI

15

#### SEMESTER VII

JUST 406	Crime Scene Investigation3
JUST 408	The Investigation of Death4
JUST 429	Intro. to Culminating Experience <sup>5</sup> 1
	U/L General Elective3
	General Electives6
_	16

72

#### SEMESTER VIII

15

- \* MATH 111 or higher is required NOTE: If you are enrolling in a course that is a pre-requisite for a required course in your program, your TAP eligibility may be affected.
- \*\* Fulfills writing intensive requirement.
- \*\* Writing intensive course.

1. Lower Level Program Electives are selected from JUST or EADM (100-200) level courses

- 2. UL Program Electives are selected from JUST, EADM or LEST (300-400) level courses
- 3. A student CAN earn credit for both courses but is only required to take one or the other.
- 4. Choose one from this list: JUST330 Questioned Documents, JUST411 Forensic Drug Analysis and Investigation, JUST412 Firearm and Toolmark ID, JUST413 Methods of Human Skeletal ID
- 5. This course is only required for students intending to take JUST 430, Culminating Experience, in the 8th semester
- NOTE: All newly admitted transfers and freshmen must attain a passing grade of 2.0 or greater to receive credit towards graduation for any UL JUST course.
- Student Learning Outcomes can be found at www.canton.edu/sci\_health/ci/.

The Law Enforcement Leadership program blends the disciplines of criminal justice, law enforcement and management. It provides the foundation to allow graduates to seek entry positions in law enforcement or to seek promotion into supervisory and management positions. Most graduates of this program will seek employment with law enforcement agencies, other governmental agencies or in the private sector. Since the program provides ample opportunities for electives, students may choose electives that may help them to develop or hone management skills, or acquire knowledge and skill in law enforcement techniques.

## Students In This Major:

- Develop leadership and managerial skills needed to succeed in contemporary law enforcement agencies.
- Analyze critical issues in law enforcement
- Study under the tutelage of experienced criminal justice professionals.
- Are exposed to current issues and stateof-the-art technology.
- Culminate their education with a semester-long internship or additional course work.
- Qualified students have the opportunity to attend the David Sullivan-St. Lawrence County Law Enforcement Academy as an internship site.
- Can choose to take all classes for the degree online!

## CAREER OPPORTUNITIES:

- Law enforcement officers at local, state and federal level
- Law enforcement management for municipal, state, and federal agencies
- Probation and Parole
- Security consultants
- College and university campuses

## CAREER OUTLOOK:

- Jobs for graduates in law enforcement are projected to increase by 7% through 2020 according to the U.S. Department of Labor Bureau of Labor Statistics.
- Higher education requirements for entry level employees of law enforcement agencies at all levels are becoming more common.

## **Admission Requirements:**

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0.

## **PROGRAM REQUIREMENTS**

### (CURRICULUM 1911)

SEMESTE	CREDITS
JUST 101	Introduction to Criminal Justice3
BSAD 100	Intro. to Business
ENGL 101	Composition & Spoken Word3
MATH 111	Survey of Math or Higher3
PSYC 101	Introduction to Psychology3

### SEMESTER III

- CITA 110 Intro. to Information Technology .....3

### SEMESTER IV

- JUST 201 Critical Issues in Criminal Justice \*\* .3
- JUST 209 Law Enforcement
  - Communication OR

### SEMESTER V

JUST 321	Managing Law Enforce. Training3
JUST 344	Civil Liability Issues for CJ Admin3
BSAD 301	Principles of Management3
	U/L Program Elective <sup>2</sup> 3
	U/L Program Elective <sup>2</sup> 3
	15

### SEMESTER VI

JUST 314	Ethics in Criminal Justice OR
BSAD 319	Professional Ethics
JUST 333	Managing Patrol Functions3
	U/L Program Elective <sup>2</sup> 3
	U/L Program Elective <sup>2</sup> 3
	General Elective
	15

## SEMESTER VII

JUST 429	Intro to Culminating Experience *	1
	Current Issues in Law Enforce	
	CJ Agency Management	
	Leadership & Decision Making	
	General Elective	3
	General Elective	3
	$\overline{1}$	6

### SEMESTER VIII

JUST 430	Culminating Exper. in CJ AND/OR
	U/L Program Electives 3-15
	15

\*This course is only required for students intending to take JUST 430 Culminating Experience.

\*\*Writing Intensive course

- U/L = Upper Level course (300/400)
- GER = General Education Requirement

Program Electives: JUST, BSAD, or LEST

- NOTE: Criminal Justice: Law Enforcement Leadership students must meet seven of the ten General Education Requirements and have 30 total General Education credits.
- NOTE: As of Fall 2013, all newly admitted transfers and freshmen must attain a grade of 2.0 or greater for any Upper Level JUST course to receive credit towards graduation.
- Student Learning Outcomes can be found at www.canton.edu/sci\_health/lelm/.

# Cybersecurity–B.S.

The Bachelor of Science in Cybersecurity program prepares students to assess security needs of computer and network systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures. The program includes instruction in computer architecture, programming, and systems analysis; networking; telecommunications; cryptography; security system design; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting. The Program of Study (PoS) has been validated by the National Security Agency (NSA) for the National Centers of Academic Excellence in Cybersecurity Defense (CAE-CD) designation.

## STUDENTS IN THIS MAJOR:

- Develop management skills, communication skills, and other skills in order to meet their challenging career.
- Are taught by qualified faculty in small classes.
- Gain hands-on experience on security and risk management, asset security, security engineering, communication and network security, identity and access management, security assessment and testing, security operations, and software development security.
- Are encouraged to pursue Cybersecurity internships during their senior year.

## CAREER OPPORTUNITIES:

- Cybersecurity Forensic Specialist
- Security Analyst
- Security Auditor
- Security Consultant
- Security Risk Assessor
- Security Manager
- Information Security Officer
- Security Trainer
- Security Systems Designer

## **POTENTIAL EMPLOYERS:**

- Information Security / Information Technology Companies
- Health Management Services
- Financial Services
- Government

- Education
- Military
- Information Security / Information Technology Departments in any industry

## **Admission Requirements:**

- Students must be qualified to enter at least College Algebra (MATH 121) and Composition and the Spoken Word (ENGL 101).
- Computer or technology courses are strongly recommended.
- Transfers into this program must have a 2.0 GPA for admission. Students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

Students who do not meet necessary prerequisites may be admitted to the College. However, completing the program may require more than four years.

# **PROGRAM REQUIREMENTS:** \* (CURRICULUM 2698)

SEMESTI	ER I CRED	ITS
CYBR 152	Computer Logic	3
	Survey of Cybersecurity	
	Composition & Spoken Word	
	Mathematics Elective1	3
	LA Course (GER 6,7,8,9,10,11)	3

### SEMESTER II

- CYBR 170 Comp. Concepts & Oper. Sys. ......3
- CYBR 171 Oper. Sys. Use & Administration .....3 MATH 141 Statistics .......3 Diversity Elective (GER 3) ........3
- Natural Science Elective (GER 5) ......3

### SEMESTER III

Introduction to Programming4
Database Apps & Concepts3
Data Comm & Network Tech
LA Course (GER 6,7,8,9,10,11)3
LA Course (GER 6,7,8,9,10,11) <u>.3</u>
16
ER IV
Systems Analysis and Design <sup>2</sup> 3
Information Security
GER/LA Course
GER/LA Course3
LA Course
Program Elective <sup>3</sup>
15

#### SEMESTER V

Network Security Cluster	3
Data Security Cluster	3

MATH 351	Discrete Mathematics	3
	LA Course	
	General Elective	3
	1	5

#### SEMESTER VI

CYBR 352	Ethical Hacking & Pen Testing.	3
	curity Cluster	
Data Securi	y Cluster	3
	LA Course	
	General Elective	3
		15

#### SEMESTER VII

CYBR 450	Cyber Security Body of Knowledge3
	LA Course
	UL LA Course3
	UL LA Course3
	UL LA Course3
	15

### SEMESTER VIII

CYBR 485	Cybersecurity Practice <u>OR</u>	
	UL Program Elective	
	UL Program Elective	6
	UL LA Course	
	UL LA Course	3
	UL General Elective	3
		15

Program Elective-CYBR, CITA, DATA, JUST

- Seven of ten SUNY GER academic areas and 30 credits of SUNY GER courses must be completed within the first two
- years of full-time study of the program.
- Network Cluster-CYBR 354, CYBR 356, CYBR 440

Data Security Cluster-CYBR 360, CYBR 365, CYBR 455 1 Minimum mathematics requirement is MATH 121 College Algebra.

2 Fulfills writing intensive requirement.

15

3 On-campus students are encouraged to take CITA 175, CITA 221, and CITA 441 to fulfill this program elective requirement.

## Additional Graduation Requirements

To meet graduation requirements, CYBR 450 must have a grade of C or higher. No more than 3 CITA credits with a course number below CITA 150 may be used for credit towards graduation.

The Bachelor of Business Administration in Early Childhood Care and Management combines theory and practice for students seeking careers in the childcare field, working specifically with children from infancy - 5 years of age. The degree program prepares students for careers in childcare centers or various early childhood-based businesses and organizations within the early childhood and childcare industry.

Early Childhood upper-level program electives offer content relevant to the professional development and growth of the early childhood educator and early childhood director. Additional courses provide a strong business-focused foundation. Courses include content related to organizational leadership, human resources and fiscal management, small business management and ownership, and leadership.

The Bachelor of Business Administration in Early Childhood Care and Management program is accredited by the International Accreditation Council for Business Education.

## **PROGRAM DELIVERY:**

The Bachelor of Business Administration in Early Childhood Care and Management can be completed fully online, on campus, or a combination of both. Students can begin enrollment in fall, summer, or spring and attend part or full-time.

## STUDENTS IN THIS MAJOR:

- Participate in field-based experiences and internships in various childcare settings, including Head Start Programs, Universal Pre-K, and Kindergarten Public School Classrooms, Child Care Centers, Family Child Care Provider Homes, Nursery, and Pre-School programs, Children's Museums, Libraries, and additional Early Childhood Businesses and Organizations
- Design a final semester of study to include an internship, or capstone project, or enrollment in program electives or a combination of all, based on students' individual future career or academic goals.
- Take part in professional development opportunities offered through courses, conferences, trainings, seminars, and workshops

## **CAREER OPPORTUNITIES:**

- Child Care Center Owner or Director
- Child Care Center Director
- Self Employed Family Child Care Center Provider
- Early Childhood Resources and Referral Agencies
- Early Childhood Trainer or Consultant
- Early Childhood-Based Businesses and Organizations

- Head Start Program Administration
- Children's Museum Educator/Trainer

### **CAREER OUTLOOK:**

- According to the U.S. Department of Labor, job opportunities for preschool and childcare center directors are favorable. \*Employment statistics from Bureau of Labor Statistics 2019-2029, May 2020
- Certification requirements are increasing for Early Care and Education providers. Bachelor's Degrees are necessary to work in lead administrator positions in childcare facilities and Head Start programs.
- Changes in society and the workforce demand an increase in the availability of high-quality early childcare and education options for families and children from infancy to prekindergarten.

### Admission Requirements:

Students must meet entrance requirements and be eligible for enrollment in:

- Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0
- GPA for admittance to the ECHD major Transfer students must meet re-registration
- requirements to be considered for admission Students who do not meet ECHD admission requirements may enroll in preparatory courses. Students must pass all \*preparatory courses and have a minimum 2.0 GPA for admittance to the ECHD program.
- Graduates of BOCES Early Childhood Occupations programs may be eligible for 3-6 college credits toward the Early Childhood Program at SUNY Canton. Refer to the College catalog for a list of BOCES Programs for which we have articulation agreements.

## **PROGRAM REQUIREMENTS:**

- Students are required to complete mandated trainings offered through NYS Office for Children: Identification of Child Abuse & Neglect and Foundations in Health, Safety & Nutrition [offered online within our courses]
- Early Childhood students must complete a Health Clearance through the SUNY Canton Davis Health Center; have evidence of a recent physical exam, and updated immunizations.
- For off campus field experiences (ECHD 201 and the Internship) residential students will need to arrange for coordination of and/or transportation to their assigned placement sites. Distance students' complete student teaching and internship experiences near their residence and attend seminars virtually.

### (CURRICULUM 2699)

(CURRICULUM 2699)		
SEMESTE	ER I CREDITS	
FYEP 101	First Year Experience1 Introduction to Early Childhood	
ECHD 101	Introduction to Early Childhood (GER 7)3	
ENGL 101	(GER 7)	
PSYC 101	Introduction to Psychology	
	Science Elec. (GER 5)	
	16-17	
SEMESTER		
BSAD 100 ECHD 121	Introduction to Business	
PSYC 220	Child Development	
	Child Development	
ECHD 131	Infants and Toddlers	
SEMESTER	III	
ECHD 105	Orientation EC Field Experience1	
ECHD 125 ACCT 101	Curriculum Development3 Foundations of Fin. Accounting4	
ECHD 250	Children with Special Needs	
	GER (6,8,9,10,11)	
SEMESTER	IV 17-18	
ECHD 201	Early Childhood Field Experiences4	
ECHD 204	Early Childhood Observation3	
ECHD 285	Issues & Policies in Early EC & ED* - WI	
BSAD 203	Marketing	
	GER (6,8,9,10,11) <u>3</u>	
SEMESTER	10	
ECON 101	Principles of Macroeconomics	
BSAD 215 ECHD 340	Small Business Management	
	EC Settings	
ECHD 404	Positive Child Guidance	
	15	
SEMESTER		
BSAD 319 BSAD 310	Professional Ethics	
ECHD 401	DAP: Learning Environments	
ECHD 301	Infants-Age 5	
	EC Programs	
	U/L Program Elective	
SEMESTER		
ECHD 409 ECHD 420	Orientation to Culminating Experience1 EC Program Development	
BSAD 340	& Management	
	U/L Program Elective3	
	U/L Elective	
	U/L Elective	
SEMESTER	VIII	
	ood Care & Management Internship OR	
Capstone Pro nation of:	ject OR U/L Program Electives OR Combi-	
ECHD 410	Internship AND/OR 3-12	
ECHD 410 ECHD 411	Capstone AND/OR	
	U/L Program Elective	
	12	

\* Fulfills writing intensive requirement.

GER = General Education Requirement

NOTE: Early Childhood students must meet seven out of ten General Education Requirements.

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Student Learning Outcomes can be found at:

www.canton.edu/business/early\_childhood/.

The Electrical Engineering Technology (B. Tech.) program at SUNY Canton provides opportunities for students to acquire knowledge and practical skills necessary to begin a career in engineering technology as technologist or engineer.

## Program Educational Objectives

- Be effective in performing their duties as Engineers, Technologist, or Technician;
- 2. Be effective in writing and oral communications;
- Be ready to expand knowledge in engineering profession through continuing education, or other life-long learning experiences;
- 4. Be committed to quality, timeliness and respect for diversity.

## Student Learning Outcomes

What students are expected to know and be able to do by the time of graduation:

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- 2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- 3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- 4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- 5. An ability to function effectively as a member as well as a leader on technical teams.

## CAREER OPPORTUNITIES:

- Electronics Technologist or Engineer
- Biomedical Engineering Technologist
- Sale Engineering Technologist or Engineer
- Service Engineering Technologist or Engineer
- Systems Test Engineering Technologist or Engineer
- Product Engineering Technologist or Engineer
- Software Engineering Technologist
- Documentation Engineering Technologist or Engineer
- Quality Control Engineering Technologist or Engineer
- Applications Engineering Technologist or Engineer

- R&D Technologist or Engineer
- Engineering Assistant
- Power Sub-Station Design Engineer
- Graduate School

### Accreditation

 Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

### Admission Requirements

- Candidates must have a minimum of a high school diploma <u>or</u> GED.
- Students must be prepared to take Pre-Calculus (MATH 123). If a student does not meet the criteria, he/she will be required to take prerequisites in math. All students with high school diploma or GED will be required to take a placement examination to determine his/her standing.
- Students who graduate with a two year college degree in a program related area will be evaluated and awarded maximum credit to enable him/her to complete the (B. Tech) degree in two years. Transfer students from community colleges, universities or other institutions of higher learning with some coursework completed will be evaluated on case-by-case basis. Minimum grades of "C" for transfer provided the content is comparable to that offered at SUNY Canton.

## **PROGRAM REQUIREMENTS:**

#### (CURRICULUM 0216)

SEMESTE	R I CREDITS
ELEC 161	Electronic Fabrications2
ENGL 101	Composition & the Spoken Word3
MATH 123	Pre-Calculus4
SOET 116	Intro to CAD & Design2
ELEC 101	Electrical Circuits I
ELEC 109	Electrical Circuits I Lab <u>1</u>
	15

#### SEMESTER II

Elec 141	Industrial Controls2
ELEC 102	Electric Circuits II
ELEC 129	Electric Circuits II Laboratory1
MATH 161	Calculus I4
ELEC 165	Digi Fundamentals & Systems3
ELEC 166	Digi Fundamentals & Systems Lab1
	14

#### SEMESTER III

PHYS 121	College Physics I OR	
	University Physics	3
PHYS 125/1	35 Physics I Lab	1
ELEC 141	Industrial Controls	2
ELEC 213	Microprocessors	3
	Electronic Circuits	
MATH 162	Calculus II	4
		17

#### SEMESTER IV

- ELEC 243 Computer Automated Control

ELEC 215	Electrical Energy Conversion4
	Telecommunications
PHYS 122	College Physics II OR
PHYS 132	University Physics II
PHYS 126/1	36 Physics II Lab1
MATH 263	Calculus III4
	17

#### SEMESTER V

OLIVILOIL	
ELEC 332	Industrial Power Electronics3
ELEC 343	Advanced Circuit Analysis
SOET 377	Engineering Ethics1
MATH 141	Statistics 1
MATH 364	Differential Equations4
	Diversity Elective Course (GER 3)3
	17
SEMESTE	ER VI
ELEC 380	LAN/WAN Technology3
ELEC 383	Power Transmission and
	Distribution3
ELEC 385	Electronic Communications I3
SOET 348	Engineering Safety1
	Program Elective
	Elective (GER 3, 4, 5, 6, 8, 9) <u>3</u>
	16

#### SEMESTER VII

ELEC 386	Electronic Communications II3
ELEC 416	Microelectronics Circuit Design3
SOET 361	Project Management
	Program Elective
	Elective (GER 3, 4, 5, 6, 7, 8, 9) <u>3</u>
	15

#### SEMESTER VIII

ELEC 477	Capstone Project*3
ELEC 436	Biomedical Electronics OR
ELEC 488	Electrical Power Systems
ECON 370	Engineering Economics
	Program Elective
	Elective (GER 3,4,5,6,7,8,9) <u>3</u>
	15

Suggested Program Electives:

- SOET 374 Industrial Management
- SOET 349 Industrial Safety and Health
- SOET 373 Management Telecommunications
- ELEC 405 Satellite Communications
- ELEC 375 Fiber Optic Communications
- PHYS 301 Introduction to Photonics
- MECH 351 Design of Experiments
- AREA 303 Wind Turbines
- MECH 342 Thermodynamics
- AREA 340 Geothermal Energy
- ELEC 355 Embedded Electronics
- MATH minor courses: 341, 361, 351, 371, 391
- \* Fulfills writing intensive requirement
- UL = Upper Level Courses (300/400)
- GER = General Education Requirement
- Program Electives: Must be from approved list of program electives for the Electrical Technology program or permission of program coordinator.
- NOTE: Electrical Engineering Technology students must meet seven of ten General Education Requirements, 45 upper level credits.
- Student Learning Outcomes can be found at www.canton.edu/csoet/elec/.

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The Bachelor of Science degree in Emergency Management focuses on the development and education of emergency managers and other administrative personnel with responsibilities in emergency management or the allied homeland security field of study. Students receive education in the mitigation of, preparedness for, response to, and recovery from natural or technological emergencies, disasters and catastrophes.

Students learn emergency management theory and doctrine and how to apply it In simulated disasters. The curriculum follows standard processes for ensuring the preparedness and resilience of communities and organizations.

## STUDENTS IN THIS MAJOR:

- Learn about the phases of emergency management (mitigation, preparedness, response, and recovery).
- Analyze past disasters and examine effectiveness of the current approaches to emergency management.
- Learn about natural and technological hazards, develop hazard and vulnerability assessments, and strategize mitigation solutions.
- Study new and innovative methods for preparing communities and organizations to address the risk of emergencies, disasters, and catastrophes.
- Understand how to assess community and organization resilience to disasters and methods for recovering from disasters.
- Build leadership, communication, decisionmaking and problem-solving skills through the development and completion of tabletop, functional and full-scale virtual exercises.
- Explore the major legal and liability issues in emergency management and their potential roles in rule-making and policy development.
- Acquire the skills necessary to develop, conduct and evaluate disaster exercises in highly-structured and applied, interactive educational simulations.

## CAREER OPPORTUNITIES:

- County and city emergency and disaster management agencies
- Regional and state emergency management and homeland security departments and agencies

- Federal emergency management and homeland security agencies
- Emergency management departments within many Federal agencies
- Private Sector emergency management consulting firms.
- Institutions of Higher Education and secondary school districts
- Hospitals and public health agencies
- Private corporations and businesses, including nuclear power plants
- Criminal justice, firefighting and emergency service agencies

## Admission Requirements:

- Students must be prepared to take Survey of Math (Math 111) or College Algebra (MATH 121)
- Students must be prepared to take Composition and the Spoken Word (ENGL 101)
- Transfer students must have a minimum 2.0 GPA for admittance to the Emergency Management major and meet specific program requirements for admission.

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 1864)

SEMESTER I CREDITS	
ENGL 101	Composition & the Spoken Word3
SOCI 101	Introduction to Sociology3
EADM 201	Fundamentals of Emergency
	Management3
	Liberal Arts Elective(Any GER)3
	Liberal Arts Elective(Any GER)3
FYEP 101	First Year Experience1
	16

### SEMESTER II

### SEMESTER III

OEMIEO I EK III		
EADM 220	Emergency Mgmt. & Response3	
EADM 222	Emergency Planning3	
	Science Elective(GER 5)3	
	Liberal Arts Elective (GER 3)3	
	Liberal Arts Elective	
	(GER 6, 8, 9, 10, 11) <u>.3</u>	
-	15	
_	//	

### SEMESTER IV

EADM 320	Recovery and Resilience3
JUST 230	Fundamentals of Homeland Security3
	Liberal Arts Elective
	Liberal Arts Elective
	General Elective3
	15

### SEMESTER V

	Principles of Management3
EADM/BSA	D 305 Public Budgeting & Fiscal
	Mgmt3
EADM 314	Professional Ethics OR
BSAD 319	Professional Ethics
	Liberal Arts Electives
	Liberal Arts Elective3
	15

### SEMESTER VI

EADM 307	Legal Issues in E&D3
SOCI 325	Sociology of Disaster3
	General Elective
	Liberal Arts Elective
	U/L Liberal Arts Elective3
	15

### SEMESTER VII

EADM 400 Incident Management Systems	3
EADM 430 Simulated Disaster Training	3
JUST 429** Introduction to Culminating	
Experience	1
U/L Liberal Arts Electives	3
U/L Liberal Arts Elective	3
General Elective	<u>3</u>
	16

### SEMESTER VIII

EADM 435	Disaster Simulation3
EADM 485	Emergency Management Case Study 3
EADM 480	Internship EADM 3-9
	OR
	UL Program Elective3
	UL General Elective3
	General Elective <u>3</u>
	15

### UPPER LEVEL PROGRAM ELECTIVES:

ALL UPPER LEVEL EADM, JUST, LELM, HSMB, CONS, ECON, BSAD, SSCI, CITA AND PSYC COURSES, AND/OR OTHER UPPER-LEVEL COURSES WITH PER-MISSION OF INSTRUCTOR.

\*MATH 111 OR HIGHER IS REQUIRED-NOTE: IF YOU ARE ENROLLING IN A COURSE THAT IS A PRE-REQUISITE FOR A REQUIRED COURSE IN YOUR PROGRAM, YOUR TAP ELIGIBILITY MAY BE AFFECTED.

- \*\* Fulfills writing intensive requirement.
- U/L = Upper Level Courses (300/400)
- GER = General Education Requirement
- **NOTE:** Emergency Management students must meet all ten General Education Requirements.
- Student Learning Outcomes can be found at www.canton.edu/business/eadm/.

Esports is a rapidly growing field, both nationally and internationally. Experts predict that, by 2021, global Esports revenues will have reached \$1.65 billion. As more game designers and gaming consumers enter the market, there will be a need for managers to support their efforts. Game publishers, college and professional leagues, advertisers, and firms in complementary markets (gaming accessories, computers, specialty evewear products, etc.) will together create a high demand for employees who understand the basic technology, language, and culture of Esports and who possess marketing and management skill and knowledge. Graduates of the Esports Management program will be able to pursue positions in public relations, Esports marketing and promotion, tournament directors, collegiate Esports coaches and directors, events management, sales, facilities management, game day operations, and general Esports administration.

## **CAREER OPPORTUNITIES:**

Graduates will be well-qualified for entry-level professional opportunities in fields such as:

- Esports public relations
- Advertising
- Event management
- Sales
- Coaching/administration

## **Admission Requirements:**

- Refer to the table of high school course prerequisites for admission http://www.canton.edu/academics/ prerequisites.html.
- Students must be prepared to take ENGL 101 (Composition and the Spoken Word).

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 2991) SEMESTER I

CITA 110	Introduction to Information
	Technology3
ESPT 100	Introduction to eSports Mgmt3
ENGL 101	Composition and the Spoken Word
	(GER 1,2)3
FYEP 101	First Year Experience1
	MATH 111, 121, or 141 (GER 4) 3-4
	Natural Sciences Elective (GER 5) 3-4
	17-19

### SEMESTER II

BSAD 100	Introduction to Business
BSAD 203	Marketing3
ACCT 101	Foundations of Financial
	Accounting4
ECON 101	Macroeconomics (GER 7)3
GMMD 101	GMMD 101 Introduction to Media
	Studies (GER 6) <u>3</u>
	16

### SEMESTER III

ACCT 102	Foundations of Managerial	
	Accounting	3
BSAD 201	Business Law I	3
ECON 103	Microeconomics (GER 7)	3
ESPT 200	Fundamentals of Esports Tech	3
	DEISJ Elective (GER 3)	3
		15

### SEMESTER IV

FSMA 210	Introduction to Finance	3
	GER (8,9,10, or 11)	3
	GER (8,9,10, or 11)	3
	General Elective	3
ESPT 210	Esports Governance	3
	1	15

### SEMESTER V

	GER 8,9,10, or 113
BSAD 301	Principles of Management3
	U/L Program Elective
	General Elective
	Program Elective3
	15

### SEMESTER VI

BSAD 372	Electronic Commerce3
BSAD 373	International Business Management .3
ESPT 301	Esports Marketing3
	U/L Program Elective
	U/L General Elective
	15

### SEMESTER VII

**CREDITS** 

BSAD 340	Management Communications3
ESPT 308	Esports Event Management3
	U/L General Elective
	U/L General Elective3
	Liberal Arts Elective
	15

### SEMESTER VIII

ESPT 450	Esports Internship OR
	U/L Program Electives
ESPT 404	Esports Capstone <u>3</u>
	15
* Fulfills writing intensive requirement.	

U/L = Upper Level Courses (300/400)

*GER* = *General Education Requirement* 

Upper Level Program Electives: ACCT, BSAD, ECON, ENGL 270, ENGL 301, ESPT, FSMA, LEST, GMMD, SPMT, CITA and MINS As our society moves to a more serviceoriented world, the area of financial services becomes critical to our present and future economic situation. The movement towards blurring of the worlds of business, finance, stock brokerage, bond trades, insurance, banking and retirement planning has produced a tremendous growth industry. SUNY Canton's Finance program puts our graduates on the leading edge of this service industry.

## STUDENTS IN THIS MAJOR:

- Receive a solid fundamental education in the areas of business, finance, accounting, and liberal arts.
- Train in many operational areas of financial services.
- Have the opportunity to spend an entire semester in the financial industry.
- Prepare for graduate-level education.

## CAREER OPPORTUNITIES:

The employment opportunities cover a broad range of options, including major employers and also entrepreneurship. Graduates are working in:

- Banking
- Insurance
- Credit Unions
- Brokerage Firms
- Financial Planning Firms
- Colleges and Universities

## Employers of SUNY Canton Graduates:

- Community Bank
- SEACOMM Federal Credit Union
- SUNY Canton
- North Franklin Federal Credit Union
- North Country Savings Bank
- MetLife

## **Admission Requirements:**

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0 GPA for admittance to the Finance major and meet specific program requirements for admission.

## **PROGRAM REQUIREMENTS:**

## (CURRICULUM 0282)

SEMESTE	CREDITS
ACCT 101	Foundations of Financial
	Accounting4
ECON 101	Macroeconomics (GER7)3
ENGL 101	Composition & the Spoken Word
	(GER 1,2)3
CITA 110	Intro. to Information Technology3
FYEP 101	First Year Experience1
	Mathematics Elective (GER 4) 3-4
	17-18

### SEMESTER II

ACCT 102	Foundations of Managerial
	Accounting3
ECON 103	Microeconomics
MATH 141	Statistics
BSAD 200	Business Communications
	Natural Sciences Elective (GER 5) 3-4
	15

### SEMESTER III

BSAD 201	Business Law I3
FSMA 210	Introduction to Finance3
	DEISJ Elective
	General Elective
	(GER Recommended)3
	Program <sup>1</sup> Elective
	15

### SEMESTER IV

FSMA 220	Introduction to Investments
BSAD 301	Principles of Management3
FSMA 312	Financial Management3
	GER (6,8,9, or 11)
	GER (6,8,9, or 11)3
	15

### SEMESTER V

FSMA/ECO	N 330 Financial Institution &	
	Market	.3
ECON 315	Global Economy (GER 10)	3
FSMA 315	Global Investments	3
	Program Elective <sup>1</sup>	3
	Program Elective <sup>1</sup>	
	1	5

### SEMESTER VI

BSAD 319	Professional Ethics
BSAD 203	Marketing3
FSMA 415	Global Finance
FSMA 420	Financial Derivatives3
	Program Elective <sup>1</sup> <u>3</u>
	15

### SEMESTER VII

FSMA 325	Financial Compliance & Regulation.3	
FSMA 422	Risk Management3	
	Program Elective <sup>1</sup>	
	Program Elective <sup>1</sup>	
	U/L Program Elective <sup>2</sup>	
FSMA 429	Orientation to Culminating Exp1 15-16	
SEMESTER VIII		
FSMA 480	Finance Internship** OR6-15	
FSMA 460	Senior Project OR	
	U/L Program Electives <sup>1</sup> 3-15	

15

<sup>1</sup> Program Electives: Courses in ACCT, AGMT, BSAD, CITA, ECON, ESPT, FSMA, HSMB, LEST and MINS

<sup>2</sup> Program Electives: Courses in FSMA

\*Lowest acceptable level: College Algebra or Survey of Math.

\*\*REMINDER: Pre-req to FSMA 480 or 460 is FSMA 429 (Orientation to Culminating Experience).

The four-year, undergraduate Bachelor of Science in Forensic Criminology is an exciting new program which combines a core concentration in criminology with select courses in the forensic sciences. Throughout this program, students explore the complex interplay between theory and practice in the criminal justice system. Applying the scientific method to criminological theory, individuals who complete the program will be prepared to actively investigate the relationship between criminological research and evidence-based practice in the justice system, and will be poised to begin professional work in criminal justice, or for enrollment in graduate work. The program is interdisciplinary, reflecting the wide range of job opportunities in the field, including: law enforcement, corrections, victim services, juvenile justice and forensic behavioral sciences.

The program requires 3 lower-level core requirements in criminology and the social sciences; 6 upper-level core courses in criminology, forensic science, information management, and research methods; 2 courses from the criminology cluster; and 2 courses from the forensics cluster.

## **PROGRAM OBJECTIVES**

The primary educational objectives of the BS in Forensic Criminology include:

- Exploring a broad range of liberal arts disciplines, and identifying the ways in which these disciplines are interrelated, both in theory and in practical application of theory;
- Demonstrating facility with conventions of academic and professional discourse;
- Analyzing the foundations and evolution of criminological theory;
- Analyzing the foundations and principles of forensic science and criminological practice, including the systems in which these disciplines are found, as well as the prevailing ethical and practical guidelines for practice in these disciplines and systems;
- Identifying systemic issues and problems in contemporary forensic and crimino-logical practice; and
- Applying research and data to current forensic and criminological practice to

investigate potential mechanisms for evidence-based practice to lead change in emerging justice-system reforms.

## **CAREER OPPORTUNITIES:**

- Court positions
- Criminalistics
- Criminal justice researcher
- Research analyst
- Criminal justice policy analyst
- Victim advocacy
- Victim services
- Offender re-entry services
- Rehabilitation services
- Offender programing
- Restorative justice services
- Child protective and social services
- Governmental administration
- Law enforcement, corrections and juvenile justice programming

### **Admission Requirements:**

- Refer to the table of high school course prerequisites for admission.
- Students must be prepared to take College Algebra (MATH 121)
- Students must have a high school average of at least 80.
- Students must be prepared to take ENGL 101 or ENGL 102.
- Transfer students must have a minimum cumulative grade point average of 2.0.

## **PROGRAM REQUIREMENTS**

### (CURRICULUM 2994)

#### SEMESTER I

**CREDITS** 

#### SEMESTER II

- SOCI 105 American Social Problems (GER /)... Science w/ Lab (GER 5)......4

#### SEMESTER III

GMMD :	01Intro to Media Studies	3
SSCI181	Alcohol, Drugs & Society	3
	American History Elective (GI	ER 9)3
	General Elective	3
	General Elective	3
		15

#### SEMESTER IV

MATH 141	Statistics
PSYC 275	Abnormal Psychology3
	DEISJ Elective
	Liberal Arts Elective (any GER)3
	General Elective
	$\overline{15}$

#### SEMESTER V

I

UST 310	Causes of Crime	.3
	Criminology Cluster*	.3
	Forensics Cluster**	
	U/L Liberal Arts Elective	.3
	U/L Liberal Arts Elective	.3
	-	15

### SEMESTER VI

JUST 426	Ethics in Forensic Science	3
	Forensics Cluster**	3
	U/L Liberal Arts Elective	3
	U/L Liberal Arts Elective	3
	General Elective	3
		15

### SEMESTER VII

JUST 302	Information Management in	
	Criminal Justice	3
JUST 347	Research Methods Criminology	3
JUST 349	Vulnerable Populations in	
	Criminal Justice1	Ĺ
	Criminology Cluster*	3
	U/L Liberal Arts Elective	
	General Elective	3
	$\overline{16}$	ś

### SEMESTER VIII

JUST 432	Senior Seminar (Capstone)	3
	U/L Program Elective	3
	Program Elective	
	Program Elective	3
	Program Elective	3
	0	15

- Students in the Criminal Investigation, B. Tech. program are required to earn a C or better in all JUST courses taken for credit in the program.
- \* Criminology Cluster JUST 307, JUST 313, JUST 316, JUST 322, JUST 324, JUST 350 or JUST 351
- \*\* Forensic Cluster JUST 303, JUST 320, JUST 422 or JUST 424
- NOTE: Forensic Criminology students must meet seven of the ten General Education Requirements and successfully complete the SUNY Canton computer competency requirement.

The Bachelor of Technology degree in Funeral Services Administration is open to new students, transfer students and funeral directors who have passed the National Board Examination and are licensed. This is the only bachelor's degree in Funeral Services Administration in New York State and one of only a few in the country.

## STUDENTS IN THIS MAJOR:

- Participate in classes, Practicums, and Internships that provide theoretical education as well as practical training and experience in all phases of the funeral service profession including embalming, funeral directing, funeral customs and traditions, and restorative Art..
- Are eligible to take the National Board Examination required for licensure.
- Experience a learning environment that is rigorous yet supportive and flexible.
- Can concentrate elective courses in their field of interest such as business, coroner preparation, or Human Services.
- Will be involved in online and on campus courses.

## Accreditation:

National Board Examination pass rates, graduation rates, and employment rates for this and other ABFSE-accredited programs are available at www.abfse.org. To request a printed copy of this program's pass rates, go to the office of the FSAD program Director, Cook 109 or by email at penepentd@canton.edu, or by telephone 315-386-7170.

## **CAREER OPPORTUNITIES:**

- Funeral Director
- Embalmer
- Funeral Home Manager/Owner
- Pre-need Funeral Counselor in a funeral home or with specialized pre-need companies
- Funeral Service After Care Specialist
- Educator in Funeral Services
- Cemetery Administration
- Allied Professions such as cemeteries, crematories, morgues, coroners, and

medical examiners offices, organ and tissue banks, teaching funeral service, and funeral supply sales such as caskets, vaults, embalming fluids, computer software companies.

## B-Tech Completion Program for Licensed Funeral Directors:

Graduates from an accredited ABFSE mortuary science program and who have passed both sections of the National Board Exam are eligible for the B-Tech Completion program. Admissions and graduation requirements apply. Up to 30 credits may be obtained through challenge exams and/ or from life experience credits.

## Admission Requirements:

- Students must be eligible for enrollment in Composition and the Spoken Word (ENGL 101).
- Students must be eligible for enrollment in Intermediate Algebra (MATH 106) or higher.
- Transfer students must have a minimum 2.0 GPA.
- Blue Card requirements, see website under Program Description.

## **PROGRAM REQUIREMENTS**

## (CURRICULUM 0152)

## SEMESTER I

BIOL 101	Intro to	Biology4	È
DCAD 100	т	n ·	

- FSAD 111 Study of Funerals: Past and Present...3
- $\frac{1}{16}$

### SEMESTER II

- CITA 110 Intro to Information Technology\*\*...3
- MATH 111 Survey of Math OR

## SEMESTER III

ACCT 101	Foundations of Financial Acct.**4
SSCI 315	Death, Dying & Bereavement**3
FSAD 115	Thanotochemistry *2
	DEISJ Elective(GER 3)3
	Liberal Arts Elective
	(GER 8, 9, 10, 11)3
	General Elective (GER)
	18

### SEMESTER IV

BIOL 207	Human Anatomy**4
FSAD 121	Analytical Embalming Tech.**3
FSAD 129	Clinical Practicum**
FSAD 225	Professional Funeral Practice**3
	Liberal Arts Elective
	(GER 8, 9, 10, 11)3
	15

### SEMESTER V

FSAD 205	Mortuary Hygiene *3
FSAD 211	Embalming & Asep. Tech**4
FSAD 214	Funeral Home Management I**3
	General Elective
	U/L Liberal Arts Elective
	(GER 8, 9, 10, 11) <u>3</u>
	16

### SEMESTER VI

FSAD 307	Human Response to Death**4
FSAD 308	Intro to Internship1
FSAD 322	Funeral Home Management II**3
HLTH 303	Occupational Health & Safety3
	UL Management, Social Science or
	Health Elective
	17

### SEMESTER VII

FSAD 321	Advanced Embalming3
	Current Issues in Funeral Service3
FSAD 440	Internship7
	UL General Elective
	$\overline{16}$

### SEMESTER VIII

FSAD 406	Bereavement Counseling*3
FSAD 323	Restorative Art**
FSAD 404	Funeral Service Law**3
FSAD 445	Mortuary Compliance2
	12

\* Fulfills writing intensive requirement.

\*\*Core course: covers topics directly assessed on the NBE U/L = Upper Level Courses (300/400)

- *GER* = *General Education Requirement*
- —"C" or better is required in all FSAD courses and core courses. Students who have taken Mortuary Compliance (FSAD 445) more than 1 year prior to completing requirements in the major, will be required to repeat this course and earn a C or better to be eligible for the NBEs. Once enrolled in the FSAD program, students must complete the program within sex years. For extraordinary situations, permission to complete beyond 6 years must be granted by the FSAD Director.
- NOTE: Funeral Services Administration students must meet seven of the ten General Education Requirements and 30 total liberal arts credits.

Student Learning Outcomes can be found at www.canton.edu/sci\_health/fsad/outcomes.html.

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The Bachelor of Science in Game Design and Development is a comprehensive program focusing on the design and development of modern video games. Courses in the Bachelor of Science in Game Design and Development program provide a focus on video game design and development, imaginary storytelling, and production needs of the modern gaming industry, Graduates of the Game Design program will have handson skills to pursue a career creating content for everything from home computers and mobile devices, to emerging platforms like cloud gaming.

## **STUDENTS IN THIS MAJOR:**

- Students will learn the most recent technologies and programming skills to create video games on multiple platforms and devices.
- They will learn the theories and fundamentals of the game development life cycle, such as prototyping, producing, designing, programming, level creation, art production, and testing.
- Through this program, students will gain a high degree of hands-on experience with the design and development of modern video games.
- They will also receive intensive training in developing and applying an algorithmic approach to problem solving through using structure and object-oriented programming techniques, as well as designing and building gaming databases.
- Throughout the program, students will collect samples of their work and create a professional portfolio used in pursuing a job in gaming and other interactive entertainment industry.

## CAREER OPPORTUNITIES:

- Game programmers
- Computer graphics and visualization developers
- Virtual reality and augmented reality software engineer

- Modelers
- Animators
- Digital content producers
- Level designers
- Texture mappers

## CAREER OUTLOOK

Employment of gaming software developer, computer graphics and virtual reality engineer, multimedia artists and animators, is projected to grow 6 percent from 2014 to 2024. Projected growth will be due to increased demand for animation and visual effects in video games, movies, and television, according to the U.S. Department of Labor Bureau of Labor Statistics. The median pay scale for these positions was \$63,970 per year.

## **Admission Requirements:**

- Refer to the table of high school course prerequisites for admission.
- Students must be prepared to take ENGL 101 Composition and the Spoken Word.
- Transfers cannot be admitted until Fall 2019.
- Transfer students must have completed a college level English course.
- Transfer students to this program must have a 2.0 GPA for admission.
- Transfer students from other institutions and majors have to complete certain bridge courses that could extend their graduation rate.

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 2638)

SEMESTE	CR I CR	EDITS
CITA 152	Computer Logic	3
ENGL 101	Composition and the	
	Spoken Word (GER 10)	3
GAME 110	Fundamentals of Game Design	n3
GMMD 10	l Intro to Media Studies	3
MATH	Elective	3
FYEP 101	First Year Experience	<u>1</u>
		16

SEMESTI	ER II	CREDITS
CITA 180	Intro to Programming	4
ENGL 202	Creative Non-Fiction	3
GAME 230	3D Character Modeling	3
SOCI 101		
	MATH Elective - Min.	MATH 121.4 16
SEMESTI	ER III	CREDITS
CITA 215		
ENGL 221		
GAME 130	Game Design and Proto GER - Natural Science .	typing3
	GER Elective - Any	<u>3</u>
		15
SEMESTI		CREDITS
GAME 210	Object-Oriented Design Development	
GAME 240		
011012 210	GER Elective - Any	
	GER - DEISJ	
	Elective Liberal Arts)	
		15
SEMESTI		CREDITS
CITA 342		
ENGL 301	U	
GAME 250	Game Mechanics and D	
	Liberal Arts Elective	
	U/L Elective - GAME/C	JMMD/
	TCOM	2
	ТСОМ	
<b>CEMECT</b> I		15
SEMESTI	ER VI	15 CREDITS
CITA 204	E <b>R VI</b> System Analysis Design	15 CREDITS 
CITA 204 ENGL 315	E <b>R VI</b> System Analysis Design Short Fiction: The Art o	15           CREDITS
CITA 204 ENGL 315	E <b>R VI</b> System Analysis Design Short Fiction: The Art o 2 Virtual Worlds	15           CREDITS
CITA 204 ENGL 315	E <b>R VI</b> System Analysis Design Short Fiction: The Art o	15           CREDITS
CITA 204 ENGL 315	E <b>R VI</b> System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective	15           CREDITS
CITA 204 ENGL 315	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C	15           CREDITS
CITA 204 ENGL 315 GMMD 43	E <b>R VI</b> System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM	15           CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS	15           CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330	E <b>R VI</b> System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM	15           CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 390	ER VI System Analysis Design Short Fiction: The Art o 2Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop	15           CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 390 GAME 450 GMMD 42	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0Animation Techniques	15           CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 390 GAME 450 GMMD 42 U/L Liberal	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0Animation Techniques	15           CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 390 GAME 450 GMMD 42 U/L Liberal	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0Animation Techniques	15           CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 450 GMMD 42 U/L Liberal U/L Liberal	ER VI System Analysis Design Short Fiction: The Art o 2Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0Animation Techniques Arts Elective	15           CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 450 GMMD 42 U/L Liberal U/L Liberal SEMESTH	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0Animation Techniques Arts Elective Arts Elective	15         CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 450 GMMD 42 U/L Liberal U/L Liberal SEMESTH GAME 470	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM U/L Elective - GAME/C TCOM Web Design & Develop GAME Capstone I Mobile Game Developm 0Animation Techniques Arts Elective Arts Elective Arts Elective	15         CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 450 GMMD 42 U/L Liberal U/L Liberal U/L Liberal SEMESTH GAME 470 GAME 490	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0 Animation Techniques Arts Elective Arts Elective ER VIII CREDITS Emerging Gaming Appl GAME Capstone II	15         CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 450 GMMD 42 U/L Liberal U/L Liberal U/L Liberal SEMESTH GAME 470 GAME 490	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0 Animation Techniques Arts Elective Arts Elective ER VIII CREDITS Emerging Gaming Appl GAME Capstone II 7 Culture and Communic	15         CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 450 GMMD 42 U/L Liberal U/L Liberal U/L Liberal SEMESTH GAME 470 GAME 490	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0 Animation Techniques Arts Elective Arts Elective ER VIII CREDITS Emerging Gaming Appl GAME Capstone II 7 Culture and Communic U/L Liberal Arts Elective	15         CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 450 GMMD 42 U/L Liberal U/L Liberal U/L Liberal SEMESTH GAME 470 GAME 490	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0 Animation Techniques Arts Elective Arts Elective ER VIII CREDITS Emerging Gaming Appl GAME Capstone II 7 Culture and Communic	15         CREDITS
CITA 204 ENGL 315 GMMD 43 SEMESTH GAME 330 GAME 450 GMMD 42 U/L Liberal U/L Liberal U/L Liberal SEMESTH GAME 470 GAME 490 GMMD 31	ER VI System Analysis Design Short Fiction: The Art o 2 Virtual Worlds Liberal Arts Elective U/L Elective - GAME/C TCOM ER VII CREDITS Web Design & Develop GAME Capstone I Mobile Game Developm 0 Animation Techniques Arts Elective Arts Elective ER VIII CREDITS Emerging Gaming Appl GAME Capstone II 7 Culture and Communic U/L Liberal Arts Elective	15         CREDITS

GER = General Education Requirement

The Bachelor of Technology in Graphic and Multimedia Design (GMMD) is a fast paced technology and culture driven major for creative students interested in pursuing a four-year degree. Students can also expect to learn about mobile and social media, and other new forms of communication.

## Students In This Major:

- Create and design original works using graphics, video, photography, sound, and animation.
- Develop communications skills, management skills, and analytical skills.
- Learn design theory and interact with the latest multimedia authoring software.
- Design and launch their own multimedia project individually, as part of a team, and/or complete an internship within the media field.

## CAREER OPPORTUNITIES:

- Graphic designer
- Web designer
- Advertising specialist
- Public Relations specialist
- Video/Sound/or Video Game designer
- Journalist

## **POTENTIAL EMPLOYERS**

- Web Design Firms
- Advertising Firms
- Government
- Education
- News Agencies
- Other (design departments)

## **Admission Requirements:**

- Prepared to take Expository Writing (ENGL 101)
  - -NYS English Regents score > 75; or
  - —Verbal SAT score  $\geq$  420; or
  - —Reading and Writing ACT scores  $\geq$  17; or

-Transfer student who has already passed a college level English course.

• Transfer students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 2026)

SEMESTE	CR I CREDITS
GMMD 10	1 Intro to Media Studies3
ARTS 101	Intro to Drawing OR
GMMD 102	2Intro to Design
ENGL 101	Composition & The Spoken Word 3
CITA 152	Computer Logic
	GER - Social Science3
	15

### SEMESTER II

ARTS 101 or GMMD 102
GMMD 112Intro. to Time-Based Media
ENGL/TCOM Elective3
HUMA189/SPCH104/GAME110/
BSAD100/CITA1803
MATH 111/121
15

### SEMESTER III

GMMD 20	0Digital Photography	3
	Art History BCE to 16th C	
GMMD 24	0 Professional Practices	3
	GER - Natural Science and	Scientific
	Reasoning	3
	ENGL/TCOM Elective	
		15-16
SEMESTE	ER IV	
GMMD 21	1 Film Analysis	3

GMMD 211 Film Analysis
GMMD 317 Culture and Communication3
ARTS 202 Art History 16th-20th Centuries3
GMMD Elective
General Elective <u>3</u>
15

#### SEMESTER V GMMD 313Stud

MMD 313Studies in Genre Film3	
GER - Diversity: Equity, Inclusion,	
and Social Justice3	
ENGL/TCOM Elective3	
UL GMMD/ARTS Elective3	
GMMD/CITA Elective3	
GMMD Elective3	
18	

### SEMESTER VI

ENGL 301	Professional Writing3
	Upper Level Elective
	Upper Level Elective
	GMMD Elective
	GMMD Elective
	15

### SEMESTER VII

GMMD 401 Multimedia Product Design
GMMD 408Portfolio Development and Media
Strategies3
GMMD Elective
GMMD Elective
GMMD 440Senior Project Proposal/Internship
Orientation1
Upper Level Liberal Arts Elective3
16
SEMESTER VIII
GMMD 444 Multimedia Product Design 24
Upper Level Elective
GMMD Elective

Arts Management Internship or	
Upper Level Electives	3
	13

#### \*Program Electivet

\*\*Writing Intensive Course U/L = Upper Level Courses (300/400) GER = General Education Requirement Student Learning Outcomes can be found at

www.canton.edu/csoet/gmmd/gmmd/html.

The fitness industry continues to grow as the benefits of good health and exercise become more evident in our society. Fitness is no longer reserved for the elite athlete, but is important for all of society as a means of disease prevention and longevity. Students who complete the bachelor program in Health and Fitness Promotion may pursue employment in settings that promote health and wellness including fitness centers, corporate fitness facilities, as personal trainers, as strength and conditioning coaches with athletic teams, community health, and health organizations. Once enrolled in the program, students have three tracks to choose from to best meet their career goals: science, business, or physical therapy assistant.

The science track is designed for students who plan on pursuing graduate level studies in physical therapy, occupational therapy, chiropractic, athletic training, or physician's assistant. If a student is interested in physician's assistant, they may also be required to take additional science and math course work that may not be included in this program, such as organic chemistry, microbiology, genetics, and calculus. This is best discussed with the student's advisor.

The business track is designed for students who are interested in handling the day-to-day business operations of a fitness facility in addition to their personal trainer or strength and conditioning duties. These students are more interested in helping run a facility or perhaps owning their own business or facility. The business track will provide students with fundamental courses in business and management which should serve to prepare them for business ownership or positions of management in the field.

The physical therapy assistant track is designed for students who have already obtained a two-year PTA degree and wish to complement their physical therapist assistant training with further knowledge in exercise and fitness, or who wish to pursue a Doctor of Physical Therapy Degree after obtaining their bachelor's in Health and Fitness Promotion.

All tracks provide students with a core foundation in health promotion and fitness. Students will be able to choose from specialized electives with an emphasis on exercise and sports. Students also have the opportunity to pursue an internship in an area of their interest.

## **CAREER OPPORTUNITIES:**

 Graduates of the program may pursue employment in settings that promote health and wellness including fitness centers, corporate fitness facilities, as personal trainers, as strength and conditioning coaches with athletic teams, and community and health organizations.

## Graduate Study Opportunities:

- Doctor of Physical Therapy (DPT) programs
- Doctor of Chiropractic (DC)
- Master of Science in Occupational Safety and Health
- Master of Science in Physician Assistants Studies
- Master of Science in Occupational Therapy
- Occupational Therapy Doctorate (OTD)
- Master of Science in Kinesiology
- Master of Science in Exercise Science
- Master of Science in Community Health
- Master of Science in Therapeutic Recreation
- Master of Science in Athletic Training
- Master of Science in Human Performance

### **Admission Requirements:**

• Students must have prerequisites to enroll in a GER Math course and ENGL 101.

## **PROGRAM REQUIREMENTS:**

#### (CURRICULUM 2254)

#### SEMESTER I

HEFI/HLTH	H/PHTA/BSAD Program Elective3
BIOL 217	Anatomy & Physiology I4
ENGL 101	Composition & Spoken Word3
PSYCH 101	Introduction to Psychology3
	GER/Liberal Arts Elective
	(6, 8, 9, 10, 11)
	$\overline{16}$

### SEMESTER II

HEFI/HLT	H/PHTA/BSAD Program Elective	3
BIOL 218	Anatomy & Physiology II	4
	GER Math*	4
	DEISJ Elective	3
	GER/Liberal Arts Elective	
	(6, 8, 9, 10, 11)	3

16-17

### SEMESTER III

HEFI/HLT	H/PHTA/BSAD Program Elective3
PSYC 225	Human Development3
ACCT 101	Founds. of Financial Accounting OR
PHYS 121	& 125 Or College Physics I & Lab4
	General Elective3
	General Elective
-	
	84

### SEMESTER IV

HEFI/HLTH/PHTA/BSAD
Program Elective3
HEFI 203 Motor Development OR
PHTA 103 Neuromuscular Pathologies 3-4
PHTA 102 Kinesiology OR
HEFI 300 Biomechanics
BSAD 201 Business Law I OR
PHYS 122 & 126 College Physics II & Lab 3-4
General Elective3
15-17

#### SEMESTER V

HEFI 303	Exercise Physiology3
CHEM 150	College Chemistry I OR
BSAD 301	Principles of Management 3-4
MATH 141	Statistics
	General Elective3
	General Elective U/L if needed3
	15-16

#### SEMESTER VI

	College Chemistry II OR
SPMT 306	Sports Operations & Facilities Man-
	agement
HEFI 401	Fitness Assessment and
	Exercise Prescription4
HEFI 375	Fitness and Sports Nutrition3
HEFI 405	Current Issues in Health &3
	Fitness (WI)**
	General Elective U/L if needed3
	16-17

### SEMESTER VII

HEFI 402	Strength and Conditioning3
HEFI 406	Orientation to Culminating Exp1
HEFI 404	Organization and Administration in
	Health and Fitness Professions3
	U/L Program Elective
	U/L Program Elective
	12

### SEMESTER VIII

- HEFI 407 Health & Fitness Internship AND/OR U/L Program Electives......<u>12-15</u> 12-15
- \* Students who wish to pursue the science track or are planning to pursue a DPT or wish to take Physics must take College Algebra (Math 121) for their required GER math.
- \*\* Fulfills writing intensive requirement.
- U/L = Upper Level Courses (300/400) GER = General Education Requirement
- Program Electives: BIOL 310, The Genome, BIOL 325 Biology and Society, BIOL 335 Pathophysiology, HEFI 310 Advanced Care and Prevention of Athletic Injuries, PSYC 320 Psychology of Health, HLTH 303 Occupational Health & Safety, SSCI 370 Research Methods in the Social Sciences, HEFI 403 Community Wellness, HEFI 408 Exercise Prescription for Special Populations, HEFI 409 Applied Exercise Prescription for Special Populations, HEFI 409 Applied Exercise Prescription for Special of Health, Illness & Healthcare, SPMT 306 Sports Operations and Facilities Management, SPMT 330 Psychology of Sport and Exercise, SSCI 315 Death, Dying and Bereavement
- NOTE: Health & Fitness Promotion students must take seven out of ten General Education Requirements including one and ten, and 30 total General Education credits.
- Student Learning Outcomes can be found at www.canton.edu/sci\_health/hefi/.

# Health Care Management-B.S.

Health Care Management is a Bachelor of Science degree, which includes study in health, science, business and management. Students will be prepared to enter public and private service jobs with theoretical and practical skills necessary for a challenging lifelong career in an ever-changing technological society.

## STUDENTS IN THIS MAJOR:

- May start as a freshman or transfer credits from another discipline for advanced standing in the major.
- May take asynchronous online courses and thus attendance in Canton will not be necessary.
- Will have internship possibilities in the last semester of study.
- Will have a diverse background in health sciences, health care management and business management upon completion of the program.

## CAREER OPPORTUNITIES:

- Upward mobility in management of allied health fields
- Public and private health service careers
- Long-term care administration
- Research in public health on county, state and federal levels
- Business sector jobs in administration within industry, education, government as well as health care

## **Admission Requirements:**

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum GPA of 2.0.

## **PROGRAM REQUIREMENTS:**

- All students will complete a minimum of 121 credits, maintaining a GPA of 2.0.
- In order to advance to junior level status students will complete 60 credits, main-

taining a GPA of 2.0.

- Course work from certificate and associate degree programs may be accepted to permit advanced standing.
- In order to maintain junior and senior level status and to advance to the final semester, all students must maintain a GPA of 2.0.

### (CURRICULUM 0253)

#### SEMESTER I

HSMB 101Intro. to Health Care Mgmt.3ENGL 101Basic Communication (GER 1,2).....3Liberal Arts and Science Elective ......3GER (6,8,9,10, or 11)PSYC 101Introduction to Psychology (GER 7) 3

**CREDITS** 

16

FYEP 101 First Year Experience......1

## SEMESTER II

ECON 103	Microeconomics	3
HSMB 316	Equity, Diversity, and Cultural	
	Competence in Healthcare	3
SOCI 101	Introduction to Sociology	3
	GER (6,8,9,10, or 11)	3
MATH 141* Statistics (GER 4)3		
		16

#### SEMESTER III

ACCT 101	Foundations of Financial Acct4	
CITA 108	Introduction to Spreadsheets1	
	Science Elective (GER 5)	
HLTH 200	Medical Terminology of Disease OR	
HSMB 200	Terminology and Coding3	
	Liberal Arts and Sciences Elective3	
	14-15	
SEMESTER IV		

### SEMESTER V

HSMB 301	Public Health Issues	3
HSMB 306	Health Care Financing	3
	Liberal Arts and Sciences Elective.	3
	Liberal Arts and Sciences Elective.	3
	U/L Liberal Arts and Sciences	
	Elective	3
		15
SEMESTE	R VI	
HSMB 305	Managed Care	3
ECON 310	Economics of Healthcare	3
HSMB 307	Health Care Facility Admin	3
	Liberal Arts and Sciences Elective.	2
	LIDEIAL ALLS ALLE SCIENCES LICELIVE.	)
	Liberal Arts and Sciences Elective.	
SEMESTE	Liberal Arts and Sciences Elective .	<u>3</u>

1	Liberal Arts and Sciences E	lectives3
HSMB 302**	Legal and Ethical Issues	
	in Health	3
HSMB 310	Quality and Patient Safety.	3

### SEMESTER VIII

HSMB 410	Senior Seminar
HSMB 408	Internship (3-12) AND/OR Up to 4
	program electives for total of 12 credits
	U/L program elective3
	General Elective
	General Elective
	General Elective
	15

### Total Credits: 122-124

16

- Program Electives: ACCT, BIOL, BSAD, CHEM, CITA, CYBR, select PSYC courses, DHYG, EADM, ECON, FSAD, FSMA, HEFI, HLTH, HSMB, LEST, MINS, NURS, PHTA, VSCT, VSAD. Program must meet 7 of 10 General Education Requirements and 30 total GER credits.
- \*Students must meet the pre-requisite for MATH 141 Statistics

#### \*\*Writing Intensive

BSAD 340\*\* Management Communications\*......3

The Homeland Security program provides students with a combination of theory and practical skills in the subject area as well as offering a solid grounding in the broader justice system. As a result, students will understand the importance of the impact of technology, human resources and other organizational constraints on homeland security strategies confronting both the public and private sector.

## STUDENTS IN THIS MAJOR:

- Receive advanced training in identifying, protecting and responding to threats in both the public and the private sectors in the post-USA PATRIOT Act society.
- Are familiarized with immigration law and issues related to civil liberties while involved in intelligence operations.
- Receive the same certification in the Incident Command System/National Incident Management System as our nation's first responders.
- Individualize their final semester by either completing an internship with a criminal justice agency or completing five upper level criminal justice courses.

## CAREER OPPORTUNITIES:

- FBI
- U.S. Border Patrol
- U.S. Coast Guard
- U.S. Department of Homeland Security's Immigration and Customs Enforcement (ICE)
- U.S. Drug Enforcement Administration
- U.S. Marshal's Service
- U.S. Secret Service
- International Criminal Police Organization (Interpol)
- Transportation Security Administration
- Criminal & Intelligence Analysis

• Private Sector Security/Domestic Infrastructure Security

## **Admission Requirements:**

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

# Recommended preparatory courses or their equivalents are:

- JUST 101 Introduction to Criminal Justice
- JUST 105 Correctional Philosophy
- JUST 110 Criminal Law
- JUST 111 Criminal Procedure JUST 209 Law Enforcement Communications OR BSAD 200, Business Communications
- MATH 111 Survey of Mathematics OR

MATH 121 College Algebra

## **PROGRAM REQUIREMENTS**

### (CURRICULUM 2335):

### SEMESTER II

- JUST 230 Fundamentals of Homeland Security3
- - Humanities Elective (GER 6) ..... $\frac{...3}{16}$

### SEMESTER III

### SEMESTER IV

JUST 233	Crime Analysis3
	General Elective
	General Elective
	Liberal Arts Elective (Any GER)3
	Liberal Arts Elective (Any GER)3
	$\overline{15}$

### SEMESTER V

JUST 326	Threats to Homeland Security3
JUST 375	Global Terrorism: 20th Century
	to Present3
JUST 380	Civil Liberties & Homeland Security3
	General Elective3
	General Elective <u>3</u>
	15

### SEMESTER VI

JUST 314	Ethics in Criminal Justice3	
LEST 375	Immigration Law & Border Control 3	
JUST 355	Public Safety Incident Response3	
	U/L Program Elective3	
	General Elective	
	15	

### SEMESTER VII

JUST 415	Emerging Issues in
	Homeland Security3
JUST 425	Intelligence Research & Analysis3
JUST 429	Intro. to Culminating Experience1
	UL Program Elective3
	General Elective
	General Elective
	16

## SEMESTER VIII

JUST 430	Culminating Experience in
	Criminal Justice OR
	(5) U/L Program Electives15
	15

- \* MATH 111 or higher is required NOTE: If you are enrolling in a course that is a pre-requisite for a required course in your program, your TAP eligibility may be affected.
- \*\* Writing intensive course.
- 1. UL Program Electives are selected from JUST or LEST (300-400) level courses
- 2. This course is only required for students intending to take JUST 430, Culminating Experience, in the 8th semester
- Student Learning Outcomes can be found at www.canton.edu/sci\_health/home/.

The Industrial Technology Management (ITM) curriculum provides students with the opportunity to blend technical interests with management and leadership aspirations. This academic program is ideal for students seeking to build upon a background in engineering technology (e.g. electrical, mechanical, civil, or construction) with an emphasis on developing abilities for project management, systems thinking, managerial skills, entrepreneurship, and business development.

## STUDENTS IN THIS MAJOR:

- Have a specialization in an engineering discipline.
- Are able to plan and manage technical projects.
- Are prepared to contribute to business development activities such as product development, operational support, technical marketing, and production management.
- Develop skills to function in and lead a team based effort.
- Are able to communicate in an organized manner through technical reports in written, oral, and other formats appropriate to their careers.

## **CAREER OPPORTUNITIES:**

Employment opportunities are broad and span the range of industry and commerce. Opportunities in this market include:

- Manufacturing and quality control
- Operations management
- Logistics
- Field managers
- Planning and scheduling
- Project engineers or managers

## **Admission Requirements:**

Incoming students will meet all general admission requirements as freshmen to SUNY Canton and be prepared to take College Algebra (MATH 121). Transfer students will be evaluated individually by the program academic advisor and must have a minimum GPA of 2.0.

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0935)

SEMESTE	ER I	CREDITS
ENGL 101	Composition and Spoken	Word3
	Physics, Chemistry OR	
	Mathematics Elective <sup>4,5</sup>	4
	Program Elective <sup>1</sup>	3
	Program Elective <sup>1</sup>	3
	Program Elective <sup>1</sup>	3
	-	16

### SEMESTER II

ACCT 101	Foundations of Financial Accounting
	OR
ACCT 104	Survey of Accounting4
	Dhyping Chamistery OD

Physics, Chemistry OR
Mathematics Elective <sup>4,5</sup> 4
Program Elective <sup>1</sup> 3
Program Elective <sup>1</sup>
Program Elective <sup>1</sup> 3
17

### SEMESTER III

ECON 103	Microeconomics OR
ECON 101	Macroeconomics
MATH 141	Statistics
	Program Elective <sup>1</sup>
	Program Elective <sup>1</sup>
	GER <sup>2</sup>
	15

### SEMESTER IV

BSAD 201	Business Law I	.3
	Math Elective <sup>4</sup>	.4
	Program Elective <sup>1</sup>	.3
	GER <sup>2</sup>	.3
	GER <sup>2</sup>	.3
	-	16

#### SEMESTER V

BSAD 340	Management Communications*	3
	Project Management	
	Program Elective <sup>1</sup> (U/D)	
	Program Elective <sup>1</sup>	
	Program Elective <sup>1</sup>	3
	0	15

### SEMESTER VI

BSAD 301	Principles of Management3	,
ECON 370	Engineering Economics	,
	Program Elective <sup>1</sup>	,
	Program Elective <sup>1</sup>	,
	Liberal Arts/Science (U/D)	,
	15	

### SEMESTER VII

BSAD 449	Strategic Policies & Issues3
SOET 377	Engineering Ethics1
SOET 430	Systems Analysis3
	Program Elective <sup>1</sup> (U/D)3
	Program Elective <sup>1</sup> (U/D)3
	Liberal Arts/Science (U/D)3
	16

### SEMESTER VIII

SOET 348	Engineering Safety1	Ĺ
SOET 477	Engineering Capstone Project	3
	Business Elective <sup>3</sup> (U/D)	3
	Program Elective <sup>1</sup> (U/D)	3
	Program Elective <sup>1</sup> (U/D)	3
	13	;

\* Fulfills writing intensive requirement.

L/L = Upper Level Courses (100/200).

U/L = Upper Level Courses (300/400).

GER = General Education Requirement.

**Program Electives:** Any course from the Canino School of Engineering Technology, or the Business Department.

All graduates must have a minimum of 45 UD credits and 30 liberal arts credits.

- 1. All Program Elective courses presented for graduation must have at least a grade of C (or transfer credit). Program Electives can be chosen from the Canino School of Engineering technology, the Business Department, or the Cybersecurity Program.
- 2. Seven of ten SUNY General Education Requirement subject areas (including mathematics and basic communication) and 30 credits of SUNY General Education courses must be completed within the first two years of full-time study of the program. The list of all subject areas is: 1.) Mathematics; 2.) Natural Science; 3.) Social Science; 4.) American History; 5.) Diversity; 6.) Other World Cultures; 7.) Humanities; 8.) The Arts; 9.) Foreign Language; 10.) Basic Communication.

3. A business elective (U/D) is an elective from business school upper division courses.

4. Minimum mathematics requirement is MATH 121 College Algebra or MATH 123 Pre-Calculus Algebra, or equivalent.

 Physics or Chemistry Electives can be chosen from PHYS 121&125, PHYS 122&126, PHYS 131&135, PHYS 132&136, CHEM 150, CHEM155, or equivalent.

Student Learning Outcomes can be found at www.canton.edu/csoet/itm/.

The Information Technology (IT) curriculum introduces the student to computer systems, networks, and communications. This academic program is appropriate for students seeking careers in information technology including network administration, operations, systems design, troubleshooting and management. Students have the opportunity to learn systems analysis and design, information management, security implementation, web administration and commerce, and programming.

## **STUDENTS IN THIS MAJOR:**

- Develop management skills, communication skills, and other skills in order to meet their challenging career.
- · Are taught by qualified faculty in small classes.
- Gain hands-on experience on computer hardware, networking, database management, web development, security implementation, and IT applications.
- Will complete a Capstone Project and may take an internship.

## **CAREER OPPORTUNITIES:**

- System Analyst
- IT Consultant
- Network Administrator
- Database Manager
- Web Master •
- IT Security Specialist
- IT Position in any industry

## **POTENTIAL EMPLOYERS:**

- IT Companies
- Health Management Services
- **Financial Services**
- Government
- Education •
- Military
- IT Departments in any industry

## **Admission Requirements:**

Students must be qualified to enter at least College Algebra (MATH 121) and

Oral and Written Expression (ENGL 102).

- Chemistry or Physics courses are recommended.
- Computer or technology courses are strongly recommended.
- Transfers into this program must have a 2.0 GPA for admission. Students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

Students who do not meet necessary prerequisites may be admitted to the College. However, completing the program may require more than four years.

## **PROGRAM REQUIREMENTS:** \*

CUDDIC	ULUM 2045)
SEMESTE	
SEIVIES I E	CKEDI15
BSAD 100	Introduction to Business
CITA 163	Survey of Information Tech3
CITA 152	Computer Logic
ENGL 101	Composition & Spoken Word3
	Mathematics Elective <sup>1</sup> 3
	15
SEMESTE	ER II
CITA 170	Comp. Concepts & Oper. Sys3
CITA 175	

CITA 170	Comp. Concepts & Oper. Sys3
CITA 175	Comp. Concepts & Oper. Sys Lab1
CITA 171	Oper. Sys. Use & Administration3
MATH 141	Statistics
	GER - DEISJ
	GER - Natural Science <u>3</u>
	16
CEMPOTE	

### SEMESTER III

- Introduction to Programming......4 CITA 180 CITA 215 Database Apps & Concepts ......3 CITA 220 Data Comm & Network Tech ......3 Data Comm & Network Tech Lab ...1 CITA 221
- ECON 101 Macroeconomics OR
- ECON 103 Microeconomics......3 17

### SEMESTER IV

CITA 204	Systems Analysis and Design <sup>2</sup>	3
CITA 250	Information Security	3
	GER Elective (7,8,9,10,11)	3
	GER Elective	3
	GER Elective	3
		15

### SEMESTER V

BSAD 301	Principles of Management	3
CITA 300	Management Information Sys	3
CITA 310	Web Server Administration	3
SOET 361	Project Management	3
	Foundations of Financial Acct	
_		16

## SEMESTER VI

SOET 370 Engineering Economics	3
Program Elective - CITA/CYBR/GAME	3
Program Elective - CITA/CYBR/GAME	3
Program Elective - CITA/CYBR/GAME	3
UL Program Elective - CITA/CYBR/GAME	3
	18

#### SEMESTER VII

CITA 440	Network Management	3
CITA 441	Network Management Lab	1
UL Program	Elective - CITA/CYBR/GAME	3
	UL Liberal Arts Elective	3
	UL Elective	3
	Elective	3
		16

#### SEMESTER VIII

CITA 330	Emerging Information Technology
	Applications3
CITA 460	IT & Networked Economy3
SOET 477	Capstone Project
	Internship in IT OR
	2–Program Electives <sup>4</sup> 6
	<u> </u>

UD = Upper Division Course (300/400)

- GER = General Education Requirement
- Students in this program must take at least 45 upper division credits (course numbers 300/400) and a minimum of 30 Liberal Arts credits.
- Seven of ten SUNY General Education Requirement academic areas (including mathematics and basic communication) and 30 credits of SUNY General Education courses must be completed within the first two years of full-time study of the program.
- <sup>1</sup> Minimum mathematics requirement is MATH 121 College Algebra.
- <sup>2</sup> Fulfills writing intensive requirement.
- <sup>3</sup>ACCT 101 Financial Accounting or ACCT 104 Survey of Accounting recommended.
- <sup>4</sup> Program Electives are courses from within the Canino SOET and the Business Department.

Student Learning Outcomes can be found at www.canton.edu/csoet/it/.

## Additional Graduation Requirements

Students must take at least four upper level CITA courses and SOET 477 (Capstone Project) from SUNY Canton. Each required CITA course used to meet graduation requirements must have a grade of C or higher or transfer credit. No more than 3 CITA credits with a course number below CITA 150 may be used for credit towards graduation.

According to the U.S. Department of Labor Bureau of Labor Statistics, "The legal system affects nearly every aspect of our society, from buying a home to crossing the street." Such a profound impact suggests that there are a variety of opportunities for individuals with an education in Legal Studies. The Department of Labor states that employers prefer graduates of postsecondary education programs. A graduate of SUNY Canton's Legal Studies program may find employment in law firms, corporations, hospitals, and local, state or federal government offices. Since the program covers many legal specialties, students may choose electives that may help them to specialize in one or more areas.

## STUDENTS IN THIS MAJOR:

- Spend a significant amount of time engaging in legal research, analysis, and writing.
- Learn from faculty who bring a wealth of real world legal experience to the classroom.
- May take elective courses in Accounting, Business, Criminal Justice, and Liberal Arts & Sciences to receive an interdisciplinary education.
- Can choose as many online program components as needed for maximum flexibility.
- Can choose to engage in a semester-long internship as a culminating experience.

## Career and Graduate Education Opportunities

- Law school or other graduate programs
- Paralegals or legal assistants in law firms.
- Specialists in Real Estate and mortgage document preparation.
- Professionals in District Attorney, Sheriff, Probation, Legal Aid, and Public Defender Offices
- Freelance work as legal professionals.

## CAREER OUTLOOK

 Jobs for graduates in Legal Studies are projected to grow by 12 percent (much faster than average) from 2018 to 2028 and experienced, formally trained paralegals should have the best job prospects according to the U.S. Department of Labor Bureau of Labor Statistics.

## **Admission Requirements:**

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a cumulative grade point average of 2.0 for admission to the Legal studies major and meet specific program requirements to be considered for admission.

## **PROGRAM REQUIREMENTS**

### (CURRICULUM 0818)

ER I CREDITS		
American Legal System3		
MATH Elective (GER 4)3		
American History Elective (GER 9) .3		
Composition & Spoken Word		
(GER 1, 2)3		
Social Science Elective (GER 7)3		
First Year Experience1		
16		
SEMESTER II		
Foundations of Financial		
Accounting4		
Business Law I3		

BSAD 201	Business Law I
	Arts Elective
	(GER 8 - Must be Liberal Arts)3
	Liberal Arts & Sciences Electives6
CITA 101	Library/Info Literacy1
	17

### SEMESTER III

#### SEMESTER IV

LEST 310	Legal Research
	Professional Writing & Com
	World History & Global Awareness
	Elective (GER 10)

15

#### SEMESTER V

LEST 340	Constitutional Law3
LEST 330	Legal Writing**
	Civil Litigation
	Liberal Arts & Sciences Electives6

#### SEMESTER VI

BSAD 319	Professional Ethics
LEST 449	Advanced Legal Writing **
	Liberal Arts & Sciences Electives
	(U/L Recommended)9
	15

### SEMESTER VII

LEST 429	Internship Orientation	
	(If taking LEST 480 in 8th semester)1	
	Upper Level Legal Studies Electives6	
	Upper Level Liberal Arts & Sciences	
	Electives9	
	15-16	
SEMESTER VIII		
LEST 480	Legal Studies Internship 3-15	
	OR	

LEST 480	Legal Studies Internship 3-15
	OR
LEST 485	Senior Project
	AND/OR
	U/L Program Electives 3-15
	15

### Total Credits for Degree 124-127

\*\* Writing Intensive Course

- U/L = Upper Level Courses (300/400)
- GER = General Education Requirement
- U/L Legal Studies Electives: LEST 320, LEST 360, LEST 370, LEST 375, LEST 380, LEST 388, LEST 410, and LEST 450.
- U/L Program Electives: LEST 320, LEST 360, LEST 370, LEST 375, LEST 380, LEST 388, LEST 410, LEST 450, BSAD 301, BSAD 305, BSAD 310, EADM 307, HSMB/NURS 302, JUST 345, and JUST 350.
- NOTE: Legal Studies students must meet all ten General Education Requirements.
- Student Learning Outcomes can be found at www.canton.edu/business/lest/.

The Bachelor of Business Administration in Management provides a solid foundation in current management theory and practice. Students are introduced to the principles of accounting, finance, marketing, strategy, operations, human resources, economics, ethics, and communications. Case studies, internships and real world applications in corporate, non-profit, and government settings are integral parts of this exciting four-year program.

## STUDENTS IN THIS MAJOR:

- Are educated in all of the functional managerial areas.
- Use cutting-edge case studies to hone analytical skills.
- Are encouraged to pursue a minor for additional skill sets.

## **CAREER OPPORTUNITIES:**

Graduates plan, organize, and control organizational resources to enhance value to stockholders and stakeholders of the organization. Graduates assume entry managerial roles in:

- Retail organizations
- Non-profit organizations
- Government organizations
- Manufacturing organizations

## Admission Requirements:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101) and GER 1 Math.
- Transfer students must have a cumulative GPA of 2.0 to be admitted into the program.

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 1645) SEMESTER I

FYEP 101	First Year Experience1
BSAD 100	Intro. to Business
CITA 110	Intro. to Information Technology3
ENGL 101	Composition & the Spoken Word
	(GER 1,2)3
	MATH 111 or Higher (GER 4) 3-4
	Diversity: Equity Inclusion and
	SJ (GER 3)3
	16-17

**CREDITS** 

### SEMESTER II

ACCT 101	Foundations of Financial
	Accounting4
BSAD 203	Marketing
ECON 101	Macroeconomics (GER 7)3
	American History (GER 9)3
	Humanities (GER 6)3
	16

### SEMESTER III

BSAD 201	Business Law I
ACCT 102	Foundations of Managerial
	Accounting
ECON 103	Microeconomics
	Natural Sciences Elective (GER 5)3
	L/L Elective (BSAD/ECON/ACCT)3
	15

### SEMESTER IV

BSAD 202	Business Law II
FSMA 210	Introduction to Finance3
MATH 141	Statistics
	World Language (GER 11) OR
	World History &
	Global Awareness (GER 10)3
	Business Elective (LL)3
	15

#### SEMESTER V

**BSAD** 

BSAD 301	Principles of Management3	
BSAD 310	Human Resource Management3	
BSAD 373	International Business Management .3	
	U/L Elective	
	(BSAD/ECON/ACCT)3	
	Business Elective (Upper Level)3	
	15	
SEMESTER VI		
BSAD 304	Business Analytics3	
BSAD 319	Professional Ethics*3	

319	Professional Ethics*	3
340	Management Communications	3
	General Elective	3
	Business Elective (Upper Level)	3
		15

### SEMESTER VII

BSAD 400	Operations Management	3
	Strategic Policies and Issues	
	General Elective	
	U/L General Elective	3
	U/L Elective	
	(BSAD/ECON/ACCT)	3
		15

#### SEMESTER VIII

OLIVILO I L	
BSAD 406	Cumulative Evaluation-BBA in
	Management3
BSAD 450**	* Business Internship AND/OR. 6-12
BSAD 410	Senior Project AND/OR 6-12
	U/L Program Elective 3-12
	15

L/L = Lower Level Courses (100/200)

U/L = Upper Level Courses (300/400)

*GER* = *General Education Requirement* 

\* Fulfills writing intensive requirement.

\*\*3.0 GPA required to enroll in BSAD 450 Business Internship

**Program Electives:** ACCT, AGMT 310, AGMT 330, BSAD, ECON, FSMA, LEST, HSMB, SPMT, ESPT, and CITA

NOTE: Management students must meet eight of the ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/bsad/.

Graduates of the Bachelor of Mechanical Engineering Technology (B. Tech) program have knowledge on the applied aspects of science and engineering technology that demonstrate skills in analysis, design, development, implementation, and oversight of mechanical systems. Graduates will exhibit skills necessary to be successful in industrial manufacturing processes, experimental tech-niques and procedures, machinery, thermal/fluid/energy systems, instrumentation and control systems, heating, ventilation and air conditioning (HVAC) systems, and Alternative Energy Systems dependent upon elective choices. Graduates will be successful tech-nologists, field technologists, technical managers, process and sales engineers and will be prepared academically to enter and succeed in related postgraduate degree programs.

## STUDENTS IN THIS MAJOR:

- Choose from four tracks of study: (Alternative & Renewable Energy, Mechanical Energy Systems Design, Manufacturing/ Mechanical Design, Mechatronics and Robust Quality)
- Apply mathematics, science, engineering and technology to design systems, components and/or processes.
- Utilize sophisticated laboratory equipment to conduct, analyze and Interpret experimental data and report results for process improvement.
- Apply computer skills to design, interpret and analyze data, solve problems and prepare reports/presentations for professional communications.
- Develop team skills through hands projects that require a commitment to quality, timeliness, and continuous improvement while maintaining professional, ethical and social responsibilities.
- Gain real world experience through internship/Co-Op opportunities and project-based learning.

## **CAREER OPPORTUNITIES:**

 Aerospace, Automation & Controls, Automotive Industry, Composite Materials Production, CIM, Electronics Manufacturing, Construction and Fabrication, Machining & Metalworking, Manufacturing (electronics, mechanical, defense, energy, Medical Products Packaging, Plant Engineering & Maintenance, Plastics Molding & Manufacturing, Product Design & Development, and Rapid Prototyping, Quality Assurance, Robotics, Supply Chain Management, and Graduate School.

## Accreditation

Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

## Admission Requirements

- Candidates should have completed NYS Regents Math B with grade 80 or better, or Course III with one additional year of high school mathematics, and be ready to enroll in pre-calculus. If a student does not meet this criterion, he/she will be required to take prerequisites in mathematics.
- Students who graduate with a two year college degree in a program related area will be evaluated with the objective of awarding maximum credit toward the completion of the (B Tech) degree.
- Transfer students from community colleges, universities or other institutions of higher learning with some coursework completed will be evaluated on case-bycase bases.
- Refer to the table of high school course prerequisites for admission.

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0235

SEMESTER I CREDITS
MATH 123 Pre-Calculus (GER 1)4
MECH 121 Manufacturing Processes I3
ENGS 101 Introduction to Engineering2
PHYS 121/131 College/University Physics I
(GER 2)
PHY 125/135 Physics Lab 1 GER 2)1
MECH 101 Drawing for Engineers1
14
SEMESTER II
MATH 161 Calculus I (GER 1)4
ENGL 101 Composition & The Spoken Word
(GER 10)3
PHYS 122/132 College/University Physics II
(GER 2)
PHYS 126/136 Physics Lab 2 (GER 2)1
MECH 102 Parametric Modeling2
MECH 122 Introduction to 3D Printing1
Elective 1
16
91

## SEMESTER III

MATH 162	Calculus II (GER 1)4
ENGS 201	Statics
	MET Electricity4
MECH 241/	ENGS 314 Fluid Mechanics I3
MECH 242	Fluid Power lab1
	GER (6,7, 8,9,10,11) <sup>2</sup> <u>3</u>
	18

### SEMESTER IV

ENGS 203 Engineering Strength of Materials3
ENGS 205 Material Science
MECH 221 MET Lab <sup>3</sup> 1
MECH 301/ ENGS 202
Technical Dynamics/Dynamics3
MECH 303 GD&T (Geometric Dimensioning
and Tolerancing)2
Diversity Elective
15

### SEMESTER V

	Elective (300 or 400 level) <sup>4</sup> 3
ENGS 350	Mechanics of Machine Elements4
MECH 342	Thermodynamics
	Differential Equations4
	Programming for Engineers2
	$\frac{1}{16}$

### SEMESTER VI

MECH 343	Heat Transfer	,
MECH 312	Engineering Design	,
SOET 400	Technical Communication3	,
MATH 141	Statistics	,
	Elective (300 or 400 level) <sup>4</sup>	2
	15	

### SEMESTER VII

MECH 377	Capstone Research & Proposal2
	Elective (300 or 400 level) <sup>4</sup> 3
	Elective (300 or 400 level) <sup>4</sup> 3
	GER Elective (6, 7, 8, 9, 10, 11) <sup>2</sup> 3
	GER Elective (6, 7, 8, 9, 10, 11) <sup>2</sup> 3
MKTX 310	Instrumentation and Controls3
	17

### SEMESTER VIII

MECH 477	Capstone Project
ECON 370	Engineering Economics
SOET 377	Engineering Ethics <sup>6</sup>
	Elective (300 or 400 level) <sup>4,5</sup>
	Elective (300 or 400 level) <sup>4,5</sup> 3
	13

- Program electives selected from ACHP, AREA, ENGS, CITA, CONS, ELEC, MATH, MECH, SOET designators and AUTO 104.
- Must complete 7 of 11 GERS and 30 total credits. Required GERs: (1/2), 3, 4, and 5. Need to pick 3 others.
   Writing intensive course requirement.
- Program electives are upper level from all ACHP, AREA, CITA, CONS, ELEC, MATH, PHYS, MECH, MKTX,
- CITA, CONS, ELEC, MATH, PHYS, MECH, MKTX SOET course listings. Program electives are selected by advisement based on student interest and career goals. BSAD 421 can also be used.
- 5 MECH 480 Co-Op can be equivalent up to 6 credit hours.
- 6 Can substitute SOET 378 or BSAD 319 if desired.
- Student Learning Outcomes can be found at www.canton.edu/csoet/mech/.

# Nursing-BS

The SUNY Canton RN-BS Nursing program is based upon the beliefs that:

- Communities are comprised of unique, holistic individuals and aggregates who have values and beliefs that originate from their life-world, who have specific needs and are capable of making decisions by themselves, with others, and/ or by proxy.
- Health and well-being are dynamic lived experiences uniquely defined by the individual and community within the context of culture and environment.
- Nursing is a unique profession that provides a service to society that is culturally sensitive, evidence-based, collaborative, and individualized. Utilizing the nursing process, the nurse facilitates transformation within individuals, groups, and communities to attain desired outcomes.

## **STUDENTS IN THIS MAJOR:**

- Demonstrate critical thinking and decision making that utilizes the nursing process and evidence-based practice in the delivery of care to culturally diverse individuals, families, groups, and community.
- Synthesize knowledge from the liberal arts and nursing to promote the health and well-being of culturally diverse individuals, families, groups, and communities.
- Integrate legal and ethical concepts with the leadership role to advance and promote the health and well-being of culturally diverse individuals, families, groups, and communities.
- Utilize nursing theory/conceptual frameworks, nursing research, and evidencebased practice in addressing the nurs-ing care needs of culturally diverse individuals, families, groups and communities.
- Incorporate leadership theory to the nurse manage role in the collaboration, coordination, and provision of nursing care in health care settings.
- Apply knowledge from nursing, humanities, biological, and social sciences

to plan, implement, and evaluate care for sick and well individuals, families, groups, and communities.

- Participate as nurse leaders on interdisciplinary care teams to influence positive social change and health care policy.
- Plan and implement educational activities that empower individuals, families, group, and communities to manage their health care at the local, national, and global level.
- Collaborate with health care colleagues to promote holistic health care for individuals, families, groups, and commu-nities.

## **CAREER OPPORTUNITIES:**

- Public and Community Health
- Armed Services and Veterans Administration
- Entry level nursing management
- Acute, long-term, and specialty nursing units

## TRANSFER OPPORTUNITIES:

· Graduates of the RN-BS program are able to transfer into Nursing graduate programs.

## **ACCREDITATIONS:**

- · Registered by the NYS Education Department, Office of the Professions State Education Building-2nd Floor, Albany NY 12234, and phone: 518-474-3817.
- Accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road, Suite 1400, Atlanta, Georgia 30326, and phone: 404-975-5000.

## Admission **REQUIREMENTS:**

Admission requirements can be found online at: http://www.canton.edu/sci\_ health/nurs/description.html

## **PROGRAM REQUIREMENTS:**

## (CURRICULUM 0291)

(CONTCOLOM 02)1)		
SEMESTE	CR I CREDITS	
NURS 300	Conceptual Frameworks in Nursing .3	
NURS 303	Health Assessment In Nursing4	
MATH 111	Survey of Math OR	
MATH 121	College Algebra*	
	Liberal Arts Elec. (GER 4,5,6,7,8, 9)3	
BIOL 335	Pathophysiology3	
	16-17	
SEMESTER II		
NURS 302	Legal & Ethical Iss. in Healthcare3	
NURS 304	Health Promotion & Restoration3	
BIOL 310	The Genome	
MATH 141	Statistics	

01 510	
ATH 141	Statistics
CI 101	Intro to Sociology3
	Lib. Arts Elective (GER 4,5,6,7,8, 9)3
	18

## SEMESTER III

SO

NURS 370	Research Methods in Health Sci3
NURS 400	Nursing Mgmt & Leadership **3
	Lib. Arts Elective (GER 4,5,6,7,8, 9)3
	U/L Lib. Arts Elec. (GER)3
	U/L Lib. Arts Elec. (GER)3
	15

## SEMESTER IV

NURS 402	Community Health Nursing	4
NURS 403	Transcultural Nursing	. 2
	U/L Lib. Arts Elec. (GER)	3
	U/L Liberal Arts Elective	3
	U/L Liberal Arts Elective	3
		15

-Part-time status program requirements can be found online at: http://www.canton.edu/ sci\_health/nurs/description.html

-Students must pass all courses with a grade of "C" or better prior to graduating with the BS degree.

\* Students who have not met the prerequisite for MATH 141 (Statistics) take MATH 111 or Math 121; students who have already taken Statistics or have met the prerequisite for MATH 141 take a Liberal Arts elective

- \*\* Fulfills writing intensive requirement
- UL = Upper Level Courses (300/400)
- GER = General Education Requirement
- NOTE: Nursing students must take seven out of ten General Education Requirements including one and ten, 30 total General Education credits and 45 upper level credits.
- Student Learning Outcomes can be found at www.canton.edu/sci\_health/nurs/.
- Residency Requirements: Students must complete a minimum of 30 credits at SUNY Canton's RN-BS program in order to receive a Bachelor of Science degree from SUNY Canton. Required courses include: Health Assessment in Nursing (NURS 303), Nursing Management and leadership (NURS 400), and Community Health Nursing (NURS 402).

The Dual Degree Nursing Program (DDNP) combines general education courses and nursing courses that allow students to complete their baccalaureate education in four years and be eligible to take the NCLEX-RN (RN licensing exam) in three years. After three years of full-time study, graduates earn an Associate in Applied Science (AAS) Degree in nursing and are eligible to take the NCLEX-RN licensing examination to become Registered Nurses (RN). The fourth year is online for those who have obtained their RN license and have graduated with an AAS degree in nursing from SUNY Canton. The final year is career oriented so that students may work as RNs and attend school online to complete their degree.

## Students in this Major

- Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
- Minimize risk of harm to patients and providers through both system effectiveness and individual performance.
- Use information and technology to communicate, manage knowledge, mitigate error, and support decision-making.
- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context.
- Function effectively within nursing and interprofessional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.
- Advocate for clients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
- Recognize the client or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for client's preferences, values, and needs.
- Examine the evidence that underlies clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and communities.
- Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems
- Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
- Utilize the nursing process, think critically, and base client care on evidence based practice.
- Engage in active learning.
- Develop personally and professionally.
- · Upon meeting the requirements for graduation,

are eligible to sit for the licensing examination to become Registered Professional Nurses.

## **PROGRAM HIGHLIGHTS**

- Career oriented
- Obtain eligibility to be a Registered Professional Nurse
- Develop critical thinking and professional behaviors
- Become competent in nursing skills
- Participate in clinical practicums and the skills laboratory

## CAREER OUTLOOK

- Nursing is the largest health care occupation.
- There is increasing diversity in nursing employment, and projections indicate large numbers of new jobs.

## Employers Of SUNY

## CANTON GRADUATES

- · Hospitals and physicians' offices
- Home healthcare services
- Nursing care facilities
- Correctional facilities
- Schools
- Military service

## **TRANSFER OPPORTUNITIES**

• Graduates have a number of transfer options including: RN-MSN programs.

## Accreditations

- Registered by the NYS Education Department, Office of the Professions State Education Building-2nd Floor, Albany NY 12234, and phone: 518-474-3817.
- Accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road, Suite 1400, Atlanta, Georgia 30326, and phone: 404-975-5000.

## Admission Requirements:

Admission requirements can be found online at: www.canton.edu/sci\_health/nur/

## **PROGRAM REQUIREMENTS:**

(CURRIC	ULUM 2373 )	
SEMESTER	I C	REDITS
BIOL 217	Anatomy and Physiology I	4
ENGL 101	Composition and the Spoken Wo	rd3
PSYC 101	Introduction to Psychology	3
MATH111	Survey of Math OR	
MATH 121	College Algebra	3
SOCI 101: In	troduction to Sociology	<u>3</u>
		16

### SEMESTER II

BIOL 218	Anatomy and Physiology II	4
PSYC 225	Human Development or	
PSYC 220	Child Development	3
MATH 141	Statistics	3

- 16 SEMESTER III BIOL 209 Microbiology ......4 NURS 101 NURS 103 Pharmacology .....1 NURS 105 Nursing Seminar.....1 Liberal Arts Elective (GER 3: DEISJ) ......3 15 SEMESTER IV NURS 106 Maternal Newborn Nursing......4.5 NURS 107 NURS 104 Pharmacology .....1 BIOL 391 U/L Liberal Arts Elective (GER if needed) .....<u>3</u> 16 SEMESTER V NURS 201 Medical Surgical Nursing I.....10 BIOL 310 NURS 200 Pharmacology .....1 U/L Liberal Arts Elective (GER if needed) .....<u>.3</u> SEMESTER VI NURS 202 Medical Surgical Nursing II .....10 NURS 203 Professional Issues & Trends in Nursing ... 1 NURS 204 Pharmacology .....1 U/L Liberal Arts Elective (GER if needed) ......3 15 SEMESTER VII NURS 300 Conceptual Frameworks ......3 NURS 370 Research Methods in the Health Sciences.3 NURS 303 Health Promotion and Restoration ......3 NURS 304 16 SEMESTER VIII NURS 302 Ethical and Legal Issues......3 NURS 400 Nursing Mgmt. and Leadership ......3 NURS 402 Community Health Nursing......4 NURS 403 Transcultural Nursing .....2 Upper Liberal Arts Elective ......3 15 \* Fulfills writing intensive requirement
- \*\* Co-requisite for NURS 201, Pre-requisite for NURS 202 Graduation Requirements: Total Semester Hours – 126

credits with minimum 2.0 GPA

- \*A grade of "C+" or better is required for successful completion of all Nursing courses and a "C" or better in all co-requisite courses.
- Successful completion of all co-requisite courses and a minimum semester GPA of 2.0 is required to continue in the program. This requirement is different from that of the college in order to help insure that the student is adequately prepared to enter the nursing profession, increase likelihood of success on the NCLEX-RN test, and enhance the ability of the student to transfer credit to another college.
- Once enrolled in NURS 101, students must complete the program within five years. For extraordinary circumstances, permission to complete the program beyond five years must be granted by the Dean of the School of Science, Health, and Criminal Justice in consultation with the Nursing Department Director.
- Additional Graduation Requirements can be found online at: www.canton.edu/sci\_health/nur/

The BBA in Sports Management prepares individuals for professional careers within sport organizations, such as nonprofit companies, commercial and private enterprises, government/public sector jobs, and various levels of professional sports.

The BBA in Sports Management will develop capable sport management professionals able to apply creative communication, leadership, and managerial skills in an array of positions in the sport industry. These positions can include sports administration, sales, marketing, public relations, information and media, operations, facilities, and event management. The program offers an exciting array of sports management courses that provide students experiential learning opportunities and hands-on application throughout their journey. The program also offers various culminating experience options that include applied senior level courses and/or senior research project and/or semester internship.

## STUDENTS IN THIS MAJOR:

- Will be prepared to be effective managers and leaders in the various skills, roles, and functions of sport management professionals.
- Develop communication and technical skills needed to be effective professionals in various sport management settings.
- Will gain valuable hands-on experience and developmental insights from applied learning opportunities throughout the program.

## CAREER OPPORTUNITIES

- Sport Event Management
- Marketing and Promotions
- Athletic Director
- Sport Facilities Manager
- Sport Programming
- Athletic Business Operations
- Sport Media Relations

- Ticket Sales Operations
- Sport Corporate Sales
- Recreation Programming
- Sport Coordinators

In addition, the Sport Management program prepares students who desire to pursue an advanced degree in Sport Management.

## Admission Requirements

- Students must satisfy SUNY Canton general admission's requirements.
- Students must meet requirements to enroll in MATH 106 or higher and ENGL 101.

## **PROGRAM REQUIREMENTS**

### (CURRICULUM 0182)

SEMESTE	ER I CREDITS
SPMT 100	Major Prep1
SPMT 101	Foundations of Sports Management .3
BSAD 100	Introduction to Business
ENGL 101	Composition & the Spoken Word3
	Math (GER 4)* 3-4
	GER (6, 8, 9, 10, 11)3
	15-16

### SEMESTER II

SPMT 240	Sport Governance
ACCT 101	Foundations of Financial
	Accounting4
	GER 7 (Intro to Soc. recommended) 3
	GER (6, 8, 9, 10, 11)3
	GER (6, 8, 9, 10, 11)3
	16-17

### SEMESTER III

SPMT 202	Sport in Society
ECON 103	Microeconomics (GER 7)3
BSAD 201	Business Law I3
	Natural Science (GER 5) 3-4
	Diversity (GER 3)

### SEMESTER IV

SPMT 241	Legal Issues in Sport3
SPMT 242	Sports Finance
BSAD 203	Marketing3
	Sports Information
	GER (1-11)
	$\overline{15}$

#### SEMESTER V

SPMT 203 Leadership for Sports Professionals ... 3

SPMT 307	Sports Marketing3
SPMT 411	Sports Public Relations*3
BSAD 301	Principles of Management3
SPMT 308	Sports Event Management3
	15

### SEMESTER VI

SPMT 306	Sports Operations & Facilities Mgt3
BSAD 310	Human Resource Management3
SPMT 320	Global Sports Perspectives
	U/L Program Elective
	General Elective**
	15

### SEMESTER VII

SPMT 410	Orienta. to Culminating Experience.1
SPMT 415	Sports Media & Broadcasting3
	U/L Program Elective
	U/L Program Elective
	General Elective
	General Elective
	16

### SEMESTER VIII

Sport Management Internship (421) OR Senior
Project (422) OR U/L Program Electives or
Combination of:
Internship OR Senior Project OR:

#### 15

Students may also combine an internship with Upper Level elective. Internship must be a minimum of 6 credits.

Students must have a combined 3.0 GPA of all SPMT courses completed to be eligible to apply for an internship.

#### UPPER LEVEL PROGRAM ELECTIVES:

CD1 (T 200	
SPMT 300	SPMT Practicum1-3
SPMT 312	Sport Entrepreneurship3
SPMT 313	Economics of Sport
SPMT 412	Sport Sales and Sponsorships3
SPMT 413	Contemporary Issues in
	College Sport Administration3
SPMT 414	Labor Relations in Sport3
SPMT 430	Advanced Sports Marketing & Sales .3
SPMT 431	Applied Sports Media and
	Broadcasting3
SPMT 432	Applied Sports Event Management3

(Upper level BSAD, ECON, FSMA, HEFI courses also accepted as Program Electives)

- \* GER MATH must be MATH 111 or higher
- UL = Upper Level Courses (300/400)

GER = General Education Requirement

- NOTE: Sports Management students must meet seven out of ten General Education Requirements including one and ten, 30 total General Education Requirements.
- Student Learning Outcomes can be found at www.canton.edu/sci\_health/spmt/

SUNY Canton's Bachelor of Science in Technological Communications is a career-focused program of study cultivating expertise in the latest technology for building community and sharing ideas. The program offers an opportunity to explore writing for multimedia, database applications, presentation tools, application design, and digital mapping, all while considering audience, context, and the literary, architectural, interactive, and design elements of media.

Students learn vital workplace skills including professional and media writing, a variety of communications methods designed to reach general and specialized audiences, and learn best practices in the field of Technological Communications to craft innovative projects as part of guided internship experiences. Graduates are well-qualified for entry-level professional opportunities in fields such as public relations, advertising, and cultural heritage, as well as businesses and nonprofit organizations looking for trained writers and narrators who are well-versed in the most recent digital communication technology.

## STUDENTS IN THIS MAJOR:

- Explore the use of emerging social and digital media outlets for effective communication and messaging.
- Understand industry standard design frames such as User Experience (Ux) and Design Thinking
- Use the latest digital technology to create innovative communications and content to effectively reach specialized and general audiences.
- Collaborate in designing and mapping content to create powerful narratives designed for a variety of media channels.
- Work closely with expert faculty mentors to learn to effectively present, organize, and articulate thoughts, ideas, viewpoints, and conclusions both orally and/ or in writing.
- Gain significant practical experience

with internships focusing on development and publication of traditional and new media content.

### **CAREER OPPORTUNITIES**

The employment opportunities cover a broad range, including major businesses and non-profit organizations. Graduates will be prepared for employment opportunities in:

- Advertising
- Public Relations
- Web/Social Media Content Management
- Design for Gaming Industry
- Editing
- Grant Writing
- Building and Maintaining Digital Archives
- Narrative Writing
- Media Project Management
- Podcasting

## Admission Requirements

- Refer to the table of high school course prerequisites for admission.
- Students must be prepared to take ENGL 101 (Composition and the Spoken Word).
- Transfer students must meet re-registration requirements to be considered for admission.

## **PROGRAM REQUIREMENTS**

(CURRIC	CULUM 2673)	
SEMESTI	ER I	CREDITS
TCOM 100	Introduction to Technol	ogical
	Communications	3
	Math Elective (GER 4).	
	American History Electi	ve (GER 9)3
ENGL 101	Composition and the Sp	ooken Word
	(GER 10)	3
	Social Science Elective (	GER 7)3
FYEP 101	First Year Experience	1
		17-18
SEMESTER II		

DEISJ (GER 3)
Arts Elective (GER 8)3
ENGL/TCOM 200 Narrative Form in Video
Games

95

### SEMESTER III

ENGL 270 Media Writing*
ENGL/TCOM 314 Digital Graphic Storytelling.3
Science Elective (GER 5) 3-4
World Language (GER 11)4
General Elective
15

#### SEMESTER IV

ENGL 380	Intercultural Communications3
ENGL/TCO	M 322 Mobile Media Stories
	& Games3
SOCI 305	Gender in the Media3
	World History and Global Awareness
	(GER 10)3
	Program Elective3
	15

#### SEMESTER V

TCOM 310	Identity in the Digital Age
ENGL 301	Professional Writing
ENGL 302	Global Englishes
	Program Elective
	General Elective
	15

### SEMESTER VI

TCOM 330 Digital Narratives Workshop3
TCOM/ENGL 345 Electronic Literature3
Program Elective
(U/L Recommended)3
Program or Liberal Arts Elective
(U/L Recommended)6
15

### SEMESTER VII

TCOM 400 Internship I	3
TCOM 360 Online Media & Pop Culture	3
Program Elective	
(U/L Recommended)	3
Program or Liberal Arts Elective	
(U/L)	6
1	5

### SEMESTER VIII

TCOM 410	Internship II	3
	Senior Seminar	
	Program Elective	
	(U/L Recommended)	3
	Program or Liberal Arts Elective	
	(Ū/L)	6
		15

\* Fulfills writing intensive requirement. U/L = Upper Level Courses (300/400) GER = General Education Requirement Program Electives: ENGL and GRST

The Bachelor of Business Administration (BBA) program in Veterinary Service Administration constitutes the final two years of a 2+2 articulation program in which the first two years entail completion of a degree in Veterinary Technology from an AVMA - Accredited Veterinary Technology Program. This degree serves to provide the knowledge and skills necessary to manage a business or organization that provides veterinary care to animals. Emphasis is placed upon establishing a foundation in basic business and accounting principles, then applying these principles to the management of specific types of veterinary businesses and institutions. Students will complete the program with an internship concentrating on management and administration within a veterinary setting. This program may be completed partially or entirely online.

## Students In This Major:

- Begin by laying a foundation in Business, Accounting, Math, and Liberal Arts.
- Build upon this foundation with coursework specific to veterinary management.
- Will spend a semester in the field as an intern in a managerial capacity.
- Are prepared for entry-level management positions in veterinary hospitals or other veterinary industries or organizations.
- Will complete the course work required for Certified Veterinary Practice Manager (CVPM) certification.

## CAREER OPPORTUNITIES:

- Veterinary Practice Management
- Animal Shelter Management
- Veterinary Mobile and Spay/Neuter Clinic Management
- Biomedical Research Facility Management
- Zoo and Wildlife Management

• Public Sector employment (State, Federal, and Local regulatory agencies)

## CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields." Coupling this training with a baccalaureate degree focusing on veterinary business management increases its value, expanding the scope of employment opportunities and earning potential for graduates.
- Veterinary hospitals and other animal care facilities seek managers with not only a working knowledge of the medical and technical aspects of veterinary medicine, but also an understanding of the operational structure of animal care facilities and the ability to oversee the personnel, information, finances, infrastructure, equipment, and other integral components of the operation of these facilities.
- With fewer, larger veterinary facilities becoming the norm, there is greater stratification of duties within these facilities, and greater demand for full-time managers and Technician/Managers.

## **Admission Requirements:**

- Graduation from an AVMA-accredited veterinary technology program.
- Veterinary Technician licensure, registration, or certification, as applicable for state of residency, or eligibility thereof.

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 2535)

### SEMESTER V

ACCT 101	Foundations of Financial
	Accounting4
BSAD 201	Business Law I3
BSAD 340	Management Communications*3
MATH 111	Survey of Mathematics or Higher3
	Liberal Arts Elective (GER)3
	16-17

### SEMESTER VI

BSAD 215	Small Business Management3
VSAD 301	Veterinary Practice Management3
BSAD 310	Human Resource Management3
HLTH 303	Occupational Health and Safety3
	U/L Liberal Arts Elective
	(GER if needed) <u>3</u>
	15

### SEMESTER VII

HSMB 301	Public Health Issues
BSAD 301	Principles of Management3
VSAD 302	Animal Care Institution
	Management3
VSAD 308	Veterinary Service Administration
	Internship Orientation1
VSAD 402	Veterinary Business & Financial
	Management3
	U/L Liberal Arts Elective
	(GER if needed)3
	16

### SEMESTER VIII

VSAD 408	Internship for Veterinary Service
	Administration12
	Upper-Level General Elective
	15

\* Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Veterinary Service Administration students must meet seven of the ten General Education Requirements.

**Student Learning Outcomes** can be found at www.canton.edu/sci\_health/vsct/.

The Bachelors of Science degree program in Veterinary Technology provides an advanced educational opportunity to students interested in pursuing careers in the veterinary health care field. The program includes specific course work required in our Veterinary Technology AAS program and adds upper division offerings in the sciences and applied electives to obtain the distribution hours required of a Bachelor's of Science degree. Graduates of this program have the opportunity to become veterinary technicians coupled with the career flexibility that a Bachelor's degree provides.

## STUDENTS IN THIS MAJOR:

- Work with companion animals, farm animals and common laboratory animals.
- Receive advanced technical training above core requirements of a graduate veterinary technician.
- Perform two 120 hour Preceptorships
- Will be eligible to take the Veterinary Technician National Licensing Examination (VTNE).
- May be eligible to pursue a post graduate degree (MS, PhD, DVM).

## **CAREER OPPORTUNITIES:**

Veterinary technicians provide professional technical support to veterinarians, biomedical researchers, and other animal care specialists. They may work in:

- Clinical practice
- Educational Institutions
- Public Health
- Government agencies
- Research & Pharmaceutical industry
- Veterinary supply and equipment sales

## CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields."
- At the present time, there is a serious shortage of veterinary technicians throughout the country.

## **TRANSFER OPPORTUNITIES:**

 Articulation with Ross University School of Veterinary Medicine for students with an overall GPA of 3.0 or higher and possessing the required prerequisite courses.

## **Admission Requirements:**

Admission is selective and based on academic credentials. To be considered for admission, please refer to the requirements posted on our webpage at: www.canton.edu/ sci\_health/vet/description.html

The pre-exposure rabies vaccine is required in the program. This is administered in a series of two vaccinations and must be completed during or prior to the semester student is enrolled in VSCT 101

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 2278)

SEMESTE	R I CREDITS
VSCT 101	Fundamental Vet. Nursing Skills I2
VSCT 103	Intro. to Animal Agriculture2
BIOL 150	College Biology I4
CHEM 150	College Chemistry I4
ENGL 101	Expository Writing OR
ENGL 101	Composition & Spoken Word3
	15

### SEMESTER II

VSCT 104	Veterinary Office Practices	l
VSCT 114	Animal Anatomy & Physiology	3
VSCT 115	Fundamental Vet. Nursing Skills II?	2
BIOL 155	College Biology II	í
CHEM 155	College Chemistry II	í
	DEISJ (GER 5)	
	17	7

### SEMESTER III

/SCT 206	Anesthetic Principles
----------	-----------------------

- VSCT 207 Health & Disease of Farm Animals...3 BIOL 209 Microbiology......4

..3

### SEMESTER IV

VSCT 112	Veterinary Clinical Pathology I3
VSCT 201	Veterinary Technology
	Preceptorship I1
VSCT 212	Research Animal Techniques1
VSCT 213	Practical Nutrition2
PSYC 101	Introductory to Psychology3
	Lib.Arts Elec. (GER 4, 5, 6, 7,8, 9)3
	U/L Program Elective3
	$\overline{16}$

### SEMESTER V

VSCT 202	Veterinary Clinical Pathology II3
VSCT 203	Small Animal Medicine &
	Therapeutic Techniques3
VSCT 204	Large Animal Medicine & Therapeu-
	tic Techniques2
VSCT 205	Radiographic Techniques2
VSCT 209	Veterinary Technology
	Preceptorship II1
	U/L Program Elective
	U/L Liberal Arts Elective
	17
SEMESTE	ER VI
VSCT 210	Veterinary Microbiology3
VSCT 211	Animal Hospital Practices and

VSCT 210	Veterinary Microbiology	3
VSCT 211	Animal Hospital Practices and	
	Procedures *	3
VSCT 214	Veterinary Pharmacology	2
	U/L Liberal Arts Electives	6
		14

### SEMESTER VII

Upper Level BIOL OR CHEM	3
U/L Program Electives	9
U/L Liberal Arts Elective	3
1	5

### SEMESTER VIII

U/L Program Electives9	
U/L Liberal Arts Elective6	
15	

† Math Elective: MATH 111, 121, 122, 141 or another appropriate math by advisement

-Of the courses with the VSCT prefix, any course may only be repeated one time.

-Students are required to earn a C or better in all specified curriculum courses prefixed with VSCT in order to progress in the program.

-The NYS Education Department Office of the Professions requires persons applying for licensure to answer questions related to a conviction of a crime or professional misconduct.

\* Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

- U/L Program Electives: Any U/L course with the prefix of: VSAD, VSCT, BIOL, or CHEM; as well as: BSAD 319 Professional Ethics, HSMB 301 Public Health Issues, HSMB 303 Occupational Health and Safety, or SSCI 370 Research Methods in the Social & Health Sciences.
- NOTE: Veterinary Technology students must take seven out of ten General Education Requirements including one and ten, 30 total General Education credits.
- Student Learning Outcomes can be found at www.canton.edu/sci\_health/vet/.

## Students In This Major:

- Enter into this program while working towards or after obtaining a Journeyman's Certificate through technical instruction and on-the-job training through the BOCES coordinated NYS Apprentice Program.
- Earn the equivalent of one year's collegelevel study following satisfactory completion of the Journeyman's Certificate, leading to an Associate in Applied Science.

## CAREER OPPORTUNITIES:

• Program is designed to prepare skilled tradesmen to enhance their employment growth potential, not entry-level employment.

## POTENTIAL SALARY:

• Average salary for skilled trades employees varies greatly depending on employer. This degree can enhance the employee's earning ability both with the current employer and future employers.

# **Program Requirements:** (CURRICULUM 0473)

CREDITS
Related Technical Instruction and
Supervised On-the-Job Training
(Represented by satisfactory completion of Journey- man's Certificate* with related instruction provided by St. Lawrence-Lewis BOCES)

English/Humanities	6
Social Sciences	6
Mathematics/Science	6-8
Liberal Arts & Science Elective	3
General Electives	9
	30-32

\* Fulfills writing intensive requirement.

Student Learning Outcomes can be found at www.canton.edu/business/apprentice.html.

# Automotive Technology–AAS

Graduates of the Automotive Technology program experience an exciting period of transition as manufacturers continue their shift toward higher fuel efficiency. Recruiters and employers of SUNY Canton's graduates include dealerships, service industries, automobile manufacturers, and parts suppliers. Graduates learn how to troubleshoot, diagnose and repair all aspects of the automobile power train, suspension, steering, braking and air conditioning systems.

## **STUDENTS IN THIS MAJOR:**

- Have the opportunity to earn two Snap-On Diagnostics certifications.
- · May receive Subaru training in senior year if academic average is 'B' or better.
- Can earn NATEF certification upon successful examination.
- Utilize the latest technology in an electronics-based curriculum.
- Acquire extensive hands-on experience in well-equipped laboratories.
- Receive a world class education in automotive electrical, mechanical, technical, and services areas.
- Learn on late model cars donated by automotive manufacturers.
- Get special attention from faculty in small laboratory classes.
- Enjoy outstanding career placement.

## **CAREER OPPORTUNITIES:**

- Automotive Service Technician
- Service Manager
- Service Advisor •
- Industrial Research and Development
- Automotive Machine Shop
- Auto Parts Manager/Owner •
- Technical Representative
- Automatic Transmission Technician
- Wheel Alignment/Suspension Technician
- Maintenance Technician
- Fleet Maintenance Supervisor/Technician

Heavy Equipment Maintenance Technician

## **CAREER OUTLOOK:**

The U.S. Department of Labor cites a strong demand for qualified automotive technicians and master technicians.

## **RECENT EMPLOYERS OF** SUNY CANTON GRADUATES:

- Ford Motor Company
- Chrysler Corporation
- Toyota (Lexus Division)
- General Motors Corporation
- Sears
- Firestone Tire Company
- Goodyear Tire Company
- NAPA Auto Parts
- Snap-On Tools Corporation
- Taylor Rental Corporation
- Troyer Race Car Engineering
- Various dealerships throughout NYS
- · Many graduates own their own businesses.

## **TRANSFER OPPORTUNITIES:**

- Morrisville State College
- SUNY Utica/Rome, Oswego

## ARTICULATION:

Applicants who have completed a twoyear vocational-technical automotive program may qualify for advanced standing (transfer credit).

## **Admission Requirements:**

• Students must be qualified to enter Applied College Mathematics (MATH 101)

## **PROGRAM REQUIREMENTS:**

## (CURRICULUM 0525)

- SEMESTER I **CREDITS** MATH 101 Applied College Mathematics 1.......4
- AUTO 122 Automotive Electrical Systems Lab ... 1

AUTO 101 Automotive Service......2 AUTO 111 Automotive Service Lab......1 AUTO 104 Basic Welding.....2 ENGL 101 Composition & The Spoken Word (GER 10) ......3 16

## SEMESTER II

SEIVIES I E	/N 11
AUTO 113	Engine Performance I
AUTO 114	Engine Performance I Lab1
AUTO 141	Automotive Brake Systems3
AUTO 144	Automotive Brake Systems Lab1
AUTO102/1	103 Diesel Engines or Automotive
	Air Conditioning <sup>3</sup> 2
	Social Science Elective (GER 3)3
	GER 5, DEISJ Elective3
	16
SEMESTE	R III
AUTO 213	Engine Performance II4
AUTO 218	Automotive Engine Repair <sup>4</sup> 3
AUTO 241	Suspension Design and Services2
AUTO 225	Drivelines and Manual
	Transmissions
AUTO 282	Suspension Design and Services Lab.1
PHYS 115	Basic Physics 2 (GER 2)
	17
SEMESTER IV	

010212	Automotive Electrical Systems II4
UTO 214	Automotive Computer Systems3
UTO 230	Service Mgt. and Operations1
AUTO 240	Hybrids and Electric Vehicles3
	Humanities Elective (GER 7, 8, 9)3

- 1 Mathematics level depends on previous preparation. Applied College Mathematics (MATH 101) is the minimum requirement. Math 106 Intermediate Algebra or higher maybe substituted.
- 2 PHYS 121/125 College Physics I lecture/lab may substitute if student meets prerequisites
- 3 One required. Courses offered alternating years
- 4 Writing Intensive course
- GER's can be taken in a different order than suggested if desired GER cannot fit into schedule.
- Student Learning Outcomes can be found at www.canton.edu/csoet/auto\_tech.html.

## Additional Graduation Requirements

Students must meet a minimum GPA of 2.0

# **Business:** Accounting–AAS

The Associates in Applied Science degree program is a two-year program. Students learn the basics of financial accounting and real-world accounting practice from our faculty with professional working experience. The skill will be extended to tax preparation and information technology using the most recent accounting and tax software.

In addition, the two-year program In Accounting prepares graduates to continue their education in accounting or finance or business management four-year bachelor degree.

## STUDENTS IN THIS MAJOR:

- Learn accounting theory, financial, managerial and cost accounting systems.
- Learn how accountants track, report, and interpret activity to allow for appropriate decisions by business, government, education, and individuals.
- Students have the opportunity to receive IRS approved training, to be certified in preparing taxes, and to volunteer through the only Volunteer Income Tax Assistance (VITA) site in St. Lawrence County.
- Students have the opportunity to learn real world accounting practice with simulations and QuickBooks, the current accounting software.

## **CAREER OPPORTUNITIES:**

Graduates are able to disseminate financial information to public reporting entities and business decision makers. Opportunities in this field include:

- Private business and industry
- Public accounting agencies
- Governmental accounting positions
- Tax preparation
- Financial management

## CAREER OUTLOOK:

Students with a degree in accounting are positioning themselves for career advancement and greater earning power. According to the Bureau of Labor Statistics, employment of accountants and auditors is projected to grow by 13% from 2012 to 2022. The accounting profession is committed to delivering a strong ethical foundation engaged in the preparation and examination of financial records, and a commitment to lifelong learning. The role of the accountant is ever changing and integral to any business entity. See more compensation information from the website of U.S. Bureau of Labor Statics, Accountants and Auditors. <u>https://www. bls.gov/oes/current/oes132011.htm#st</u>

## Typical Jobs Upon Graduation:

- Staff Accountant
- Claims Adjustor
- Project Manager
- Credit Analyst
- Loan Specialist
- Account Clerk
- Tax Preparer
- Business Manager

## RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- St. Lawrence County
- Pinto, Mucenski & Watson PC
- United Helpers
- Home Depot
- Claxton-Hepburn Medical Center
- C. Rowe Accounting & Tax Preparation
- North Country Savings Bank
- SeaComm Credit Union
- Dragon Benware Crowley and Company PC
- Gray & Gray and Associates CPAs, P.C.

## **TRANSFER OPPORTUNITIES:**

- Clarkson University
- SUNY Canton, SUNY Albany, SUNY IT, SUNY Plattsburgh, SUNY Potsdam, SUNY Oswego
- Siena College
- LeMoyne College
- Rochester Institute of Technology
- Syracuse University
- University of Vermont

Students wishing to transfer into a four-year program should consult their transfer school of choice prior to transfer.

100

## **ADMISSION REQUIREMENTS:**

• Students must be prepared to take Composition & the Spoken Word (ENGL 101).

## **PROGRAM REQUIREMENTS:**

(CURRICULUM 0630)	
SEMESTER I CREDITS	
FYEP 101	First Year Experience1
ACCT 101	Foundations of Financial
	Accounting <sup>1</sup> 4
ECON 101	Macroeconomics
ENGL 101	Composition & the Spoken Word
	(GER 1,2)
CITA 110	Intro. to Information Technology3
	Mathematics <sup>*2</sup> (GER 4) 3-4
	17-18

### SEMESTER II

ACCT 102	Foundations of Managerial	
	Accounting <sup>1</sup>	3
ECON 103	Microeconomics	3
	Mathematics (GER 4) <sup>2</sup>	3-4
BSAD 200	Business Communications**	3
	Natural Sciences Elective (GE	R <u>5)3</u>
		15-16

#### SEMESTER III

ACCT 300	Intermediate Accounting3
ACCT 306	Cost Accounting
BSAD 201	Business Law I
	DEISJ Elective (GER 3)
	Program Elective
	15

### SEMESTER IV

	Accounting Electives (2)6
FSMA 210	Introduction to Finance3
	Program Elective or
	GER (6,8,9,10,11) <sup>3</sup> ***
	General Elective or
	GER (6,8,9,10,11) <sup>3</sup> ***
	15

- \*\* Fulfills writing intensive requirement.
- GER = General Education Requirement
- <sup>1</sup>Lowest acceptable grade 2.0.
- <sup>2</sup>Lowest acceptable level: Intermediate Algebra (MATH 106). Math courses recommended:
- College Algebra and Statistics. <sup>3</sup>Management or Finance Bachelor's Degree track: Seven GERSs are required.

## A minimum cumulative GPA of 2.0 is required to remain in this program.

- Accounting Electives: ACCT 242, 245, 302, 310, 335, 410, 430, or 440.
- **Program Electives:** Courses in ACCT, BSAD, ECON, FSMA, and LEST.
- <sup>3</sup>GER = General Education Requirement; students may take no more than one course per GER category. http://www.canton.edu/gened/
- Student Learning Outcomes can be found at www.canton.edu/business/accounting.html.

## Students In This Major:

- Obtain a viable business background for immediate employment and/or transfer to a four-year program.
- Learn principles of business, accounting, and economics.

## **CAREER OPPORTUNITIES:**

- Assistant Manager
- Advertising Representative
- Sales Representative
- Supervisor
- Customer Service Representative

## CAREER OUTLOOK:

• With the importance of technology in the global economy, business positions are anticipated to increase.

## RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Community Bank
- Wal-Mart
- New York State
- Canton-Potsdam Hospital
- St. Lawrence Health Alliance

## **TRANSFER OPPORTUNITIES:**

 Eligible students may enroll in one of SUNY Canton's four-year business or management programs.

## **Admission Requirements:**

• Students must be prepared to take Composition & the Spoken Word (ENGL 101).

## **PROGRAM REQUIREMENTS:**

AS DEGREE-TRANSFER PROGRAM (CURRICULUM 0671)

SEMESTER I CREDITS	
FYEP 101	First Year Experience***1
ACCT 101	Foundations of Financial
	Accounting4
BSAD 100	Introduction to Business
ECON 101	Macroeconomics (GER 7)3
ENGL 101	Composition & the Spoken Word
	(GER 1,2)3
	Mathematics* (GER 4) 3-4
	17-18
SEMESTER II	
ACCT 102	Foundations of Managerial

ACCT 102	Foundations of Managerial
	Accounting3
CITA 110	Intro. to Information Technology3
ECON 103	Microeconomics
	GER(6,8,9,10)3
MATH 141	Statistics
	15

### SEMESTER III

BSAD 200	Business Communications**
BSAD 201	Business Law I3
	Program Elective
	DEISJ (GER 3)
	Natural Sciences (GER 5)3
	15

### SEMESTER IV

FSMA 210	Introduction to Finance3
	Program Elective
	Program Elective
	GER (6,8,9,10)
	GER 114
	$\overline{16}$

\*Survey of Mathematics (MATH 111), College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123) and Trigonometry (MATH 131), or Calculus (MATH 161)

\*\* Fulfills writing intensive requirement.

\*\*\*Required for Freshmen students only

GER = General Education Requirement - Students may take no more than one course per GER subject area

Program Electives: ACCT, BSAD, ECON, FSMA, or LEST

## AAS DEGREE (CURRICULUM 632)

SEMESTE	R I CREDITS
FYEP 101	First Year Experience***1
ACCT 101	Foundations of Financial
	Accounting4
BSAD 100	Intro. to Business
ECON 101	Macroeconomics (GER 7)3
ENGL 101	Composition & the Spoken Word
	(GER 1,2)3
	Mathematics* 3-4
	17-18

### SEMESTER II

ACCT 102	Foundations of Managerial
	Accounting3
CITA 110	Intro. to Information Technology3
ECON 103	Microeconomics
	Natural Sciences Elective (GER 5) 3-4
	Mathematics* (GER 4) 3-4
	15-17

### SEMESTER III

BSAD 200	Business Communications**
BSAD 201	Business Law I3
	Program Elective
	GER (6,8,9,10,11) OR
	Liberal Arts & Sciences Electives3
	DEISJ Elective (GER 3)3
	15

### SEMESTER IV

FS

SMA 210	Introduction to Finance	3
	Program Elective	3
	Program Elective	3
	General Elective	3
	GER (6,8,9,10,11) OR	
	General Elective	3
		15

\*Intermediate Algebra (MATH 106), Survey of Mathematics (MATH 111), College Algebra (MATH 121), Pre-Calculus (MATH 123), College Trigonometry (MATH 131), Statistics (MATH 141), or Calculus (MATH 161).

\*\* Fulfills writing intensive requirement.

\*\*\* Required for all Freshmen

GER = General Education Requirement

**Program Electives:** ACCT, BSAD, ECON, FSMA, or LEST

Student Learning Outcomes can be found at www.canton.edu/business/bus\_admin.html.

Graduates of the Civil Engineering Technology program receive the Associate of Applied Science degree which enables them to go directly to work or transfer into a bachelor's degree program. Career options may be primarily office-based (drafting and design) or field-based (surveying, inspection, and construction management). Students are well prepared to meet the career challenges of the civil engineering and construction industries. Graduates may pursue a baccalaureate degree (Civil and Environmental Engineering Technology at SUNY Canton or elsewhere). Hands-on learning and extensive practical skills are emphasized in classes.

## STUDENTS IN THIS MAJOR:

- Communicate effectively and professionally in the construction environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem-solving methods.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for construction projects.
- Demonstrate a thorough knowledge of common construction materials; both their proper use and their proper testing procedures.
- Understand the mechanics of structural design.
- Be proficient in the use of surveying equipment to collect data to lay out projects, and to solve engineering problems.
- Graduates will have developed the personal and academic skills required to pursue lifelong learning in, and beyond, the chosen major.

## **CAREER OPPORTUNITIES:**

• Structural Steel Designer, Drafter, Estimator, Surveyor, Construction Superintendent, Construction Inspector, Materials Technician, Environmental Technician, Industrial Sales Representative, Residential/Commercial Contractor and General Contractor.

## CAREER OUTLOOK:

• Nearly 100% of graduates willing to relocate/travel are able to establish civil engineering or construction-related careers.

## RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- NYS Department of Transportation
- Atlantic Testing Laboratories
- CIVES Steel Corp.
- C & S Cos. General Contracting
- Northeast Construction Services, Inc.
- Bette and Cring Construction Group
- NC Dept. of Transportation
- Advanced Testing Labs
- Barrett Paving
- Northland Construction
- Army Corps of Engineers
- Stebbins Engineering

## TRANSFER OPPORTUNITIES:

Transfer Opportunities can be found at www.canton.edu/csoet/civil\_eng.html

## Accreditation:

• Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street, Baltimore, MD 21201 – Telephone (410) 347-7700.

## **Admission Requirements:**

• Students must be qualified to enter Pre-Calculus Algebra (MATH 123) Students who do not meet the recommended high school math prerequisites may still be admitted to the College, but completing the program may require more than two years.

## **PROGRAM REQUIREMENTS:**

(CURRICULUM 0517)		
SEMESTER I	CREDITS	
ENGS 101 Intro to Engineering		
SOET 116 Intro. to Computer Drav	ving2	
CONS 101 Elementary Surveying		
MATH 123 Pre-Calculus <sup>1</sup>		
PHYS 121/131 College/Univ. Physics	I3	
PHYS 125/135 College/Univ. Physics	I Lab <u>1</u>	
	16	

### SEMESTER II

ENGS 201	Statics
SOET 250	Intro 3D CADD and BIM2
MATH 161	Calculus I <sup>1</sup> 4
PHYS 122/1	32 College/Univ. Physics II
PHYS 126/1	36 College/Univ.Physics II Lab1
ENGL 101	Composition and the Spoken Word.3
	16

### SEMESTER III

CONS 203	Advanced Surveying	3
ENGS 203	Strength of Materials for Tech.	3
CONS 275	Strength of Materials Lab	1
CONS 280	Civil Engineering Materials	3
CONS 222	Construction Estimating	2
	Diversity GER (3)	<u>3</u>
	-	15

## SEMESTER IV

Technical Pr	ogram Elective <sup>3</sup> 3
	Soils In Construction <sup>2</sup> 4
CONS 322	Hydraulics4
CONS 274	Construction Management
	Humanities GER (6,7,8, 9, 10 or 11). 3
	17

## Total Required Program Credits = 64

1 MATH: If entering at MATH 161 they will complete MATH 161 and MATH 162.

2 Writing Intensive

Student Learning Outcomes can be found at www. canton.edu/csoet/civil\_eng.html

## Additional Graduation Requirements

Students transferring a significant number of credits from outside must complete the designated "Capstone" course at SUNY Canton, and the student's transfer records must have been reviewed and approved by the CET Department Chair.

<sup>3</sup> Must be approved technical program elective with CONS or CIVL course designator, or approved by advisor/department chair.

Computer Information Systems (CIS) students develop abilities for working with computer systems, databases, networks, and web development. Qualified graduates also have the opportunity of completing a fouryear program in Information Technology with two additional years of study earning a Bachelor of Technology degree.

## STUDENTS IN THIS MAJOR:

- Develop the knowledge and experience for a successful career in the computer industry.
- Develop teamwork skills throughout the program.
- Enhance their skill sets by opportunities to electives of interest.
- Acquire hands-on experience in small, well-equipped laboratories.
- Work with qualified faculty in small class sizes solving real-world problems.

## CAREER OPPORTUNITIES:

- Junior Programmers
- Network Technician/Administrator
- Systems Manager
- Technical Representative
- Web Developer
- Help Desk Manager

## CAREER OUTLOOK:

• Computer Information Systems is expected to continue as a strong growth area for career opportunities.

## RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- SUNY Canton
- Clarkson University
- Canton-Potsdam Hospital
- St Lawrence-Lewis County BOCES
- Eclipsys
- IBM
- Corning, Inc.

## TRANSFER OPPORTUNITIES:

- SUNY Canton: Information Technology and Industrial Technology Management
- SUNY Plattsburgh: Information Technology

## **Admission Requirements:**

- Students must be qualified to enter at least Intermediate Algebra (MATH 106) and Composition and the Spoken Word (ENGL 101).
- High school chemistry and physics courses are recommended.
- High school computer technology courses are strongly recommended.
- Transfer students must have a minimum of 2.0 GPA.

Students who do not meet necessary prerequisites may be admitted to the college. However, completing the program may require more than two years.

## **PROGRAM REQUIREMENTS:**

## (CURRICULUM 0581-01)

- SEMESTER I
- BSAD 100 Introduction to Business......3

CREDITS

15

- CITA 163 Survey of Information Technology<sup>1</sup>...3
- Mathematics Elective<sup>2</sup>.....<u>..3</u>

### SEMESTER II

- CITA 170 Comp. Concepts & Oper. Sys<sup>1</sup>......3 CITA 175 Comp. Concepts & Oper. Sys Lab<sup>1...</sup>1 CITA 171 Oper. Sys. Use & Administration<sup>1</sup>....3

### SEMESTER III

- CITA 221 Data Comm and Net. Tech Lab<sup>1</sup> ......1
- ECON 101 Macroeconomics OR

### SEMESTER IV

### \* Fulfills writing intensive requirement..

Student Learning Outcomes can be found at www.canton.edu/csoet/com\_inf\_sys.html.

Although there are several modern well-equipped computer labs on campus, it is expected each student has a personal computer.

- <sup>1</sup>Any CITA course presented for meeting degree requirements must have a grade of at least C (or transfer credit). No more than 3 CITA credits with a course number below CITA150 may receive credit towards graduation.
- <sup>2</sup>CIS minimum requirement is MATH 106 Intermediate Algebra. MATH 121 College Algebra and MATH 141 Statistics are required in B. Tech. IT Program.
- <sup>3</sup>All graduates must have a minimum of 20 LA (liberal arts and sciences) credits
- <sup>4</sup>Students pursuing a baccalaureate degree should select courses from the following GER areas when feasible. GER 2 Science (CHEM 107/108 Investigative Chemistry/ Lab recommended), GER4 American History; GER 5 Western Civilization; GER 6 Other World Cultures; GER 7 Humanities; GER 8 The Arts; or GER 9 Foreign Language.
- <sup>5</sup>Program Electives are from Canino SOET, the Business Department (including ACCT 102 Managerial Accounting), and the GMMD Department. Students pursuing a B. Tech. in IT degree should take: CITA180 Intro to Programming, CITA 204 Systems Analysis and Design, and CITA 215 Database Applications and Concepts.
- <sup>6</sup>ACCT101 Financial Accounting may be substituted for students interested in pursuing a business related minor or major.
- <sup>7</sup>Social Science Elective students pursuing a baccalaureate degree should select from GER 4, 5, or 6 – see note 4 above.

## Additional Graduation Requirements

Each CITA course used to meet graduation requirements must have a grade of "C" or higher. A transfer student must complete at least two CITA courses (six credit hours) numbered 200 or above which are applicable to the degree. This program prepares students for careers in construction by blending hands-on construction skills with project planning, management and estimating. Students are also exposed to accounting, bidding, drafting, and business organization and management. Graduates with the Construction Technology: Management, AAS (Associate of Applied Science) degree have the option of completing a four-year degree with two more years of study; Industrial Technology Management (B. Tech.) is one possible track.

## STUDENTS IN THIS MAJOR:

- Learn fundamental construction techniques through hands-on experience and classroom teaching.
- Conduct construction material testing (eg: steel, soils, concrete) using industry-standard equipment.
- Experience an academic program that blends the fields of construction, business, and management.
- Develop computer software skills, project scheduling techniques, and construction methods utilized in the management of construction projects.

## CAREER OPPORTUNITIES:

- Construction Project Manager Assistant
- Estimator
- Project Planning and Scheduling
- Construction Equipment Salesperson
- Residential Contractor
- Commercial Contractor
- Purchasing Agent
- Code Enforcement Officer
- Insurance Adjustor

## CAREER OUTLOOK:

• Career opportunities currently exist at all levels of the construction industry.

• Infrastructure rehabilitation should maintain the need for construction technicians and assistant project managers.

## RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Atlantic Testing Laboratories
- Barrett Paving Materials Inc.
- Northeast Construction Services
- C & S Companies
- Tuscarora Construction
- Jeffords Steel Inc.
- CIVES Steel
- Many local construction companies

## **TRANSFER OPPORTUNITIES:**

- SUNY Canton (B. Tech. in Industrial Technology Management)
- SUNY Alfred (BS, BT in Construction Management)

## Admission Requirements:

• Students must be qualified to enter Applied College Mathematics (MATH 101) or Intermediate Algebra (MATH 106)

Students who do not meet the recommended high school math prerequisites may still be admitted to the College, but completing the program may require more than two years.

## **PROGRAM REQUIREMENTS:**

## (CURRICULUM 1162)

SEMESTE	CREDITS
CITA 108	Intro to Spreadsheets1
FYEP 101	First Year Experience1
CONS 112	Wood Structures
SOET 116	Intro. to Computer Drawing2
BSAD 100	Intro to Business
ENGL 101	Composition and the Spoken Word .3
MATH	Math Elective <sup>1</sup> 3
	16

### SEMESTER II

CONS 111	Commercial Structures
CONS 132	Construction Drafting3

## SEMESTER III

CONS 101	Elementary Surveying4
CONS 222	Construction Estimating 2
CONS 280	Civil Engineering Materials3
BSAD 201	Business Law I
	Survey of Accounting4
	$\frac{1}{16}$

### SEMESTER IV

CONS 274	Construction Management3
CONS 216	Soils in Construction <sup>2</sup> 4
	Diversity GenEd Elective (GER 3)3
	GenEd Elective
	(GER 6, 7, 8, 9, 10, or 11)3

## 13

### Total Required Program Credits = 60

- <sup>1</sup> The student will be leveled into the appropriate MATH class. MATH 123 is the minimum level of mathematics required for the program. If entering with MATH 106, MATH 123 will be taken as the General Elective in semester 2. If leveled Into MATH 123, a general elective will be taken in semester 2.
   <sup>2</sup> Writing Intensive Course.
- Student Learning Outcomes can be found at www.canton.edu/csoet/const\_mgt.html.

## Additional Graduation Requirements

Students must have completed a minimum of nine CONS credits at SUNY Canton. Student transfer records must be reviewed and approved by the program director. The program offers three distinct learning tracts which allows the student the opportunity to tailor their coursework for future career aspirations:

- Law Enforcement
- Corrections
- Generalist

Students are provided a solid academic foundation that allows them to seamlessly transfer into any of our B. Tech majors in Criminal Investigation, Homeland Security or Criminal Justice: Law Enforcement Leadership.

## Students In This Major:

- Acquire the basic knowledge for a broad view of criminal justice which could support either a career in criminal justice OR further academic study in his field.
- Have their needs met by choosing the delivery format for the courses that best fits their lifestyles. The coursework is available in both a traditional classroom format and in an online format.

## CAREER OPPORTUNITIES:

- Police Officer
- Corrections Officer
- Private Security
- Loss Prevention Officer

## CAREER OUTLOOK:

• U.S. Department of Labor forecasts that the growth rate until 2024 is approximately 4%. The average starting pay is approximately \$39,000 which is higher than the overall average pay of all occupations tracked by the D.O.L.

## Recent Employers Of SUNY Canton Graduates:

- Federal Bureau of Investigations (FBI)
- Secret Service
- U.S. Customs & U.S. Border Patrol

- New York State Department of Environmental Conservation
- New York State University Police
- New York State Police
- New York Department of Corrections
- Military Police of the Armed Forces
- United Parcel Service
- Pinkerton Security
- Sheriff's Department
- Municipal Police Departments
- Vermont State Police

## TRANSFER OPPORTUNITIES:

• Fifty to sixty percent of AAS graduates seek baccalaureate degrees. The majority of these students remain at SUNY Canton and pursue one of the baccalaureate degrees due to the hands-on aspects of our B. Tech degrees.

## Admission Requirements:

- Students must be prepared to take Intermediate Algebra (MATH 106)
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have at least a 2.0 GPA.

## **PROGRAM REQUIREMENTS:**

## (CURRICULUM 0640)

#### SEMESTER I

- CITA 110 Intro. to Information Technology ......3
- PSYC 101 Introductory Psychology......<u>3</u>

### SEMESTER II

JUST 105	Correctional Philosophy3
JUST 112	Criminal Law and Procedure
SOCI 101	Introduction to Sociology3
	Humanities Elective (GER)3
	Natural Science w/Lab (GER) 3-4
	15-16

## 105

### EMPHASIS A: LAW ENFORCE-MENT

### SEMESTER III

JUST 201	Critical Issues in Crim. Justice *3
JUST 209	Law Enforce. Communications3
	American History Elective (GER)3
	Lib. Arts Elective (any GER)3
	General Elective3
	15

### SEMESTER IV

JUST 203	Criminal Investigation3
JUST 207	
JUST 210	Intro to Forensic Investigations3
-	Lib. Arts Elective (GER 5, 6, 8, 9)3
	Lib. Arts Elective (any GER)3
	$\frac{1}{15}$

## OR

### EMPHASIS B: CORRECTIONS PRO-FESSIONS

### SEMESTER III

JUST 201	Critical Issues in Crim. Justice *3
JUST 211	Diagnostic Eval of Offender3
	American History Elective (GER)3
	Lib. Arts Elective (GER 5, 6, 8, 9)3
	General Elective3
	15

### SEMESTER IV

JUST 215	Community Based Corrections3
	Program Electives6
PSYC 275	Abnormal Psychology
SSCI 181	Alcohol Drugs & Society
	15

### OR

**CREDITS** 

15

# EMPHASIS C: CRIMINAL JUSTICE GENERALIST

### SEMESTER III

JUST 201	Critical Issues in Crim. Justice *3
JUST 209	Law Enforce. Communications OR
JUST 211	Diagnostic Eval of Offender3
	American History Elective (GER)3
	Lib. Arts Elective (any GER)3
	General Elective
	$\overline{15}$

### SEMESTER IV

Program Electives9
Lib. Arts Elective (GER 5, 6, 8, 9)3
Lib. Arts Elective (any GER)3
15

\* Fulfills writing intensive requirement.

GER = General Education Requirement

\*\* Intermediate Algebra (MATH 106) is the minimum level acceptable toward AAS degree. Survey of Mathematics (MATH 111) or College Algebra (MATH 121) is minimum for B. Tech. degrees.

--Introduction to Criminal Justice should be taken as soon as possible.

--Early American History (HIST 103) or Modern US History (HIST 105) is recommended for American History elective.

--A minimum of 60 credit hours with a 2.0 GPA is required to receive the AAS degree in Criminal Justice. Students must take all of the PROGRAM courses and all courses In Emphasis A, Emphasis B, OR Emphasis C (NOT ALL THREE).

)5

## STUDENTS IN THIS MAJOR:

- Enroll in a course of study offering 12 courses specific to early childhood care and education along with general liberal arts courses leading to an associate of science degree
- Participate in early childhood field-based experiences in various childcare settings, including: Head Start Programs, Universal Pre-K, and Kindergarten Public School Classrooms, Child Care Centers, Family Child Care Provider Homes, Nursery, and Pre-School programs.
- Take part in professional development opportunities offered through, seminars, trainings, workshops, and conferences.
- Have access to various learning resources, activity kits, and equipment in our stateof-the-art Early Childhood Undergraduate Teacher Center & Classroom located in Cook Hall.
- Prepare for rewarding careers in Early Care and Education or continue academic studies by enrolling in our Bachelor of Business Administration in Early Childhood Care and Management, or transfer to various 4-year degree Programs.

## **PROGRAM DELIVERY:**

The Associate of Science Degree in Early Childhood can be completed fully online, on campus, or a combination of both. Students can begin enrollment in fall, summer, or spring and attend part or full-time.

## CAREER OPPORTUNITIES:

- Pre-School and Child Care Center Lead Teacher, Assistant Teacher
- Public School: Teacher Assistant
- Head Start: Lead Teacher, Asst. Teacher
- Self Employed: Child Care or Nursery School Owner
- Family Child Care Home-Based Provider

## CAREER OUTLOOK:

- U.S. Department of Labor projects employment of Preschool Teachers, and Teacher Assistants to grow by 4% from 2019-2029, about as fast as the average for all occupations.
- Certification requirements are increasing for

Early Care and Education providers. Associate and bachelor's Degrees are necessary to work in lead positions in childcare facilities and Head Start programs.

• Changes in society and the workforce demand an increase in the availability of highquality early childcare and education options for families and children from infancy to pre-kindergarten.

## **TRANSFER OPPORTUNITIES:**

SUNY Canton, BBA in Early Childhood Care and Management.....Earn 2 degrees in 4 years!

SUNY Canton Early Childhood graduates attend:

- SUNY Cobleskill, SUNY Plattsburgh, SUNY Oneonta, SUNY Cortland, SUNY Buffalo, SUNY Albany, SUNY Cobleskill
- SUNY Brockport, SUNY New Paltz, SUNY Geneseo, SUNY Potsdam, SUNY Fredonia, College of Saint Rose, Empire State

## **Admission Requirements:**

- Students must meet entrance requirements and be eligible for enrollment in: Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0 GPA for admittance to the ECHD major.
- Students who do not meet ECHD admission requirements may enroll in preparatory courses. Students must pass all \*preparatory courses and have a minimum 2.0 GPA for admittance to the ECHD program.
- Graduates of BOCES Early Childhood Occupations programs *may* be eligible for 3–6 college credits toward the Early Childhood Program at SUNY Canton. Refer to the College catalog for a list of BOCES Programs for which we have articulation agreements.

## **PROGRAM REQUIREMENTS:**

- Students are required to complete NYS Office for Children Trainings: Identification of Child Abuse & Neglect and Foundations in Health, Safety & Nutrition [offered online within our courses]
- Early Childhood students must complete a Health Clearance through the SUNY Canton Davis Health Center; have evidence

of a recent physical exam, and updated immunizations.

For off campus field experiences (ECHD 201) residential students will need to arrange for coordination of and/or transportation to their assigned placement sites. Distance/ Online students will be complete field experiences in centers and programs near their residence and attend seminars virtually.

### (CURRICULUM 1327)

SEMESTE	CR I CREDITS
FYEP 101	First Year Experience1
ECHD 101	Intro. to Early Childhood (GER 7)3
ENGL 101	Composition & the Spoken Word3
PSYC 101	Introduction to Psychology3
	Science Elec. (GER 5) 3-4
	DEISJ Elective (GER 3)3
	16-17

### SEMESTER II

ECHD 121	Wellness in Young Children3
ECHD 131	Infants and Toddlers3
PSYC 220	Child Development3
	Math Elective (GER 1)3
	GER (6,8,9,10,11)3
	15

### SEMESTER III

ECHD 105 Orientation to EC Field Experience1	
ECHD 125 Curriculum Development	,
ECHD 250 Children with Special Needs	,
ECHD 285* Iss. & Policies in Early Care & Ed.*3	,
GER (6,8,9,10,11)	,
General Elective	,
16-17	,

### SEMESTER IV

ECHD 201	Early Childhood Field Experiences
	w/Seminar4
ECHD 204	Early Childhood Observation3
ECHD 200	Planning Programs for
	Young Children3
	General Elective
	General Elective3
	16

\* Fulfills writing intensive requirement.

GER = General Education Requirement

NOTE: Early Childhood students must meet seven out of ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/early\_childhood/.

The Electrical Engineering Technology (EET) program prepares students for a wide range of opportunities ranging from manufacturing and defense to power generation and computing. At completion, graduates receive the Associate in Applied Science degree and have considerable flexibility for continuing their education or commencing their career directly. Math skills and an interest in science are expected, and the student will receive extensive hands-on experience in a small class setting. Graduates are qualified to work as Engineering Technicians, or continue in the four year EET program (B. Tech.), and will have the flexibility to a number of elective courses including Mathematics as minor.

# **PROGRAM EDUCATIONAL**

## **Objectives**

- (1) Provide industry with well qualified technicians for entry level positions in the Electrical Engineering Technology field;
- (2) Provide transferability for students who are interested in baccalaureate degree programs at SUNY Canton or other institutions with related programs;
- (3) Be ready to expand knowledge in engineering profession through continuing education, or other lifelong learning experiences;
- (4) Be committed to quality, timeliness and respect for diversity.

## STUDENT LEARNING

## **OUTCOMES**

- What students are expected to know and be able to do by the time of graduation:
- (1) An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
- (2) An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- (3) An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature
- (4) An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results; and
- (5) An ability to function effectively as a member of a technical team.

## **CAREER OPPORTUNITIES:**

More than 90% of the graduates go directly into positions like:

• Project Control Technician

- Electronic Maintenance Technician
- Production Technician
- Field Service Technician
- Systems Test Technician
- Quality Assurance Technician
- Field Project Technician
- Instrumentation Technician
- Electrical Power Technician Communications Technician

## **CAREER OUTLOOK:**

The demand for Electrical Engineering Technicians is immense. There simply are not enough qualified technicians entering the market place, and a large number of working technicians are approaching retirement age.

## **RECENT EMPLOYERS OF** SUNY CANTON GRADUATES: Brookfield Power

- Novelis
- Schlumberger
- Siemens National Grid
- ALCOA
- Schneider Packing Equipment
- Corning
- New York Power Authority
- TRC
- C & S Engineers, Inc.
- NYSEG
- Verizon

## **BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING**

### **Opportunity:**

· Graduate from the AAS degree in Electrical Engineering Technology may continue in the B. Tech degree program, and all courses are transferred into the Bachelor's Degree program to allow student to complete his/her studies in two years.

## ACCREDITATION:

Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 -Telephone (410) 347-7700.

## Admission Requirements:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)
- Students who do not meet the required high school mathematics prerequisites may still be admitted to the College, but they will have to complete all mathematics requirements before admission to this program, or they may complete one year certificate before starting the degree program.

## **PROGRAM REQUIREMENTS:** (CURRICULUM 0699)

#### SEMESTER I

ODITED I L	
ELEC 101	Electric Circuits I
ELEC 109	Electric Circuits I Laboratory1
ELEC 161	Electronic Fabrication2
SOET 116	Intro to CAD and Design2
ENGL 101	Composition & the Spoken Word3
MATH 123	Pre-Calculus Algebra4
	irst Year Experience <u>1</u>
	16

CREDITS

#### SEMESTER II

OLIVILOIL	AX 11
ELEC 102	Electric Circuits II
ELEC 129	Electric Circuits II Laboratory1
ELEC 141	Industrial Controls2
ELEC 165	Digital Fund & Systems3
ELEC 166	Digital Fund & Systems Lab1
	Diversity Elective Course(GER 3)3
MATH 161	Calculus I
	17

### SEMESTER III

OLIVILO I L		
ELEC 213	Microprocessors *	3
ELEC 215	Electrical Energy Conversion	4
ELEC 231	Electronic Circuits	4
ENGS 102	Programming for Engineers	2
PHYS 121/1	31 College Physics I OR	
	University Physics I	3
PHYS 125/135 Physics Lab I1		
	-	17
CEMECTED IV		

### SEMESTER IV

ELEC 203 Engineering Technology Project1
ELEC 225/383 Telecommunications OR
Power Transmission & Distribution3
ELEC 332 Industrial Electronics3
ELEC 243 Computer Auto Control Systems2
PHYS 122/132 College Physics II OR
University Physics II
PHYS 126/136 Physics Lab II1
SOET 377 *Engineering Ethics
$\overline{14}$

Though Engineering Safety is not required for AAS curriculum, Advisory Board suggest it will be helpful for a student to consider taking Engineering Safety Course SOET 349 or SOET 348.

\* Fulfills writing intensive requirement.

Student Learning Outcomes can be found at www.canton.edu/csoet/elec\_eng\_tech/.

## Additional Graduation Requirements

Students transferring in Electrical 200 level courses must complete a minimum of 12 credits of 200 level courses contained in the current Electrical Engineering Technology curriculum with a minimum GPA of 2.0 for all such credits taken.

The Engineering Science program prepares its graduates to complete a baccalaureate engineering degree with another two years of study. Applicable areas include mechanical, electrical, civil, and aeronautical engineering. A key difference with Engineering Science, as differentiated from other programs in the Canino School of Engineering Technology, is that this program provides a strong theoretical preparation rooted in calculus for students who seek to prepare for engineering design responsibilities. Graduates perform exceptionally well when transferring to engineering schools such as Clarkson, Cornell or RPI.

## STUDENTS IN THIS MAJOR:

- Complete their first two years at SUNY Canton and then transfer to a four-year engineering school to complete their baccalaureate degree.
- Interact with faculty on a daily basis because of small class sizes.
- Are accepted by most four-year engineering schools with full junior status.
- Have the benefit of SUNY Canton's membership in the SUNY Two-Year Engineering Science Association (TYESA) of New York State. This membership assures that SUNY Canton's Engineering Science program is rigorous and allows for smooth transfer to four-year schools.

## CAREER OPPORTUNITIES:

After transferring to and graduating from a four-year school, any engineering career is possible. Typical opportunities include:

- Aeronautical Engineer
- Civil Engineer
- Computer Engineer
- Electrical Engineer
- Engineering Management
- Mechanical Engineer
- Chemical Engineer

## CAREER OUTLOOK:

- There are favorable job opportunities for engineering-related positions.
- Employment opportunities in engineering have been good for a number of years and are expected to continue.

## TRANSFER OPPORTUNITIES:

In recent years, Engineering Science students have transferred to:

- Carnegie Mellon University
- Clarkson University Dual Admission Availible - Earn an Associates at SUNY Canton and a Bachelor's at Clarkson University.
- Cornell University
- Florida Institute of Technology
- Northeastern University
- Pennsylvania State University
- Rensselaer Polytechnic Institute
- SUNY Binghamton
- SUNY Buffalo
- Syracuse University
- University of Massachusetts
- University of North Carolina

## **Admission Requirements:**

• Students must be qualified to enter Calculus I (MATH 161)

## **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0530)

This program has been granted a SUNY General Education waiver which allows the program to require only five General Education Requirements. Care must be taken to select courses in areas which meet this requirement.

SEMESTE	R I CREDITS
ENGS 101	Introduction to Engineering2
CHEM 150	College Chemistry I4
ENGL 101	Composition & the Spoken Word3

MATH 161	Calculus I4
PHYS 131	University Physics I3
PHYS 135	University Physics Lab I1
	17

### SEMESTER II

ENGS 102	Programming For Engineers2
CHEM 155	College Chemistry II4
	Diversity Elective (GER 3)3
MATH 162	Calculus II4
PHYS 132	University Physics II
PHYS 136	University Physics Lab II1
	17

### SEMESTER III

OLIVILOI L		
ENGS 201	Statics	3
ENGS 205	Nature & Properties of Materials	3
MATH 263	Calculus III	4
ECON 103	Principle of Microeconomics	3
	Program Elective *	3
		16

### SEMESTER IV

ENGS 202	Dynamics
ENGS 263	Electric Circuits
ENGS 264	Electric Circuits Lab1
	Program Elective **
MATH 364	Differential Equations4
	$\overline{14}$

Student Learning Outcomes can be found at www.canton.edu/csoet/eng\_sci.html.

The General Technology (GT) curriculum serves needs of entering students in three broad ways. First, its curricular breadth and flexibility allows entering students to explore across a range of technology disciplines as they seek to identify a specific concentration path of interest. Second, GT enables students transferring from other academic programs or institutions to build upon academic work already accomplished. Third, this program is appropriate for students seeking a two-year degree in an unusual area of specialization for which dedicated programs may not conveniently exist (e.g. electronic testing, project planning & scheduling, quality control, plant operations & maintenance).

Graduates of this program may pursue employment upon graduation or continue their education with the pursuit of a subsequent baccalaureate (four-year) degree with a program such as Industrial Technology Management. This broad-based program is ideal for individuals with analytical capabilities seeking to pursue a path of study that serves the individual's particular interests well.

# STUDENTS IN THIS MAJOR:

- Will have the flexibility to explore career interests in various technical disciplines.
- Will be able to focus their studies within their specific area(s) of interest.
- Will develop a strengthened preparation in mathematics, science, and technology.
- Are able to build upon academic work already completed in other related areas.

### **CAREER OPPORTUNITIES:**

Employment opportunities are broad for technology and span the range of industry and commerce. Because of the broad flexibility of this program, it is important for the student and academic advisor to carefully plan the selection of program electives that will best serve the career Interests of the individual student. Opportunities in this market include:

- Manufacturing & Production
- Industrial Distribution
- Technical Sales and Services
- Pursuit of additional (four-year) education (e.g. Business, Information Technology, Industrial Technology Management)

### **Admission Requirements:**

Incoming students will meet all general admission requirements as freshmen to SUNY Canton, having completed the NYS Geometry Regents or Math A plus one year. Transfer students will be evaluated individually by the program academic advisor. The mathematics requirements will ensure that entering students are prepared to commence studies at a minimum level of College Algebra (MATH 121) and College Physics I (PHYS 121).

### **PROGRAM REQUIREMENTS:**

### (CURRICULUM 2208)

SEMESTE	R I CREDITS
ENGS 101	Introduction to Engineering2
	Technical Design OR Drafting 2-3
ENGL 101	Composition and the Spoken Word3
MATH 123	Pre-Calculus Algebra4
PHYS 121	College Physics I
PHYS 125	Physics I Lab1
	15-16

### SEMESTER II

ENGS 102	Programming for Engineers	2	
MECH 128	Electromechanical Technology	3	
	GER 3 - Diversity Elective	3	
	Math Elective**	4	
	Science Elective w/lab	4	
		16	
SEMESTER III			
	Program Elective***	9	
	Math Elective **	3	
	Humanities Elective	$\frac{3}{15}$	
		15	
SEMESTER IV			
	Program Electives***	12	
	General Elective	3	
		15	

- \* Fulfills writing intensive requirement.
- \*\* College Algebra (MATH 121) or equivalent, & at least one calculus course are required. Entering students who are unprepared to enroll in MATH121 or equivalent may require extra time to graduate.
- \*\*\* Program Electives are to be selected with the approval of the student's academic advisor from the following disciplines: ACHP, AREA, ASTR, AUTO, CHEM, CITA, CONS, ENGS, ESCI, TMMA, GEOL, GMMD, MECH, MFGT, MATH, MSPT, PHYS, and SOET.
- Student Learning Outcomes can be found at www.canton.edu/csoet/general.html.

SUNY Canton is a leader in air conditioning education, and this program is well-suited for individuals with an interest in energy and technology. With energy costs at their current level, this program leads to employment opportunities across the U.S. and around the globe. It also provides excellent preparation for entry into baccalaureate programs such as Mechanical Technology, Alternative and Renewable Energy Systems or Industrial Technology Management at SUNY Canton. Students also pursue baccalaureate degrees at other institutions.

# Students In This Major:

- Communicate effectively and professionally in the building environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem solving methods.
- Be proficient and apply mathematics, fluid mechanics, thermodynamics, and principle of heat transfer to air conditioning designs.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for HVAC projects.
- Develop skills using specific codes, ASHRAE standards and handbooks.
- Demonstrate a thorough knowledge of HVAC components and how to use as a system to maintain design conditions.

# **CAREER OPPORTUNITIES:**

- Service Technicians
- HVAC Contractors
- Designers
- HVAC Sales
- Controls Specialists
- Facilities Management

# CAREER OUTLOOK:

• All graduating students seeking employment in the past two years have accepted employment by the first of June after graduation.

# Recent Employers Of SUNY Canton Graduates:

- Day Automation Systems
- Prax Air, Inc.
- Pro Air Plus
- Siemens
- T.P. Woodside, Inc.
- Bomac
- Hyde-Stone
- DeLaval
- GEMMA Power Systems

### Accreditation:

 Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

# **Admission Requirements:**

• Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

# **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0444)

SEMESTER ICREDITSENGS 101Introduction to Engineering2ENGL 101Composition & Spoken Word3MATH 123Pre-Calculus Algebra4SOET 116Computer Drafting2PHYS 121/131College or University Physics I3PHYS 125/135College or Univ. Physics Lab I1515

### SEMESTER II

GER 6	Huminaties Elective	GER 63
MATH 161	Calculus 1	4

### SEMESTER III

ACHP 243	Air Conditioning I3
ACHP 253	Domestic and Comm. Heating I4
HVAC 201	HVAC Electrical and
	Motor Controls2
HVAC 202	HVAC Electrical and
	Motor Controls Lab2
MECH 241	/ENGS 314 Fluid Mechanics
HVAC 110	Plumbing
	17

### SEMESTER IV

ACHP 254	Domestic and Comm. Heating II	4
ACHP 264	Air Conditioning System Design	1
PHYS 122/1	33 College or University Physics II	3
PHYS 126/1	36 College or Univ. Physics Lab II	1
ACHP 201	Building Controls	3
GER 3	GER Elective Diversity	3
		15

\* Fulfills writing intensive requirement.

Student Learning Outcomes can be found at www.canton.edu/csoet/air\_cond.html.

# Additional Graduation Requirements

Students must have completed while at SUNY Canton, 12 credits of 200 level courses, including ACHP 264, contained in the current HVAC ET curriculum and earning a minimum GPA of 2.0 for all such credit hours taken while under the direct advisement of the program faculty.

# HVAC Trades-AOS

There's a growing demand nationwide for technicians specializing in heating, ventilation, air conditioning (HVAC) and refrigeration. Climate-control systems are becoming increasingly sophisticated, necessitating the need for advanced training.

Courses in the new major include hands-on labs specializing in the installation, troubleshooting and repair of HVAC systems, in addition to computers, motor controls, commercial refrigeration, and plumbing. It will also incorporate business and humanities courses to further prepare students for their professional careers.

With energy costs at their current level, this program leads to employment opportunities across the U.S. and around the globe. It also provides excellent preparation for entry into baccalaureate programs such as Sustainable Energy Technology or Industrial Technology Management at SUNY Canton. Students also pursue baccalaureate degrees at other institutions.

# Students In This Major:

- Communicate effectively and professionally in the building environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem solving methods.
- Be proficient and apply mathematics, fluid mechanics, thermodynamics, and principle of heat transfer to air conditioning designs.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for HVAC projects.
- Develop skills using specific codes, ASHRAE standards and handbooks.
- Demonstrate a thorough knowledge of HVAC components and how to use as a system to maintain design conditions.

# **CAREER OPPORTUNITIES:**

- Service Technicians
- HVAC Contractors
- Designers
- HVAC Sales
- Controls Specialists

# Recent Employers Of SUNY Canton Graduates:

- Day Automation Systems
- Prax Air, Inc.
- Central New York Trane
- Siemens
- Thomas Associates
- T.P. Woodside, Inc.
- Galson Engineering
- Bomac
- Hyde-Stone
- NEPCO
- GEMMA Power Systems

### ACCREDITATION:

 Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

### **Admission Requirements:**

- Refer to the table of high school course prerequisites for admission.
- Students must be qualified to enter Intermediate Algebra (MATH 106)

# **PROGRAM REQUIREMENTS:**

### (CURRICULUM 2953

SEMESTE	R I CREDITS
MATH 106	Intermediate Algebra3
ENGL 101	Composition and the Spoken Word
	(GER 1&2)3
HVAC 103	Hydronics
HVAC 104	Hydronics Lab2
CITA 110	Intro to Info. Technology1
CONS 151	Building Trades – Blueprint
	Reading & Drafting2
	16

### SEMESTER II

Refrigeration I2
Refrigeration I Lab
Forced Air Systems
Forced Air Systems Lab2
Plumbing
Liberal Arts Elective
15

### SEMESTER III

HVAC 201	HVAC Elec. and Motor Control	2
HVAC 202	HVAC Elec. Motor Controls Lab?	2
HVAC 205	HVAC Service and Repair	
	Coordination	3
	General Elective	3
	General Elective	3
	GER Elective 6	3
	$\overline{1}$	6

### SEMESTER IV

HVAC 203	Commercial Refrigeration2
HVAC 204	Commercial Refrigeration Lab II3
ACHP 105	Refrigeration SYSTEM Design2
AREA 210	Sustainable Building3
	GER Elective 3
	13

1 Mathematics level depends on previous preparation. Applied College Mathematics (MATH 101) is the minimum requirement. Math 106 Intermediately Graduation Requirements: Total Semester Credit Hours – G.P.A. 2.0 min.

### Student Learning Outcomes can be found at

www.canton.edu/csoet/hvac-aos/.

# Students In This Major:

- Enroll in one of the Schools: School of Business and Liberal Arts; Canino School of Engineering Technology; or School of Science, Health, and Criminal Justice.
- Develop a program consistent with a specific career objective.
- Have the opportunity to explore an unknown area.
- Benefit from the knowledge and skills obtained through life experiences.
- Earn an Associates in Applied Science after 60 credits hours.
- May transfer into baccalaureate degree programs.

# CAREER OPPORTUNITIES:

Employment options are unlimited, students while working closely with an academic advisor can design their own programs.

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Burke's Construction
- Fleet Bank
- Dine-A-Mate, Inc.
- Builders Square
- Corning, Inc.
- Claxton-Hepburn Medical Center
- Potsdam Stone and Concrete
- Morris Protective Services

# Admission Requirements:

- Student should be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must meet re-registration requirements.

# **TRANSFER OPPORTUNITIES:**

- SUNY Canton
- SUNY Potsdam, Plattsburgh, Oswego, Cortland, Geneseo, and Brockport
- State University Centers at Albany, Buffalo, and Binghamton
- Clarkson University
- Niagara University
- St. Lawrence University

# **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0688)

English/Humanities	6
Social Science	6
Natural Sciences and/or Mathematics	6
Applied Electives *	21
Liberal Arts Elective	3
General Electives	18
First Year Experience	1
*	61*

\*All students must take a writing intensive course.

Student Learning Outcomes can be found at www.canton.edu/business/individual.html.

# Liberal Arts and Sciences: General Studies–AA, AS

# Students In This Major:

- Develop a program consistent with a specific career objective or select a concentration from academic areas of humanities, social sciences or natural sciences.
- Prepare for careers in teaching, law, journalism, public administration, human services, finance, insurance, pharmacy, physical therapy, and other fields requiring an understanding of the human condition and the ability to communicate ideas.
- Graduate and continue study in such disciplines as English, education, art, drama, music, communication, economics, history, psychology, sociology, and anthropology.
- Complete all or the majority of the courses required in the first two years of a baccalaureate program in the natural and physical sciences.
- The Liberal Arts degree can be completed fully online, on campus, or a combination of both.
- Have the opportunity to cross-register at SUNY Potsdam, St. Lawrence University, and Clarkson University.
- Transfer to baccalaureate programs.

# CAREER OPPORTUNITIES:

Employment options are unlimited, since in consultation with the academic advisor, students can design their own programs.

# **TRANSFER OPPORTUNITIES:**

- 30 SUNY Canton Bachelor's Degree Programs: https://www.canton.edu/ academics/degrees.html
- SUNY Higher Education Institutions: https://explore.suny.edu/
- St. Lawrence University

- State University Centers at Albany, Buffalo, and Binghamton
- Clarkson University

### **Admission Requirements:**

• Prepared to take Composition & the Spoken Word (ENGL 101)

—NYS English Regents score  $\geq$  75; or

—Verbal SAT score  $\geq$  420; or

—Reading and Writing ACT scores  $\geq$  17; or

---Transfer student who has already passed a college-level English course.

• Prepared to take GER Math

—NYS Geometry Regents or Math A plus one year; or

—Already passed Intermediate Algebra or equivalent.

# **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0250)

AA DEGR	EE	CREDITS
ENGL 101	Composition & the Spo	ken Word3
FYEP 101	First Year Experience	1
Literature O	R Humanities GER 6	3
Humanities	Elective	3
The Arts OR	World Language (GER	8, 9 11)3
US History	OR World History (GER	. 9,10)3
Diversity: Ec	quity, Inclusion	
	& Social Justice (GER	3)3
Social Science	ce (GER 7)	3
GER Electiv	re 3	
Mathematics	s (GER 4) <sup>1</sup>	3
Natural Scie	nce (GER 5) <sup>2</sup>	4
Liberal Arts	Electives	15
General Elec	tives	15
The AA Degree Liberal Arts	ee requires minimum, 45 se	mester hours In
		$\overline{60-62^4}$

### AS DEGREE

ENGL 101	Composition & Spoken Word	3
FYEP 101	First Year Experience	1
Literature O	R Humanities GER 6	3
The Arts or	World Language (GER 8, 9 11)	3
US History	OR World History (GER 9,10)	3
Diversity: E	quity, Inclusion &	
	Social Justice (GER 3)	3

Social Science (GER 7)
Mathematics (GER 4) 1
Lab Science (GER 5) 24
Liberal Arts Electives
General Electives
The A.S. Degree requires minimum, 30 semester
hours in Liberal Arts

60-624

- <sup>1</sup> Minimum level Intermediate Algebra (MATH 106) or Survey of Math (MATH 111)
- <sup>2</sup> Science course must be a laboratory science.
- <sup>4</sup> Required: One writing intensive course in a liberal arts or science discipline
- Student Learning Outcomes can be found at www.canton.edu/business/libarts.html.

### Advisor Note:

- Transfer students: May transfer a 3 or 4 credit \*Lab Science or Science [GER 2]
- Option to waive \*\*FYEP 101

Graduates of Mechanical Engineering Technology (MET) work in a wide range of industries with a broad array of career opportu-nities. From manufacturing (CNC Machinist) and construction to equipment testing and power generation, employment opportuni-ties exist in CAD Design, product/system testing, quality improvement, and technical services support. The MET program is appro-priate for individuals who like hands-on experience, enjoy technology, and aspire to the challenge of experimentation and problem solving.

# STUDENTS IN THIS MAJOR:

- Practice and demonstrate hands on manufacturing skills related to machining, design and drafting, fluid power, mechanical design and electricity.
- Develop core skills in Science, Technology, Engineering and Mathematics to commence their career immediately upon graduation or to continue with the pursuit of a baccalaureate degree.
- Apply computer skills to design, interpret and analyze data, solve problems and prepare reports/presentations for professional communications.
- Apply the scientific and technical knowledge to design, test, troubleshoot and improve machines, tooling, processes and information flow that serve the manufacturing industry.

# **CAREER OPPORTUNITIES:**

Typical job titles in which our graduates are employed are:

- Mechanical Engineering Technician
- Engineering Assistant
- Computer-Aided Drafting
- Designer
- Quality Management Technician
- Lab Technician
- Instructional Assistant
- Field Service Technician
- CNC operator/programmer

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Corning, Inc.
- CIVES Steel Co.
- FilterTech
- Viking-Cives, USA
- Schneider Packaging
- TRC
- Gleason Works
- Bombardier, Inc.
- Novelis

### **PLACEMENT:**

• All graduates during the past five years have either started their careers or continued their education. Forty percent in industry, and sixty percent elected to continue their education with the pursuit of a baccalaureate degree.

# **TRANSFER OPPORTUNITIES:**

- SUNY Canton (Alternative and Renewable Energy Systems, Industrial Technology Management, Mechanical Engineering Technology)
- SUNY Utica/Rome
- Rochester Institute of Technology
- SUNY Alfred
- SUNY Buffalo

### Accreditation:

• Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

# **Admission Requirements:**

• Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

Students who do not meet the recommended high school math prerequisites may be admitted; students may be admitted into Mechanical Engineering Technology upon completion of this prerequisite.

### **PROGRAM REQUIREMENTS:** (CURRICULUM 0493)

### 

### SEMESTER II

MATH 161 Calculus I 4
ENGL 101 Composition & The Spoken Word 3
PHYS 122/132 College/University Physics II3
PHYS 126/136 Physics Lab 21
MECH 102 Parametric Modeling2
MECH 122 Introduction to 3D Printing1
Elective <sup>1</sup> 2
$\overline{16}$

### SEMESTER III

o Divido i D	
	Elective <sup>1</sup>
ENGS 201	Statics
MECH 261	MET Electricity4
MECH 241	/ ENGS 314 Fluid Mechanics / Fluid
	Mechanics I3
MECH 242	Fluid Power Lab1
	GER (6, 7, 8, 9, 10, 11) <sup>3</sup> 3
	17

### SEMESTER IV

OLIVILO I L	
ENGS 203	Engineering Strength of Materials3
ENGS 205	Material Science
MECH 221	MET Lab <sup>2</sup> 1
	Elective <sup>1</sup>
<b>MECH 303</b>	GD&T (Geometric Dimensioning
	and Tolerancing)2
	Diversity Elective
	15

<sup>1</sup> Program electives selected from ACHP, AREA, ENGS, CITA, CONS, ELEC, MATH, MECH, SOET designators and AUTO 104. If going into the 4-yr MET, take MATH 162 (Calculus II) and MECH 301/ENGS 202.

<sup>2</sup> Writing intensive course.

<sup>3</sup> GER elective – Must have GER (1/2, 3, 4, 5) and 20 total credits. Select one more from 6-11:

Student Learning Outcomes can be found at www.canton.edu/csoet/mech\_eng.html.

# STUDENTS IN THIS MAJOR:

- Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
- Minimize risk of harm to patients and providers through both system effectiveness and individual performance.
- Use information and technology to communicate, manage knowledge, mitigate error, and support decision-making.
- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context.
- Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.
- Advocate for clients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
- Recognize the client or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for client's preferences, values, and needs.
- Examine the evidence that underlies clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and communities.
- Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems
- Integrate best current evidence with clinical expertise and patient/family prefer-

ences and values for delivery of optimal health care.

# CAREER OUTLOOK:

- Nursing is the largest health care occupation.
- There is increasing diversity in nursing employment, and projections indicate large numbers of new jobs

# **CAREER OPPORTUNITIES:**

- Hospitals and outpatient clinics
- Long-term care facilities
- Community health agencies
- Schools
- Correctional Facilities
- Military Service

# **TRANSFER OPPORTUNITIES:**

 Graduates have a number of transfer options including: RN-MSN, RN-BSN, and BSN programs. Students may also elect to transfer into the SUNY Canton online RN-BS program.

# Accreditations:

- Registered by the NYS Education Department, Office of the Professions State Education Building-2nd Floor, Albany NY 12234, and phone: 518-474-3817.
- Accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road, Suite 1400, Atlanta, Georgia 30326, and phone: 404-975-5000.

### **Admission Requirements:**

Admission requirements can be found online at: www.canton.edu/sci\_health/nurs/ description.html

# **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0622)

SEMESTER I CREDITS NURS 101 Fundamentals of Nursing ......6

NURS 103	Pharmacology I1
	Nursing Seminar1
	Human Anatomy & Physiology I4
ENGL 101	Composition & the Spoken Word 3
	15

### SEMESTER II

NURS 104	Pharmacology II1
<b>NURS 106</b>	Maternal/Newborn Nursing4.5
NURS 107	Mental Health Nursing4.5
BIOL 218	Human Anatomy & Physiology II4
PSYC 101	Introduction to Psychology
	17

### SEMESTER III

NURS 200	Pharmacology III 1
NURS 201	Medical-Surgical Nursing I10
BIOL 209	Microbiology4
	Human Development OR
PSYC 220	Child Development**
	18

### SEMESTER IV

 NURS 202
 Medical-Surgical Nursing IV ......10

 NURS 203
 Profes. Issues & Trends in Nursing\*..1

 NURS 204
 Pharmacology IV ......11

### \* Fulfills writing intensive requirement.

\*\* co-requisite for NURS 201, Pre-requisite for NURS 202

Student Learning Outcomes can be found at www.canton.edu/sci\_health/nursing/.

–Enrolled students are required to purchase a standardized testing program. A tablet or laptop computer is required.

-CPR certification (Health Provider Status) is required prior to admission. Only American Heart Association CPR certification will be accepted.

Students will complete clinical experiences in hospitals, long-term care facilities, and community agencies throughout Northern New York. Clinical hours may include day, evenings, and weekends. The college does not provide transportation to clinical.

-The New York State Education Department, Office of the Professions requires persons applying for licensure to answer questions related to criminal convictions and/or professional misconduct.

–Once enrolled in Fundamentals of Nursing (NURS 101), students must complete this Nursing program within 2 years. For extraordinary situations, permission to complete beyond four years must be granted by the Dean of the School of Science, Health, and Criminal Justice in consultation with the Nursing Department Director.

-Of the five clinical nursing courses (NURS 101, 106, 107, 201, and 202) only one course may be repeated one time.

–A grade of C+ or better is required for successful completion of all nursing courses (NURS),, and a grade of C or better is required for all co-requisite courses.

-Successful completion of all corequisite courses and a semester GPA of 2.0 or better is required to continue in the program.

**Residency Requirement:** Students must complete SUNY Canton's NURS 201, 202, 203, and 204 in order to meet the program's residency requirements.

# Students In this Major:

- Assist the Physical Therapist in implementing a plan of care, utilizing various physical therapy interventions to promote healing and restore function.
- Develop professional behaviors required to be an effective member of the health-care team.
- Are eligible to take the National Physical Therapy Examination for the Physical Therapist Assistant after graduation.

# CAREER OPPORTUNITIES:

• PTA's work in hospitals, nursing homes, rehabilitative centers, certified home health care agencies, private practices, and schools.

# CAREER OUTLOOK

- According to the 2022 Occupational Outlook Handbook, employment for PTA's is projected to grow 24% between 2021-2031.
- PTA ranked in the top 10 of jobs in high demand that don't require a bachelor's degree. (Smith 2021, cnbc.com)

# **TRANSFER OPPORTUNITIES:**

 Students can continue their studies in the Health and Fitness Promotion B. Tech program. The B. Tech program may assist students in meeting admissions requirements for a graduate or doctoral degree program or to enhance employment opportunities in the health and fitness field.

# Accreditation:

The PTA program at SUNY Canton is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org.

# **Admission Requirements:**

The Physical Therapist Assistant Program is a selective admissions program. Admission requirements and details of the admissions process can be found online at www.canton.edu/sci\_health/pta/

# PROGRAM REQUIREMENTS:

(CURRIC	ULUM 0489)
SEMESTE	ER I CREDITS
PHTA 100	Intro. to Physical Therapy2
PHTA 101	Fund PT Skills & Modalities4
BIOL 217	Human Anatomy & Physiology I4
ENGL 101	Composition and the Spoken Word3
PSYC 101	Introductory Psychology <u>3</u>
SEMESTE	10
PHTA 102	
PHTA 102	Musculoskeletal Pathologies4
PHTA 105	Musculoskeletal Assessment
1111/110)	Techniques1
BIOL 218	Human Anatomy & Physiology II4
PSYC 225	Human Development3
PHTA 104	Clinical I (summer) <u>4</u>
SEMESTE	
PHTA 203	
PHTA 205 PHTA 204	Cardiopulmonary & Integumentary
1111A 204	Pathologies
PHTA 205	Neuromuscular Pathologies4
PHTA 206	Advanced PT Modalities2
	Liberal Arts Elective3
	$\overline{15}$
SEMESTE	
PHTA 207	
PHTA 209	** Clinical III6
PHTA 210	PTA Seminar II
* 17 17 11	

- \* Fulfills writing intensive requirement.
- \*\* Students must be prepared to work 40 hours per week and are responsible for their own transportation, meals, and housing as needed.
- Student Learning Outcomes can be found at www.canton.edu/sci\_health/pta/.
- —CPR certification (Health Provider Status) is required by the end of the first semester.
- —Students may be required to submit to a drug screen and/or a criminal background check as part of clinical education requirements.
- -To progress in the PTA curriculum a minimal grade of C in BIOL 217 & BIOL 218 and C+ in all curriculum courses prefixed with PHTA must be achieved.
- —Of all PHTA prefixed courses, only one course may be repeated one time.
- -The NYS Education Department Office of the

Professions requires persons applying for licensure to answer questions related to conviction of a crime or professional misconduct.

**Residency Requirement:** Students must be matriculated in the curriculum for at least 15 hours of graded coursework. At least 12 of these credits must be prefixed with PHTA. The Program Director will determine the 12 credit requirement following a review of the student's academic transcript

# Students In This Major:

- Work with companion animals, farm animals and common laboratory animals.
- Gain hands-on experience in small laboratory sections.
- Will be eligible to take the Veterinary Technician National Licensing Examination (VTNE) upon graduation.
- Will be eligible to take the certification examination of the American Association of Laboratory Animal Science after six months of laboratory employment.
- Perform two 120 hour Preceptorships

# CAREER OPPORTUNITIES:

Veterinary technicians provide professional technical support to veterinarians, biomedical researchers, and other animal care specialists. Technicians may work in:

- Clinical Practice
- Animal Shelters
- Diagnostic Laboratories
- Educational Institutions
- Pharmaceutical and Research Industry
- Veterinary Supply and Equipment Sales
- Zoo/Wildlife Medicine
- State and Federal Agencies
- Farms & Stables

# CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields."
- At the present time, there is a serious shortage of veterinary technicians throughout the country.

# **TRANSFER OPPORTUNITIES:**

- Articulation agreement with Cornell College of Agriculture and Life Sciences undergraduate program in Animal Science for any student graduating with a 3.0 average and possessing the required prerequisite courses.
- Articulation agreement with Mercy College.
- SUNY Canton (Veterinary Services Administration, BBA)

# TIME TO COMPLETE THE PROGRAM:

Once enrolled in Fundamental Veterinary Nursing Skills I (VSCT 101), students must complete the Veterinary Science program within four years. For extraordinary situations, permission to complete the Veterinary Science program beyond four years may be granted by the Dean of the School of Science, Health and Criminal Justice in consultation with the Veterinary Science Program Director.

### Accreditation:

 Full Accreditation—AVMA, 1931 N Meacham Rd., Suite 100, Schaumburg, IL 60173-4360. 847-925-8070

### Admission Requirements:

Admission is selective and based on academic credentials. To be considered for admission, please refer to the requirements posted on our webpage at: www.canton.edu/ sci\_health/vet/description.html

The pre-exposure rabies vaccine is required in the program. This is administered in a series of two vaccinations and must be completed during or prior to the semester the student is enrolled in VSCT 101

# **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0521)

SEMESTE	R I CREDITS
VSCT 101	Fundamental Vet. Nursing Skills I2
VSCT 103	Intro. to Animal Agriculture2
BIOL 150	College Biology I4
CHEM 150	College Chemistry I4
ENGL 101	Expository Writing OR
ENGL 101	Composition & the Spoken Word3
FYEP 101	First Year Experience <u>1</u>
	16

### SEMESTER II

VSCT 104	Veterinary Office Practices1
VSCT 112	Veterinary Clinical Pathology I3
VSCT 114	Animal Anatomy & Physiology3
VSCT 115	Fundamental Vet. Nursing Skills II2
VSCT 212	Research Animal Techniques1
VSCT 201	Veterinary Technology
	Preceptorship I1

BIOL 209	Microbiology4
	Liberal Arts Elective
	(GER 1, 4, 5, 6, 7, 8, 9) <u>3</u>
	18

### SEMESTER III

VSCT 202	Veterinary Clinical Pathology II3
VSCT 203	Small Animal Medicine & Therapeu-
	tic Techniques3
VSCT 204	Large Animal Medicine & Therapeu-
	tic Techniques2
VSCT 205	Radiographic Techniques2
VSCT 206	Anesthetic Principles
VSCT 207	Health & Disease of Farm Animals3
VSCT 209	Veterinary Technology
	Preceptorship II1
	17
SEMESTE	ER IV
VSCT 210	Veterinary Microbiology3

OLIVILO I I		
VSCT 210	Veterinary Microbiology	3
VSCT 211	Animal Hospital Practices and	
	Procedures *	3
VSCT 213	Practical Nutrition	2
VSCT 214	Veterinary Pharmacology	2
PSYC 101	Introductory Psychology	3
		13

\* Fulfills writing intensive requirement.

 Of the courses with the VSCT prefix, any course may only be repeated one time.

-Students are required to earn a C or better in all specified curriculum courses prefixed with VSCT in order to progress in the program.

-The NYS Education Department Office of the Professions requires persons applying for licensure to answer questions related to a conviction of a crime or professional misconduct.

Student Learning Outcomes can be found at www.canton.edu/sci\_health/vet\_tech/.

**Residency Requirement:** In order to graduate from the Veterinary Science Technology program, students must successfully complete SUNY Canton's VSCT 211 and at least 9 other hours of graded course work with a VSCT prefix in order to fulfill the residency requirement.

# Electrical Construction & Maintenance–Certificate

The Electrical Construction & Maintenance (EC & M) program prepares students to work in building trades with the installation and testing of electrical power distribution and an emphasis placed on residential construction applications. Students are also introduced to commercial applications and building codes. At the successful completion of this one-year program, students will earn the EC&M certificate.

# Students In This Certificate Program:

- Install wiring systems and equipment in buildings.
- Connect electrical devices in accordance with the NEC (National Electrical Code).
- Perform routine maintenance on motors and transformers.
- Install motor control circuits.

# **CAREER OPPORTUNITIES:**

- Electrical Apprentice
- Electrician
- Plant Maintenance Technician
- Electrical Supply Counter Person and Sales Support Person
- Electrical/Electronic Assembly
- Security Systems Sales and Service Representative
- Power Corporation Service Representative
- Entrepreneurship

# CAREER OUTLOOK:

• The construction industry continues to exhibit a demand for skilled electrical technicians.

# Recent Employers Of SUNY Canton Graduates:

- International Brotherhood of Electrical Workers
- Niagara Mohawk Power Corporation
- Novelis
- Smith Building Supply
- NYSEG
- S & L Electric

# **TRANSFER OPPORTUNITIES:**

- Approximately 50% of EC&M graduates choose to pursue further education full time at:
- SUNY Canton—AAS degree programs and other certificate programs
- Rochester Institute of Technology
- SUNY Utica/Rome, Oswego

Students completing two one-year Certificate programs in the Canino School of Engineering Technology can graduate with two Certificates and an Associate in Applied Science degree by completing the requirements of the Individual Studies (Eng) AAS program while pursuing the second technical certificate.

# **Admission Requirements:**

• Students are expected to have demonstrated academic success in high school and/or prior college experience.

# **PROGRAM REQUIREMENTS:**

### (CURRICULUM 0955)

SEMESTE	R I CREDITS
CONS 112	Wood Structures3
ECMR 101	Electricity for Trades
ECMR 103	Electricity for Trades Lab4
MATH 101	*Applied College Mathematics
	or higher 4
ECMR 175	Photovoltaic Solar Installers

17

### SEMESTER II

ECMR 102	Electricity for Trades II3
ECMR 104	Electricity for Trades II Lab4
ENGL	English (Writing)3
ECMR 173	Intro to National Electrical Code3
	Math/Science/Technical Elective**3
	16

\*Mathematics levels depend on previous preparation. (MATH 101) is the minimum requirement, (MATH 106 Intermediate Algebra may be substituted). Those graduates who show sufficient interest and aptitude may qualify for entry into one of the associate degree programs.

\*\*Approved by advisor, prerequisites must be satisfied, selected from any of the following designators: ACHP, AREA, BIOL, CHEM, CITA, CONS, ELEC, ENGS, ESCI, MATH, MECH, MFGT, MINS, PHSC, PHYS, SOET, or TMMA.

Graduation Requirements: Total Semester Credit Hours - 33. Graduates must complete all courses listed above and earn a cumulative index of at least 1.75.

Student Learning Outcomes can be found at www. canton.edu/csoet/ecm.html.

Those graduates who show sufficient interest and aptitude may qualify for entry into one of the associate degree programs.

Gainful Employment information is available at: www.canton.edu/academics/ge/ecm.html

# Students In This Certificate Program:

- Demonstrate appropriate care to clients with stable and predictable conditions.
- Understand client disorders and nursing care utilizing current evidence based practice.
- Demonstrate developmentally appropriate, respectful and effective therapeutic communication skills.
- Identify clinical scenarios and situations that fall outside of the PN scope of practice.
- Demonstrate, proper technique with nursing skills, use of client care equipment and technology in a cost effective manner.
- Comprehend client environmental factors, family support, and resources that may affect a client's health status.
- Demonstrate accountability for legal, ethical, and regulatory parameters within the scope of practice of the practical nurse.
- Operate effectively within multidisciplinary teams, fostering open communication, mutual respect, and shared decision-making to provide comprehensive client centered care.
- Collect data and health histories for individuals using standardized tools in an organized pattern, thereby contributing to nursing care plan.
- Demonstrate caring behaviors toward clients and his/her significant others, thereby assisting coping with stressful events and changes in health status.
- Implement standardized teaching tools to promote and maintain health and to reduce risks for clients experiencing common altered health states in the hospital and extended care facilities.
- Observe, reflect, and participate in selfperformance and peer-to-peer teaching.

# **CAREER OPPORTUNITIES:**

- Acute care
- Long-term care
- Clinic settings
- Physician Offices
- Hospice
- Community Health
- Mental Health

### **TRANSFER OPPORTUNITIES:**

• Graduates of the Practical Nursing program are able to transfer into an associates degree or baccalaureate degree nursing programs.

# **ACCREDITATIONS:**

- Registered by the NYS Education Department, Office of the Professions State Education Building-2nd Floor, Albany NY 12234, and phone: 518-474-3817.
- Accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road, Suite 1400, Atlanta, Georgia 30326, and phone: 404-975-5000.

### **Admission Requirements:**

Admission requirements can be found online at: www.canton.edu/sci\_health/ practical-reqs.html

# **PROGRAM REQUIREMENTS:**

(CURRICULUM 0938)			
SEMESTE	ER I CREDITS		
LPNC 100	Drug Dosage Calc. & Pharm3		
LPNC 101	PN Fundamentals8		
BIOL 217	Human Anatomy & Physiology I4		
ENGL 101	Composition & Spoken Word3		
	18		
SEMESTER II			
LPNC 102	PN Specialty Populations3		
LPNC 103	PN Medical-Surgical 8		
BIOL 218	Human Anatomy & Physiology II4		
PSYC 101	Introduction to Psychology3		
	18		

- -Students must complete all LPNC courses with a minimal grade of C+ in order to graduate and corequisite courses with a grade of C or better.
- -GPA of 2.0 or better is required to continue in the program.
- -Of the two clinical practical nursing courses (LPNC 101, LPNC 103), only one may be repeated one time.
- -Students will complete clinical experiences in hospitals, long-term care facilities, and community agencies throughout Northern New York. Clinical hours may include day, evening, and weekend hours. The college does not provide transportation to clinical sites.
- Residency Requirements: Students must complete SUNY Canton's LPNC 102 and LPNC 103 in order to complete the program residency requirements.
- –Enrolled students are required to purchase a standardized testing program. A tablet or laptop computer is required.
- -CPR certification (Health Provider Status) is required prior to admission and throughout the program.

Gainful Employment information is available at: www.canton.edu/academics/ge/pn.html

A minor is a course sequence within an area of study providing a degree of specialization within that area, a specialty within a discipline, or a specialty integrating several disciplines. Minors will contain a balance of introductory and advanced coursework. Minors are designed to be completed within the same time frame allowed for the completion of the baccalaureate degree. A minor must be declared while the student has at least 45 credit hours left to enroll in before qualifying for graduation. After matriculating in a program, students wishing to obtain a minor shall contact the coordinator of the minor to initiate the process. A minor will consist of a minimum of 18 credit hours, at least 9 of which will be upper division courses; a minimum of 12 credit hours of a minor must be completed in courses offered at SUNY Canton. At least 9 credit hours must not be required courses in the student's major program. major, students may be permitted to postpone their graduation if they wish to take extra course(s) to earn their minor. <u>IMPORTANT!</u> Before making that decision however, it is <u>strongly recommended</u> that students consult with a Financial Aid and/or Student Accounts Counselor.

### ACADEMIC MINOR IN A BACCALAUREATE DEGREE

A minor must be declared while the student has at least 45 credit hours left to enroll in before qualifying for graduation.

### ACADEMIC MINOR IN AN ASSOCIATE DEGREE

A minor must be declared while the student has at least 15 credit hours left to enroll in before qualifying for graduation.

### ACCOUNTING

The Accounting Minor adds to the skillset and marketability of students preparing the enter the worlds of business and management. Accounting Minors advance their foundational accounting acumen by completing three required accounting courses (ACCT 300, ACCT 302, & ACCT 306) and three accounting electives that reflect their respective areas of interest. The Minor is available to any matriculated SUNY Canton student. Many students choose to pair enrollment in the Accounting Minor with enrollment in the Management, Finance, Legal Studies, or Health Care Management Program.

MINOR R	REQUIREMENTS	CREDITS
ACCT 300	Intermediate Accounting	I3
ACCT 302	Intermediate Accounting	II3
ACCT 306	Cost Accounting	3
SELECT THREE COURSES		

ACCT 242	Accounting for Government and
	Nonprofit Organizations3
ACCT 310	Accounting Information Systems3
ACCT 335	Individual Taxation3
ACCT 430	Auditing
ACCT 440	Advanced Financial Accounting3
BSAD 305	Public Budgeting and Fiscal Mgmt3
BSAD 365	Financial Statement Analysis3

# Aging in Society

People are living longer, and the number of older persons is increasing. These trends are evident in American society, as well as in many developed countries around the world. In the U.S., life expectancy has increased, from approximately 45 years of age in 1900 to more than 75 years now. At the beginning of the 21st century, one in eight people in the U.S. was over 65. And the age group growing fastest in our society and in many other countries is the "very old," people aged 85 and over.

This growth in our elderly population will continue into the future. By the middle of the 21st century, one in five Americans will be over 65, and there will be 15 to 18 million persons over the age of 85. These growth trends will result in a demand for both citizens and professionals with knowledge and expertise in the subject of aging. The area of Social Gerontology will offer expanded career opportunities for the disciplines and professions who will serve our older population (The Association for Gerontology in Higher Education, 2014).

MINOR REQUIREMENTSCREDITSHLTH 104 Introduction to Gerontology			
SELECT FOUR COURSES			
Only one additional 100 level course can			
be chosen; three must be upper level- 300			
or above			
FSAD 307 Human Responses to Death3			
HEFI 202 Health and Wellness Across the			
Lifespan3			
HLTH 103 Health Current Perspectives and			
Practical Applications3			
HLTH 212 Happiness, Health and Wellbeing3			
GRST 201 Introduction to Gender Studies			
HUSV 201 Introduction to Human Services3			
PSYC 225 Human Development			
SOCI 105 American Social Problems			
SOCI 210 Sociology of the Family3			
SOCI 313 Women and Ageing			
SOCI 320 Sociology of Health, Illness and			
Health Care3			
SOCI 330 Sociology of Gendered Lives3			

SSCI 315 Death, Dying and Bereavement......3

# Applied Physics

Psychology is the science of behavior and mental processes, and its applications are relevant to many different fields of study. The Minor in Applied Psychology is designed to complement the training and education students receive in their respective academic majors, particularly in terms of describing, predicting, understanding, and explaining human behavior. The minor is organized so that students have a choice regarding the content that is most applicable to their own interests (and major). The requirements are 18 credit hours, from the following designations:

MINOR I	REQUIREMENTS	CREDITS
PHYS 121	College Physics I OR	
PHYS 131	University Physics I	4
PHYS 122	College Physics II OR	
PHYS 132	University Physics II	4
PHYS 202	Modern Physics	3
PHYS 301	Introduction to Photon	ics3
SELECT TWO COURSES		

PHYS 330	Intro to Classical Mechanics3
PHYS 340	Electromagnetism
	Solid State Science
PHYS 420	Intro to Quantum Mechanics3
AREA 320	Experimentation and Measurement I3
MECH 342	Thermodynamics

# Applied Psychology

Psychology is the study of the mind and behavior. As a science and profession, psychology is relevant to any major that

involves understanding, helping, communicating, and working with others, including (but not limited to) Nursing, Criminal Justice, Health and Fitness Promotion, Homeland Security, Sports Management, Legal Studies, Management, and Health Care Management.

The purpose of the Minor in Applied Psychology is to provide students pursuing other academic majors with the opportunity to: (1) broaden their understanding of psychological principles, theories, and methods; and (2) apply this understanding to their future career path. In particular, the focus of this minor is on socio-developmental processes and applications to real life and career settings.

### MINOR REQUIREMENTS CREDITS

PSYC 101 Introduction to Psychology......3

### SELECT TWO LOWER LEVEL COURSES:

PSYC 225	Human Development	3
PSYC 275	Abnormal Psychology	3
ABAP 245	Introduction to Applied Behavior	
	Analysis	3
HUSV 201	Introduction to Human Services	3
	HREE UPPER LEVEL COURSES	
$DSVC^{2}\Omega\Omega$	Cultural Parchology	- 2

PSYC 300	Cultural Psychology3	5
PSYC 308	Personality & Individual	
	Differences	5
PSYC 315	Crisis Intervention	5
PSYC 340	Social Psychology	5
PSYC 406	Workplace Psychology	5
PSYC 420	Counseling Skills & Procedures3	5
HEFI/PSYC	320 Psychology of Health and	
	Fitness	5
HUSV 305	Professional and Ethical	
	D (1)1.1	,
	Responsibilities	)
HUSV 315	Mental Health Practice	
HUSV 315 JUST 331	-	
	Mental Health Practice	3
	Mental Health Practice3 Profiling and Behavioral Criminology3	3
JUST 331	Mental Health Practice	3

# CHEMISTRY

A minor in chemistry offers students a chance to enhance their knowledge of the key principles of chemistry, such as inorganic, organic, and biological chemistry. This minor offers a strong complement to disciplines such as Veterinary Technology BS and Health and Fitness Promotion B. Tech, and is suited to students who are interested in pursuing graduate programs in science, engineering, medicine, or pharmacology.

MINOR R	EQUIREMENTS	CREDITS
CHEM 150	College Chemistry I	4
CHEM 155	College Chemistry II	4
	Organic Chemistry I	
	Organic Chemistry II	
CHEM 430	Biochemistry	3

# Corrections

The corrections minor provides an overview of interworking's of the corrections system, including challenges and opportunities present within both institutional corrections and community-based correctional environments. This minor is suited for students interested in preparing for career opportunities with the criminal justice system. Courses within this minor focus on understanding the care, custody and control aspects of working with offenders involved in the criminal justice system.

#### MINOR REQUIREMENTS **CREDITS** SELECT ONE COURSE: JUST 341 Corrections Management and Administration ......3 JUST 311 JUST 313 **JUST 322** Gender and the CJ System......3 JUST 340 **IUST 341** Corrections Manag & Admin ......3 JUST 349 Vulnerable Populations in CJ......3 **JUST 431** Culminating Exp in Corrections......3

### CRIMINOLOGY

This minor will provide students with an opportunity to further examine the relationship between victims, offenders and community members-at-large. An interdisciplinary approach is utilized to allow students the ability to examine this broad topic from the perspective of literature, psychology, and history while furthering theoretical studies in the field of criminal justice.

MINOR F	REQUIREMENTS	CREDITS
JUST 310	Causes of Crime	3

121

### 

JUST 316	Sex Offenders
JUST 324	Serial Murderers and Their Victims3
JUST 331	Profiling and Behavioral
	Criminology3
JUST 347	Research Methods in Criminology
	and CJ3
JUST 349	Vulnerable Populations in CJ3
JUST 350	Victimization
ENGL 305	Perpetrators and Their Victims3
ENGL 306	Irish Prison Literature
PSYC 275	Abnormal Psychology3

# Criminal Justice Administration

The Criminal Justice Administration minor provides an opportunity for students to acquire a general knowledge of the administrative duties within the Criminal Justice System. This minor is a blend of foundational courses in the areas of business, math and criminal justice; along with supplementing with upper level program electives which will enhance the student's understanding and ability better prepare them for supervisory positions in the field of criminal justice.

MINOR REQUIREMENTS	CREDITS
MATHIA (1 Contesting	2

WI/111 141	Statistics
JUST 314	Ethics in CJ3

### SELECT THREE COURSES

Students must choose three for a total of nine credit hours.

Managing Law Enforcement
Training3
Managing Patrol Functions3
Criminal Justice Agency Mgmt3
Civil Liability for the CJ
Administrator3
Constitutional Law3
Corrections Manag & Admin3
Criminal Justice Technology3
Current Issues in LE

### CYBERSECURITY

The Cybersecurity minor program will equip students with the necessary skills to pursue a career with additional Cybersecurity knowledge/skills needed in various industries. For example, healthcare records represent an extremely attractive target for cyber criminals, containing as they do various bits of sensitive information like Social Security numbers all in one place.

The challenge for professionals working in the healthcare industry is that they just improve data protection without impeding healthcare professionals' speedy access to potentially life-saving patient information.

### SELECT ONE COURSE

### SELECT ONE COURSE

Students must choose one for a total of three credit hours.

CYBR 354	Incident Response and Disaster
	Recovery
CYBR 356	Cryptology in Theory and Practice3
CITA 440	Network Management AND3
CITA 441	Network Management Lab1

# Early Childhood Studies

The Minor in Early Childhood Studies offers a broad course of study in early childhood history, theory, child development, teaching, programming, and the importance of high quality early care and education experiences, with a focus on children from infancy to age five. Students can select specific courses based on their area of interest.

Students will complete 18 credits. Nine credits must be upper level [300 or 400] courses.

### SELECT FOUR COURSES

Student must complete 4 courses from those listed below; 3 courses must be 300 or 400-level courses.

ECHD 121	Wellness in Young Children: Promot-
	ing Health, Safety, and Nutrition3
ECHD 131	Infants and Toddlers3
ECHD 250	Children with Special Needs3
ECHD 285	Issues and Policies in Early Care and
	Education3
EDUC 210	Principles of Education3
PSYC 220	Child Development OR
PSYC 225	Human Development3
ECHD 301	Fostering Relationships in Early
	Childhood Programs3
ECHD 340	Policies and Regulations in Early
	Childhood Settings3
ECHD 401	DAP Learning Environments,
	Infants - Age 53
ECHD 402	Early Literacy and Language Develop-
	ment3
ECHD 404	Positive Child Guidance3
BSAD 340	Management Communications3
HIST 375	History of Childhood and Youth in
	the United States3

# **ECONOMICS**

The Economics minor is applicable to all students who would like to broaden their knowledge of economics. It is a common minor for students majoring in business, management and finance. It provides students with analytical and problem-solving skills in applied economics fields such as economic development, economics of crime, environmental economics, financial economics, global economy, health economics, labor economics, managerial economics, public economics, and other areas. Six courses (18 credits) must include ECON 101, ECON 103, ECON 314, and ECON 315.

MINOR R	EQUIREMENTS	CREDITS
ECON 101	Principles of Macroecor	nomics3
ECON 103	Principles of Microecon	iomics3
ECON 314	Managerial Economics.	3
ECON 315	Global Economy	3

### SELECT TWO COURSES

Any course with an ECON (and FSMA/ ECON 330) designation may be used as an optional course in the minor. For students not in Finance, Principles of Banking and/ or Global Finance, may be used as optional course(s) in the minor. At least one optional course must be at the upper level.

# Environmental Technology

As global awareness of environmental issues increases, the environmental sector has emerged as a leading discipline in the science and engineering fields. As the environmental market continues to grow, so does the demand for trained environmental engineers, environmental engineering technicians, and environmental scientists. The Environmental Technology minor is designed for students in complimentary disciplines to diversify their background, providing them with knowledge and skills in areas related to air, water, and soil. A minor in Environmental Technology provides students with a more in-depth understanding of environmental related standards and regulations, resource management, water and soil resources, characterization and treatment of water and soil, and field/lab techniques. The Environmental Technology minor provides a way for students to formally demonstrate competency in these areas and will make them competitive and highly sought after in today's market.

### MINOR REQUIREMENTS:

A minimum of 19 credit hours is needed to complete the minor in Environmental Technology as follows:

CORE RE	QUIREMENTS	CREDITS
CONS 285	Engineering Geology	OR
ESCI 107	Earth Science OR	4
GEOL 103*	Physical Geology	3

### ELECTIVE COURSES

CONS 101	Elementary Surveying4
	Soil Mechanics
CONS 350	Intro to GIS OR
GEOL 340*	Geographic Information Systems 4
CONS 385	Hydrology and Hydrogeology4
CONS 386	Water Quality4
CONS 387	Water and Wastewater Treatment3
CONS 388	Environmental Law2
CONS 485	Solid Waste Management3
CONS 486	Soil and Groundwater Remediation3
CONS 487	Water Resources, Management, and
	Design

Future courses developed by SUNY Canton's Civil and Environmental Technology program or other related courses - will require approval by minor coordinator at SUNY Canton

\*Course offered at SUNY Potsdam, through the Department of Geology

# Finance

The Finance minor will complement the skills the student gains in his or her major discipline by providing a study of financial theory and practice associated with the allocation of financial resources in a business environment. This minor shall consist of a minor of 18 credit hours, at least half of which shall be upper division courses. A minimum of 12 credit hours of the minor must be completed in courses offered at SUNY Canton. At least 9 credit hours must not be required courses in the student's major program.

### MINOR REOUIREMENTS CREDITS

	agomanner	01022110
ACCT 101	Foundations of Financial	Acct3
FSMA 210	Introduction to Finance.	3
FSMA 312	Financial Management	3
FSMA 315	Global Investment	3

### SELECT TWO ELECTIVES

(one elective must be a 400 upper level course)		
BSAD 120	Principles of Banking3	
ECON 314	Managerial Economics3	
BSAD 315	Financial Statement Analysis3	
ECON 315	Global Economy3	
FSMA 325	Financial Compliance and	
	Regulations3	
FSMA 415	Global Finance	
FSMA 420	Financial Derivatives3	
FSMA 422	Risk Management3	

# FORENSIC SCIENCE

The Forensic Science minor provides an opportunity for students to delve further into the field while still completing a degree in their primary area of interest. The Forensic Science minor is a blend of applied courses providing the student with an overview of the various disciplines, including forensic chemistry, fingerprints, questioned documents, taphonomy, and the autopsy process.

MINOR R	EQUIREMENTS	CREDITS
JUST 210	Introduction to Forensic	

Investigations	3
CHEM 100/101 Introduction to Chemistry	OR
CHEM107/108 Forensic Chemistry	4

### SELECT FOUR COURSES

JUST 300	Forensic Photography3
JUST 301	Latent Prints and Impressions
JUST 320	Medicolegal Investigation of Death3

JUST330	Questioned Documents
JUST 353	Criminal Justice Technology3
CYBR 365	Digital Forensics
JUST370	Forensic Taphonomy3
JUST410	Clandestine Graves
JUST 411	Forensic Drug Analysis & ID3
JUST 412	Firearms & Toolmark ID3
JUST 426	Ethics in Forensic Science

# FRAUD EXAMINATION

The Fraud Examination Minor is attractive to students who wish to pursue a career in civil or criminal fraud investigation and white-collar crime investigations in the public or private sector. This minor provides students, particularly those in baccalaureate degree programs in Management, Finance, Legal Studies, Criminal Investigations and Criminal Justice: Law Enforcement Leadership, an opportunity to develop a degree concentration in fraud examination. A minimum of 12 credit hours of the minor must be completed in courses offered at SUNY Canton. At least 9 credit hours must not be required courses in the student's major program.

### MINOR REQUIREMENTS:

	CREDITS		
ACCT 245	Forensic Accounting3		
JUST 110	Criminal Law		
JUST 485	Fraud Exam. and Investigation3		
SELECT THREE COURSES:			

ACCT 430	Auditing
BSAD 319	Professional Ethics OR
JUST 314	Ethics in Criminal Justice
ECON 305	Economics of Crime
FSMA 312	Financial Management 3
FSMA 325	Financial Compliance and Reg3
JUST 303	Investigative Interviews

# Gender Studies

The Gender Studies Minor is committed to broadening women's and men's knowledge and awareness of issues concerning or related to gender. From an interdisciplinary approach, the minor provides a variety of courses that emphasize the gender experience from both national and global perspectives.

### MINOR REQUIREMENTS CREDITS

SELECT FIVE COURSES (Three must be Upper Level -300 or higher) ENGL 267 Masculinity Studies in American Literature & Culture......3 ENGL 304 LGBTQ Lives and Literature......3 ENGL 340 American Women Writers ......3 HIST 204 U.S. Immigration History: Race, Class and Gender.....3 HIST 304 SOCI 210 Sociology of the Family ......3 SOCI 300 SOCI 305 Gender in the Media ......3 SOCI 313 SOCI 330 Sociology of Gendered Lives......3

# Graphic and Multimedia Design

Students looking to enter the fields of news reporting, journalism and engineering can obtain additional skills in design, photo, and video that will enhance their marketability to prospective employers. Graphic and Multimedia Design minor students will have the opportunity to learn design and layout in the Adobe Suite of software including Photoshop, Illustrator and InDesign, as well as video production and web design and development.

MINO	R REQUIREMENTS	CREDITS
GMMD	102Intro to Design	3
	201 Digital Photography	
GMMD	302 Professional Photography	3
GMMD	331 Digital Illustration and T	ypography3

### SELECT ONE ELECTIVE

GMMD 10	I Intro to Media Studies	3
GMMD 21	1 Film Analysis	3
	Web Design and Development.	
GMMD 41	l Digital Documentary Video	3
ARTS 301	Digital Storyboarding	3

\*A given course may be used as either required or elective course, but not both.

# Healthcare Management

The Health Care Management minor is available to any SUNY Canton student interested a learning more about managing healthcare organizations. The minor allows

students to explore the current financial, legal, and man-agement issues modern healthcare organizations face.

MINOR R	EQUIREMENTS CREDITS		
BSAD 310	Human Resource Management3		
HSMB 101	Intro to Health Services Mgmt3		
HSMB 301	Public Health Issues		
HSMB 307	Health Care Facility Administration .3		
SELECT TWO COURSES			
HSMB 302	Legal & Ethical Issues in Health Care 3		
HSMB 305	Managed Care		
	Health Care Financing		

# History

The Minor in History offers a broad course of study in Europe, American, and World History. Students can select specific course based on their area of interest. Students will complete a minimum of 18 credits, with at least one course from each of the three areas and at minimum, two upper level [300 or 400] courses from those listed below.

\* 9 credits of minor coursework must be at the upper-division level

at the upper-division level		
	Europe	
HIST 101	History of Europe to 18153	
HIST 102	History of Europe since 18153	
HIST 310	European City in Industrial Age3	
HIST 315	Children, Youth, and Revolution in	
	20thCentury Europe3	
HIST 320	Twentieth Century Europe3	
	United States	
HIST 103	US History to 18653	
HIST 105	US History since 18653	
HIST 303	Colonial American History3	
HIST 304	US Women's History3	
HIST 305	History of the Vietnam War3	
HIST 306	US Immigration History3	
HIST 307	American Thought since 18653	
HIST 309	African American History3	
HIST 375	History of Childhood and Youth in	
	the United States3	
World		
HIST 106	World History to 15003	
HIST 107	World History since 15003	

# Homeland Security

The Homeland Security Minor is most appropriate for students in public safety disciplines wishing to enhance their credentials in this important and growing area of study. Students in health, engineering technologies, legal studies, or business may also benefit from this minor. The course of study provides a survey of the issues in Homeland Security through the lens of the history of terrorism with applied courses supporting theoretical study in the discipline. While the focus of study is the responsibility of law enforcement in Homeland Security, other disciplines will find the topics interesting and timely.

### MINOR REQUIREMENTS CREDITS

JUST 230	Fundamentals of HS	3
JUST 326	Threats to Homeland Sec	3
SELECT F	OUR ELECTIVES	
JUST 355	Public Safety Critical Incident	
	Response	3
JUST 375	Methods of Terrorism Through the	
	Ages	3
JUST 380	Civil Liberties & Homeland Sec	3
JUST 402	Crime Mapping	3
JUST 415	Emerging Issues in HS	3
JUST 420	Corporate Role in HS	3
JUST 425	LE Intelligence Systems in HS	3
LEST 375	Law of Immigration & Border	
	Control	3

# Hospitality Management

The U.S. Bureau of Labor Statistics (BLS, 2013) considers the travel and tourism industry as a "top 10 industry in the U.S." With the hospitality industry growth rate on the upswing, the importance of recruiting and retaining trained employees is a high priority. This minor allows students to build a secondary area of expertise in support of or in addition to their major discipline. This minor is also a pertinent supplement for students who wish to pursue a career in the hospitality industry.

\* 9 credits of minor coursework must be at the upper-division level

# MINOR REQUIREMENTS CREDITS (18 CREDITS)

BSAD 2	201	Business Law I OR	
BSAD 2	202	Business Law II	3
BSAD 2	.06	Introduction to Hospitality	
		Management	3
BSAD 3	02	Customer Service and the Guest	
		Experience in Hospitality	3

BSAD 303	Global Tourism - Perspectives and
	Practices
BSAD 306	Food and Beverage Management3
BSAD 407	The Meeting, Expositions, Events,
	and Conventions Industry3

# LEGAL STUDIES

A minor in Legal Studies will help students to reap the benefits and avoid the pitfalls of the law as it may apply to their chosen major.

### MINOR REQUIREMENTS CREDITS

LEST 101	The American Legal System3
BSAD 201	Business Law I
LEST 340	Constitutional Law3

### SELECT THREE ELECTIVES

(Two must be Upper Level -300 or higher)

BSAD 202	Business Law II	3
LEST 221	Criminal Practice	3
LEST 320	Negligence and Intentional Torts	3
LEST 350	Civil Litigation	
LEST 360	Family Law	
LEST 370	Real Property	
LEST 375	Immigration Law and Border	
	Control	3
LEST 380	Wills, Estates and Trusts	3
LEST 388	Environmental Law	3
LEST 410	American Indian Law and	
	Fed. Policy	3

# Management Information Systems

The Management Information Systems Minor offers students the opportunity to broaden their disciplinary program with material and skills widely useful in the business world. Information technology has been the driving force behind the new economy. It has enabled companies to make tremendous strides in productivity, opened new markets and channels, and created new products and services. While one part of the information revolution has been advances in hardware and software, another major advance has been in how information is organized and used to make effective decisions. This program helps students to broaden their exposure to information technology and its use in business and industry.

# MINOR REQUIREMENTS CREDITS

MINS 300	Management Information Systems3
MINS 305	Customer Relationship Management3
MINS 315	Decision Support Systems3
MINS 425	Enterprise Resource Planning3
1 (1) 10 (20	

### MINS 430 Data and Knowledge Management...3

### SELECT ONE COURSE

BSAD 345	Technological Innovations and Entre-
	preneurship3
BSAD 372	E-Commerce
BSAD 373	International Business Management .3
BSAD 375	Leadership and Change3
CITA 330	Emerging Information Technology
	Applications3
CITA 400	Quantitative Approaches to
	Management3
CITA 460	Information Technology and
	Networked Economy3

# Marketing Management

The Marketing Management Minor provides a path for students who wish to expand and enhance their marketing skillset. The areas of focus include: advertising and promotion, consumer behavior, retail management, and sales. Students have the opportunity to customize their minor by selecting two elective courses. The Marketing Management Minor may be paired with any bachelor degree program offered at SUNY Canton, though it is best suited for business and sports management majors. Students are encouraged to enroll in the minor as early as possible to ensure efficient pairing of the Marketing Management Minor with their respective major.

MINOR F	REQUIREMENTS	CREDITS
BSAD 203	Marketing	3
BSAD 220	Principles of Retailing (	OR
BSAD 222	Principles of Selling	3
BSAD 322	Advertising and Promo	tion3
BSAD 325	Consumer Behavior	3

### ELECTIVE COURSES (select two courses)

*BSAD 220	Principles of Retailing OR	
*BSAD 222	Principles of Selling	3
BSAD 330	Sales Force Management	3
BSAD 372	E-Commerce	3
BSAD 411	Marketing Research	3
	New Product Marketing	
SPMT 307	Sports Marketing	3
	E-Commerce	

BSAD 411	Marketing Research
BSAD 425	New Product Marketing3
SPMT 307	Sports Marketing3
SPMT 312	Sports Entrepreneurship3
SPMT 412	Sports Sales and Sponsorships3
SPMT 430	Advanced Sports Marketing
	and Sales3
* 1	

\* A given course may be used as either a required or elective course, but not both

# MATHEMATICS

The study of mathematics develops the logic and reasoning skills that provide the tools for making decisions, interpreting observations, explaining natural phenomena, and solving problems. The Mathematics Minor provides a way for students to formally demonstrate competency in using mathematics. The minor is important for prospective employers and for use when students consider a transfer to other educational institutions. The Mathematics Minor is an important tool for the growing number of technology and business 4-year programs.

### MINOR REQUIREMENTS:

A minimum of 20 credit hours is needed to complete the minor in Mathematics as follows:

CORE RE	QUIREMENTS	CREDITS
MATH 141	Statistics I	3
MATH 161	Calculus I	4
MATH 162	Calculus II	4

### SELECT THREE COURSES

(at least 2 n	nust be MATH designated)	
MATH 263	Calculus III	4
MATH 341	Statistics II	3
MATH 351	Discrete Mathematics	3
MATH 361	Linear Algebra	3
MATH 364	Differential Equations	4
MATH 371	Graph Theory	3
MATH 461	Advanced Calculus	4

\*Business, computer, engineering, physics courses in which mathematics plays a significant role may be selected with approval by the mathematics department

### Sociology

This minor focuses on the systematic study of human social institutions and social relationships. Includes instruction in social theory, sociological research methods, social organization and structure, social stratification and hierarchies, dynamics of social change, family structures, social deviance and control, and applications to the study of specific social groups, social institutions, and social problems.

Students will take a minimum of 18 credit hours from the categories below.

MINOR F	REQUIREMENTS	CREDITS
SOCI 101	Introduction to Sociolo	ogy3
SSCI 370: R	lesearch Methods in Soci	ial Sciences3

### SELECT 1 LOWER LEVEL ELECTIVE

SOCI 105: American Social Problems	3
SSCI 181: Alcohol, Drugs & Society	3
SSCI 271: Contemporary Global Issues	3
SPMT 202: Sports in Society	3

### SELECT 3 UPPER LEVEL ELECTIVES

PSYC 300: Cultural Psychology	3
SSCI 315: Death, Dying and Bereavement	3
SOCI 300: Race & Ethnic Relations	3
SOCI 305: Gender in the Media	3
SOCI 313: Women & Aging	3
SOCI 320: Sociology of Health, Illness,	
Healthcare	3
SOCI 3/4@ Special Topics Courses: 391-395;	
491-495	3

# Sustainability

Environmental Sustainability, the effort towards continuing economic, professional and national growth in a generational and environmentally responsible manner, is increasingly entwined with all professional fields and industries. Resource limitations, national/international demand and population growth will continue to assert its resulting implications on contemporary lifestyles and economy. Graduates who are well versed in sustainability concerns will be more competitive in the job market. MINOR REQUIREMENTS **CREDITS** Introduction to Environmental ESCI 101 Salamaa

	Science
ESCI 102	Introduction to Environmental
	Science Lab1
GMMD 42	1 Sustainability Design3

### SELECT FOUR ELECTIVES (TWO MUST BE UPPER LEVEL - 300 OR HIGHER)

AREA 110	Intro To Alternative Energy3	
	Risk & Hazard Impact Studies3	
ECON 201	Economics and Social Issues	
GMMD 101	Introduction to Media Studies3	
HIST 101	History of Western Heritage3	
POLS 101	Introduction to Political Science3	
SOCI 105	American Social Problems3	
SOCI 250	Sociology of a Mass Media3	
SSCI 271	Contemporary Global Issues3	
BSAD 319	Professional Ethics	
BSAD 325	Consumer Behavior3	
BSAD 375	Leadership and Change3	
ECON 320	Environmental Economics3	
ESCI 320	Weather, Climate and Climate	
	Change3	
GMMD 302	2Digital Photojournalism3	

# Veterinary Service Administration

The Veterinary Service Administration Minor provides students with an interest in Business and/or Veterinary Technology with a background in Business and Accounting, then turns the focus to Veterinary Management specifically. This Minor allows students with the desire to manage a veterinary clinic or other animal care facility to prepare themselves to undertake a position in this area of management.

MINOR R	EQUIREMENTS	CREDITS
ACCT 101	Foundation of Financia	ll Accounting.4
BSAD 201	Business Law I	
BSAD 310	Human Resource Mana	agement3
VSAD301	Veterinary Practice Man	nagement3
VSAD 302	Animal Care Institution	n
	Management	3
VSAD 402	Veterinary Business &	Financial
	Management	3

# **Wellness**

18 credits total, 9 credits must be Upper Level

REQUIRED	CREDITS
Any WELL 10X	
WELL 380 Foundations in Mir	id-Body Health
and Wellness OR	
WELL 382 The Limitless Mind	

### **OPTIONAL**

Any course listed below to get to 18 credits (9 credits U/L)

\* Up to three credits total

\*\* Both can be taken for credit (only one is REQUIRED)

### **COURSES:**

WELL 101	Yoga1
WELL 102	Personal Fitness1
WELL 103	Practicing Mindful Living and Mind-
	fulness1
WELL 104	Alternative Approaches to Mental and
	Physical Wellness1
WELL 380	Foundations in Mind-Body Health
	and Wellness3
WELL 382	The Limitless Mind: Lessons on
	Dedication, Resilience and Mental
	Fortitude3
Any addit	ional WELL course developed

### can count towards minor

PSYC 101 Introductory Psychology SPMT 202 Sport in Society HLTH 103 Health Current Perspectives (no enrollments) HLTH 104 Intro to Gerontology HLTH 175 Basic Nutrition HLTH 212 Happiness, Health, & Wellbeing HLTH 242 Botanical Medicine BIOL 117 Human Reproduction HEFI 201 Health and Wellness Promotion Health and Wellness across the Lifespan HEFI 202 HEFI 203 Motor Development SSCI 181 Alcohol, Drugs, and Society HEFI 375 Fitness and Sports Nutrition (with permission of instructor) HEFI 405 Current Issues in Health and Fitness HEFI 408 **Community Wellness** Sociology of Health, Illness, and SOCI 320 Health Care PSYC 320 Psychology of Health and Fitness

- SPMT 330 Sport Psychology
- HLTH 303 Occupational Health and Safety

# WRITING AND COMMUNICATION

The Minor in Writing and Communication trains students in the written communication skills sought by employers and necessary for responsible citizenship. The coordinator will work with you to tailor a minor appropriate to your degree program, career plans, and personal interests.

Students will take a minimum of six of the courses designated below, with at least one course from each of the three areas:

ENGL 202	Creative Non-Fiction3
ENGL 216	Children's Literature3
ENGL 221	Creative Writing
ENGL 315	Short Fiction: The Art of the Tale3
ENGL 350	Flash Fiction
ENGL 351	Advanced Fiction Workshop3
HUMA189	Acting and Improvisation3
SPCH 104	Introduction to Speech

### VISUAL COMMUNICATION/NEW MEDIA

ENGL 270	Media Writing	.3
ENGL 314	Digital Graphic Storytelling	.3
TCOM 200	Narrative in Video Games	.3
TCOM 290	Mobile Media Stories and Games	.3
TCOM 310	Identity in the Digital Age	.3
TCOM 350	Electronic Literature: From Cybertex	t
	to Video Games	.3
TCOM 360	Online Media and Popular Culture	.3

# PROFESSIONAL AND INTERCULTURAL COMMUNICATION

AMSL 101	Introduction to American Sign	
	Language	3
ENGL 301	Professional Writing and	
	Communication	3
ENGL 302	Global Englishes	3
ENGL 309	Journalism	3
ENGL 380	Intercultural Communication	3
FREN 101	Contemporary French I	3
LEST 330	Legal Writing	3
SPAN 101		
SPAN 102	Contemporary Spanish II	3
	1 . 1	

Microcredentials

Stand out in the job market by adding in-demand new skills to your resume. Designed to be completed in months, not years, microcredentials are a great way to show current and future employers that you have mastered a specific subject or gained a valuable skill. They are academic credentials, recorded on official transcripts, that can stand alone or be applied to advanced degrees. Additional information on microcredentials can be found online at www.canton.edu/academics/micro/.

# **CAMPAIGNING AND** COMMUNITY ADVOCACY

Campaign for a better future in the Campaigning & Community Advocacy microcredential where you will gain an understanding of working in the nonprofit sector, specifically focusing on social justice and advocacy campaigns. First, you'll develop an understanding of both national and international social movements while engaging in advocacy and activism. Then, you will examine key management concepts used to contend with challenges encountered in domestic and/or global environments. Finally, you will study leadership paradigms and contingency leadership models. This microcredential is intended for anyone interested in learning about social justice and advocacy campaigns

### **REQUIRED COURSES**

BSAD 301	Principles of Management3
SOCI 312	Advocacy, Activism, and
	Social Change3
BSAD 375	Leadership & Change3

# CHILD CARE

Taking your first step is an amazing start in the Child Care microcredential where you will gain knowledge on the development and needs of children ages infancy to five years old. First, you will study the history, theories and philosophies that form the foundation of early childhood care and education. Then, through development of skills ensuring the well-being of a young child, you will focus on health, safety and nutrition to support a healthy lifestyle. Finally, you will explore the core competencies of the infant-toddler caregiver and the caregiver and family relationship. You will also gain an understanding of state policies and regulations as established by the NYS Office for Children and Family Services. This microcredential is intended for anyone interested in working in the early childcare field, including participants in the St. Lawrence County Child Care Training

Program. The child care microcredential does not count for CDA credit.

REQUIRE	D COURSES:	CREDITS
ECHD 101	Introduction to Early	Childhood3
ECHD 12	Wellness in Young Ch	ildren:
Promoting Health, Safety,		
	Nutrition and Dev.	
ECHD 131	Infants and Toddlers.	

# CYBERSECURITY AND **RECOVERY IN HEALTHCARE**

Keep your health data safe in cyberspace in the cybersecurity and recovery in healthcare microcredential where you will gain an understanding of the need for data security and protection of patients' records in health care information systems as the industry continually faces cyber threats and emergencies. First, you'll learn about health information systems and technology in healthcare delivery and public health. Then, you will examine current threats and trends, providing insight as to why healthcare is such a target rich environment and discuss ways to mitigate the risk. Finally, you will analyze past incidents and discuss strategies to prepare for, respond to, and recover from health and other emergencies. This microcredential is intended for health care working professionals who want to gain additional skills required for responding to cybersecurity disasters.

### **REQUIRED COURSES**

**CREDITS** HSMB 311 Healthcare Information Technology...3

EADM 330 Emergency Mgmt. in Public Health and Healthcare ......3

CYBR 416 Cybersecurity in Healthcare......3

# CYBERSECURITY **P**RINCIPLES

Secure your future in the cybersecurity principles microcredential where you will gain valuable knowledge in distinct phases of information security and assurance from both technical and business aspects. First,

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you'll be exposed to a spectrum of information security activities, methodologies and procedures. Then, by examining best practice framework you will better understand how the various functions within cybersecurity can be combined and leveraged to secure an organization. This microcredential is intended for working professionals who want to gain additional skills pertaining to the cybersecurity field.

**REQUIRED COURSES: CREDITS** CYBR 450 Cybersecurity Body of Knowledge .... 3

# DATA SCIENCE

Collect the data to improve your credentials in the Data Science microcredential where you will learn the distinct phases of data science from both technical and business aspects. First, you'll learn the concept of data mining and the methods of knowing, preprocessing, processing and warehousing data. Then, by examining ethical considerations, you'll assess collection, storage, use and analysis of data. This microcredential is intended for working professionals who want to incorporate data science into their employment field.

#### **REQUIRED COURSES CREDITS**

DATA 315 Data Mining and Machine Learning 3 

# DEATH INVESTIGATION

Investigate your potential in the Death Investigation microcredential where you will look into the medico-legal aspects of death investigations. First, you'll analyze the manners, mechanisms and causes of death associated with postmortem changes. Then, based on your career desires and interests, you'll tailor the second portion of the microcredential by selecting either violent crime analysis or cold case investigation. In violent crime analysis you will analyze criminal justice data to understand criminal classifications and how research can assist in an investigation. In cold case

investigation you will evaluate cold case files while incorporating advancements in forensic science and criminal investigation techniques. This microcredential is intended for working professionals who want to gain additional skills pertaining to death investigation scenes.

### CORE REQUIREMENTS

REQUIRED COURSESCREDITSJUST 320Medico-Legal Investigation of Death 3SELECT ONEUST 422UIST 422Violent Crime Analysis3

JUST 422	Violent Crime Analysis
JUST 424	Cold Case Investigation

# **DRONE SURVEILLANCE**

Fly to new heights in the Drone Surveillance microcredential where you will gain knowledge required for positions where drones are used. The drone surveillance microcredential combines a credit bearing course and a non-credit drone and forensic mapping training. First, you will study geographic information systems and their use in public safety and crime mapping. Then, through the non-credit training, you will learn specific skills associated with drone operation and 2D/3D crime mapping, including tactical surveillance, orthomosaic mapping, and various software systems. The non-credit training includes FAA regulations (Part 107), sectional charts, weather basics, TAF, flying basics, preprogrammed flights for 2D and 3D mock crime scenes and Precision mapping to include CAD import. This training does not culminate with an FAA license. This microcredential is intended for anyone interested in beginning the process of flying drones.

REQUIRE	ED COURSES	CREDITS
JUST 402	GIS: Crime Mapping	3

# **EMERGENCY MANAGEMENT**

Lead disaster preparedness, response, & recovery in the Emergency Management microcredential where you will gain valuable knowledge in the distinct phases within emergency management science. First, you'll learn about the theory and practice of coordination of activities such as hazard and vulnerability assessments, emergency operations planning, strategic mitigation strategies and resource management. Then, you will focus on proactive measures to safeguard lives and assets from natural or manmade disasters and develop a comprehensive emergency management plan. Finally, through case study analysis, you will assess short and long-term recovery strategies and community and organizational resilience for future disasters. The microcredential is intended for working professionals who want to gain additional skills pertaining to the emergency management field.

# FORENSIC ACCOUNTING

Rule out risky business in the Forensic Accounting microcredential where you will gain knowledge of fraud prevention, detection and correction of financial fraud and white-collar crime activities. First, you'll identify areas of financial risk, develop internal control policies and procedures, and define the role of the forensic accountant in the courtroom. Then, by utilizing an accounting software system, you'll prepare the necessary source documents, journal entries, special journals, reconcile accounts, generate financial statements and close an entire accounting cycle. This microcredential is intended for working professionals who want to expand their expertise in forensic accounting.

### **REQUIRED COURSES**

# FORENSIC ANTHROPOLOGY

No bones about it: dig a new training in the Forensic Anthropology microcredential where you will gain knowledge in the area of locating, excavating, collecting and analyzing human remains. First, you will analyze forensic taphonomy, including an overview of forensic anthropology and archaeology. Then, you will learn the theories and practices of locating clandestine graves. Finally, you will study human skeletal identification methods, such as biological profile, radiographic comparison, craniofacial superimposition, stable isotopes and DNA. This microcredential is intended for anyone who wants to gain additional skills pertaining to forensic anthropology techniques.

### **REQUIRED COURSES**

JUST 370	Forensic Taphonomy	.3
JUST 410	Clandestine Graves	.3
JUST 413	Human Identification Methods	.3

# FORENSIC DRUG TESTING

Test your way to a new certification in the forensic drug testing microcredential where you will gain hands-on skills at the field-testing level and knowledge of testing in the forensic laboratory. First, you will learn forensic drug testing techniques and complete training that results in NIK Polytesting System of presumptive drug identification certification. Then, you will explore the tools and methods involved with drug investigations and forensic analysis. This microcredential is intended for anyone interested in obtaining NIK presumptive drug identification certification.

REQUIRI	ED CREDITS	5
JUST 210	Intro. to Forensic Investigation	3
JUST 411	Forensic Drug Analysis and Investiga-	-

1	Forensic Drug Analysis and Investiga-
	tion

# HEALTHCARE LEADERSHIP

Learn to lead in the Healthcare Leadership microcredential where you will examine current challenges in health care that impact health care access, cost, quality and patient experiences. First, you will learn the fundamentals of the financial management of health care organizations. Then, you will examine socioeconomic factors, which contribute to health disparities, healthcare access, and lack of sufficient diversity in health care while evaluating the current challenges in health care that impact access, cost, quality and patient experience. Finally, you will focus on communicating strategically and persuasively in a professional environment. This microcredential is intended for health care working professionals who want to gain additional skills required for leadership positions.

REQUIRE	D CREDITS
BSAD 340	Management Communications3
HSMB 306	Healthcare Financing3
HSMB 316	Equity, Diversity and Cultural Com-
	petence in Healthcare3
HSMB 317	Current Changes in Health Care3

# **INVESTIGATIVE ANALYSIS**

Analyze your potential in the investigative analysis microcredential where you will gain hands-on skills associated with forensic investigations. First, you will learn digital camera techniques for taking proper forensic photographs and explore latent print processing, including rolling fingerprints, processing evidence and classification. Then, you will study investigative interviews used in forensic science and law enforcement settings. Finally, to build teamwork you will learn protocols for crime scene processing and investigation of death scenes. This microcredential is intended for students enrolled in the Bachelor of Technology in Criminal Investigation degree program.

### **REQUIRED COURSES**

JUST 300	Forensic Photography3
JUST 301	Latent Prints and Impressions
JUST 303	Investigative Interviews
JUST 406	Crime Scene Investigations
	Investigation of Death

# MEDICAL CODING

Answer the code and enroll in the Medical Coding microcredential where you will gain the necessary skills to obtain employment in various healthcare settings and be prepared to take the American Health Information Management Association (AHIMA) and the American Academy of Professional Coders (AAPC) certification exam. First, you'll learn the language of medical terminology and the tools a coder uses to report impatient and outpatient diagnoses and procedure services to health plans. Then, you will examine technology for planning, selecting, building and implementing the health information systems' platforms for direct patient care and management of hospital and public health sectors. Finally, you study the human body with an emphasis on

structure and general function. This microcredential is intended for anyone interested in gaining the necessary education and skills to enroll in the American Health Information Management Association (AHIMA) and the American Academy of Professional Coders (AAPC) certification exam.

REQUIRE	D COURSES	CREDITS
BIOL 207	Human Anatomy	3
	Medical Terminology &	
HSMB 305	Managed Care	3
	Healthcare Information '	

# NETWORK SECURITY

Secure your network of credentials in the Network Security microcredential where you will learn the distinct phases of network intrusion, detection, prevention, control and countermeasures. First, you'll identify vulnerabilities within computer networks and the countermeasures that mitigate risks and damage. Then, by examining the latest technology, trends, and techniques you'll develop a plan to stay one step ahead of potential security threats. This microcredential is intended for working professionals who want to gain additional skills pertaining to the network security field.

REQUIRE	CD CREDITS
CYBR 354	Cyber Incident Response and Disaster
	Recovery
CYBR 356	Cybersecurity Defense and Counter-
	measures

# NURSING HOME Administration

Lead the future of elder care in the Nursing Home Administration microcredential where you will gain the necessary skills for the educational portion of the Department of Health's (DoH) requirement to complete the Nursing Home Administrator Licensure Program in New York State. First, you'll examine legal and ethical issues in healthcare and the fundamentals of financial management of health care organizations. Then, you will analyze nursing home administration with a specific focus on operational management, finance, residential care and environmental management. Finally, you will study human capital management, including job analysis, recruiting, training, motivating employees, performance appraisals and compensation issues. This microcredential is intended for health care working professionals who want to gain the necessary educational requirements for the Nursing Home Administrator Licensure Program in New York State.

REQUIRE	ED COURSES	CREDITS
HLTH 104	Intro. to Gerontology	3
HSMB 302	Legal Issues in Healthcare	3
HSMB 306	Healthcare Finance	3
HSMB 309	Nursing Home Administr	ration3
BSAD 310	Human Resource Manage	ment 3

# TRUE CRIME

It'd be a crime not to enroll in the true crime investigation microcredential where you will expand your knowledge of criminal investigations situated within a contemporary, real-world context, with a focus on homicide and serial crime. First, you will examine real-world crime and its treatment throughout the stages of the justice process. Then, based on your career desires and interests, you'll tailor the second portion of the microcredential by selecting either serial murderers & their victims or profiling & behavioral criminology. In serial murderers & their victims you will analyze categories of crime, including male vs female, team, healthcare and international killers. In profiling & behavioral criminology you will explore the nature, history and methods of criminal profiling. This microcredential is intended for anyone interested in true crime or for working professionals who want to gain skills associated with investigations.

REQUIRI	ED COURSES	CREDITS
JUST 339	True Crime Investigat	tion3
	-	
SELECT	ONE	
COURSE	NAME	CREDITS
JUST 324	Serial Murderers and	their Victims3
JUST 331	Profiling and Behavio	oral
	Criminology	3

Other Programs

# Environmental Science and Forestry-2+2 Cooperative Program with SUNY-ESF, Syracuse

SUNY Canton participates in a cooperative program with the SUNY College of Environmental Science and Forestry (ESF). By providing most of the required courses needed at ESF, this effort insures an easy transition into a student's junior (3rd) year at the College. SUNY Canton graduates attending ESF compete extremely well with students from other colleges.

Students enrolled in this program receive an AA degree in Liberal Arts and Sciences:

General Studies. A student attending SUNY Canton is able to obtain all the necessary required courses for the various pre-environmental programs during two years<sup>1</sup>.

The ESF programs are: Aquatic and Fisheries Science, Conservation Biology, Environmental Biology, Environmental Science, Environmental Studies, Forest Ecosystems Science, Forest Resource Management, Landscape Architecture, Natural Resource Management, and Wildlife Science. Students interested in this program need to apply for the Liberal Arts and Sciences: General Studies (Curriculum 0250) program. Call the Office of Admissions 315-386-7123/800-388-7123 for further details.

<sup>1</sup>Some curricula may require cross-registration to complete requirements.

# FOREST TECHNOLOGY—1+1 Cooperative Program with SUNY ESF, Wanakena

SUNY Canton participates in a cooperative one-plus-one program with the Ranger School at the SUNY College of Environmental Science and Forestry (SUNY-ESF). Students who select this career goal complete one year at SUNY Canton and one year at the Ranger School in Wanakena, where they will choose between three academic concentrations: Forest Technology, Land Surveying Technology, or Environmental and Natural Resources Conservation. The degree of Associate in Applied Science is awarded upon graduation from SUNY-ESF. Graduates are prepared to seek positions as forest technicians, land surveyors, or field/laboratory technicians, or to transfer to a four-year program at SUNY-ESF.

Students pursuing this program are admitted to SUNY Canton for the first year of enrollment and application must be made to SUNY-ESF for the second year. To learn more about the programs offered at Wanakena, visit www.esf.edu/rangerschool/ programs.

### ADMISSIONS REQUIREMENTS:

- Prepared to take College Biology I —NYS Regents Biology score ≥ 75; or
- —Already passed Intro. to Biology
- Prepared to take at least Intermediate Algebra
- Prepared to take Expository Writing

The following is the recommended first-year course of study for transfer to SUNY College of Environmental Science and Forestry at Wanakena.

### (CURRICULUM 0620)

SEMESTE	R I CREDITS
BIOL 150	College Biology I4
ECON 101	Principles of Macroeconomics*3
ENGL 101	Expository Writing3
MATH 106	Intermediate Algebra OR
MATH 121	College Algebra OR
MATH 123	Pre-Calculus Algebra** 3-4
	13-14

### SEMESTER II

BIOL 155	College Biology II OR
CHEM 155	College Chemistry II OR
PHYS 121/1	25 College Physics I***4
ENGL 202	Creative Non-Fiction OR
	Writing Intensive English
MATH 121	College Algebra OR
MATH 123	Pre-Calculus Algebra OR
	General Elective
	General Elective
	(GER 3,4,5,6,7)****
	16-17

\* Students interested in Environmental & Natural Resources Conservation take POLS 101 or POLS 105 In place of ECON 101.

\*\* Students interested In the Land Surveying option must take MATH 123 in Semester I or II.

\*\*\* Students interested in the Land Surveying Option must take PHYS 121/125 in Semester I or II.

\*\*\*\* HIST 103 or HIST 105 recommended as a GER elective.

Students planning to continue in the B.S. degree program in Forest Resources Management (SUNY-ESF) after earning an A.A.S degree in Forest Technology take BIOL 150, CHEM 150, ENGL 101, MATH 121, and PHYS 121 & PHYS 125 and MATH 121 in semester I; BIOL 155, ECON 101, ENGL 221, HIST 105, and MATH 161 in semester II.

# Police Academy Program

### WAYS IN WHICH ONE MAY ENTER THE ACADEMY:

- Become a full-time student at SUNY Canton and enroll in the Criminal Justice curriculum with the Police Academy curriculum coordinator. The Academy is currently offered in the spring semester only. The Academy is worth up to 12 college credits toward the associate degree in Criminal Justice and 15 college credits toward the bachelor degree in Criminal Investigation or Law Enforcement Leadership for all full-time tuition-paying cadets.
- Be hired and sworn as a full-time police officer of a law enforcement agency.
- Be sworn in as a part-time police officer and carried on the Workmen's Compensation of the employing police agency.
- Enroll as a non-degree student in Pre-Employment for Basic Course for Police Officers.
- \* Attending SUNY Canton is not a guarantee that you may attend the Police Academy. Entry is competitive, space is limited, and applicants must meet all entry requirements.

### ACADEMICS:

Student cadets must meet admissions requirements for full-time students and must have the approval of the Academy Director.

### APPLICATION:

The application and all forms (available at www.canton.edu/academy) must be completed and returned to the Director of the Police Academy at SUNY Canton. A statement of physical fitness, signed by a physician, must accompany the application. Application for spring enrollment in the Academy should be submitted by October 1. Any deception on the application is grounds for rejection. A thorough background investigation may be conducted on the applicant after completing an oral interview by the Academy Board of Directors. An applicant may not be admitted to the Academy if the investigation discloses unsuitability for a law enforcement career due to criminal behavior, alcohol or controlled substance abuse, poor driving record, lack of integrity, inappropriate financial problems, or other evidence of a bad attitude. Applying to the Academy is no guarantee of acceptance. If you realize you are not acceptable for hiring as a police officer, do not apply to the Academy. In case of doubt as to your suitability, ask your local police chief.

### INTERVIEW:

The applicant will undergo at least one interview conducted by the law enforcement executives of the county. This interview will be conducted prior to completion of the background investigation and determines whether or not the applicant is accepted into the Academy.

### PHYSICAL FITNESS:

Physical fitness should be a lifelong goal of a law enforcement officer and is stressed in the Academy. In order to be admitted to the Academy, the cadet must pass the current Cooper testing standards for police officers. If you know you are out of shape, do not wait until the Academy starts to begin to correct the condition.

### COSTS:

Cost depends on your status upon entry. Veterans benefits and financial aid may apply. Check with the Financial Aid Office of the College.

• You pay the usual tuition rates as a fulltime student including all fees. Costs of books and anticipated lab fees for student manuals totals approximately \$500.00 and uniforms (including boots) approximately \$200.00.

### AGE:

Please inquire with the Director of the Police Academy.

### MEDICAL FITNESS:

You must be medically fit to be a police officer. Individual police departments determine what is acceptable in regard to eyesight and injuries, such as trick knees and shoulders. It is your responsibility to obtain medical certification that you are fit to perform the physical training in the Academy. It is your responsibility to determine if your eyesight and any disabilities disqualify you from being hired as a police officer. In case of doubt, ask your local police chief.

- Graduation from the Academy is not a guarantee of a job in law enforcement. You must still meet all the criteria of the hiring law enforcement agency (i.e. score well in the civil service exam and be medically and morally fit).
- If you are not hired within two years, you may have to take the refresher course. The Academy will not substitute for the State Police, Environmental Conservation, or Park Police academies, or the academies of larger municipalities such as New York City, however your chances of employment are increased by successfully completing the Police Academy. The Academy curriculum and instructors are approved by the New York State Department of Criminal Justice Services.
- If you fail in the Academy either academically, physically, or through insufficient attendance, college policies regarding refunds apply. Pre-employment Phase 1 Cadets will not be certified as Police Officers by the State and/or College. If you are in the Academy for college credit and fail, the Criminal Justice curriculum coordinator will evaluate the work completed for credit on a case by case basis.

The Academy information along with the application form can be obtained from the college website: www.canton.edu/academy.

# SUNY CANTON CORRECTIONS ACADEMY

The SUNY Canton Corrections Academy is offered every summer in conjunction with the St. Lawrence County Sheriff's Office and follows the New York State Division of Criminal Justice Services (DCJS) approved guidelines. The SUNY Canton Corrections Academy is open to individuals who have been hired by the St. Lawrence County Sheriff's Office and other surrounding county agencies, as well as all SUNY students who meet the eligibility guidelines. Completion of the academy as a student will provide you with 2 years of precertification eligibility for employment with county corrections within the state of New York. In order to become fully employed as a county corrections officer one must successfully complete and pass the NYS civil service exam.

### ELIGIBILITY GUIDELINES

- Enrollment at a SUNY school (first priority provided to SUNY Canton students)
- GPA of 3.0 or higher
- At least 18 years of age

### ACADEMY LOCATION

The academy is held on the SUNY Canton campus and all coursework will be completed in Wicks Halls in the classroom associated with University Police. Sign up early because space is limited.

### DRESS CODE

- Black BDU pants
- Black dress shoes or boots
- Minimum (2) Corrections Academy t-shirts must be purchased prior to the first day (orders will begin in April and each shirt will cost \$11.00)

In order to attend the summer SUNY Canton Corrections Academy as a student, enrollment in JUST 431 - Culminating Experience in Corrections (4 credits) must be completed prior to the first day of the academy. During the summer academy two additional upper level corrections related courses (6 credits) will also be offered online for a total of 10 credits (academy 4 credits + 2 upper division courses) that can be achieved and transferred back to your home institution. Enrollment in the two additional online corrections courses is optional and not required to participate in the academy.

### SUNY CANTON LIVING ACCOMMODATIONS

Housing is available in Kennedy Hall at a cost of \$900 per person for the duration of the summer academy. This rate includes a single bedroom in an apartment-style suite with a shared full kitchen, living room and bathroom. The suites are furnished but do not include linens or kitchen items (dishes, pots, pans, etc.). The living room in each suite has air conditioning but the bedrooms are not air conditioned (a fan is recommended). If you would like to arrange housing please contact the Residence Life Office at 315-386-7513 or via email at reslife@canton.edu at least two weeks prior to the program.

### SUNY CANTON FITNESS CENTER

The fitness center will be offering a pro-rated 5-week membership during the academy at a reduced rate of \$25.00. Membership can be obtained during the first day of coursework by visiting the fitness center located in the SUNY Canton Convocation, Athletic, and Recreation Center.

### FINANCIAL AID FOR SUMMER STUDY

There is financial aid available for the summer sessions. In order to receive aid for summer, the following must be taken into consideration:

You must admitted into a degree program. New students will not be eligible for summer financial aid (includes students admitted for Fall 2018). All summer courses MUST be applicable to your current degree program in order to receive aid. Your academic advisor will assign you a summer registration code for scheduling access on UCanWeb.

Financial aid you receive in the summer may reduce your eligibility for aid during the academic year or in a subsequent year.

Taking courses at another college? To receive aid to help pay for them you must complete and submit a Consortium Agreement. To be aid eligible the course must transfer back into your degree program. Be prepared to pay for your course upfront and be reimbursed by aid later, not all schools participate in this process especially during summer. Be sure to check with the other school for their policy when signing up for the courses.

For academy related questions please contact Dr. Liz Brown, Chair of the Criminal Justice Department at (315)386-7504 or ericksone@canton.edu OR Cpl. Rodney Votra, Programs Director / Training Coordinator, St. Lawrence County Sheriff's Office at (315)379-2414 or rvotra@stlawco.org

Send completed applications to:

Dr. Elizabeth Brown SUNY Canton 34 Cornell Drive, Payson 117B Canton, NY 13617

# UB School of Law Degree (3+3) - B.S. + J.D.

With our new 3+3 program, you can save one full year of tuition by earning your bachelor's degree at SUNY Canton and your law degree at University at Buffalo School of Law, in just six years (instead of seven). It's one of the most affordable paths to a law degree in the country!

### ABOUT THIS MAJOR:

The program is open to a SUNY Canton student who has maintained a 3.5 GPA and completed three years of under-graduate work in Legal Studies or Applied Psychology. To become eligible, students must have an LSAT score at or above the median LSAT for the School of Law's previous year's enrolled class (currently 153), complete the University at Buffalo School of Law application, and complete all required coursework toward the B.S. degree.

### CAREER OPPORTUNITIES:

Holders of Juris Doctor degrees go on to careers including, but not limited to:

- Professional Litigators
- Corporate Counsel
- Wills, Estates, and Trusts Attorneys
- Judges
- Public Defenders
- Criminal Prosecutor
- Entrepreneurs
- Politicians

# UPSTATE MEDICAL UNIVERSITY EARLY ADMISSION PROGRAM— Joint Admission with SUNY Upstate Medical University at Syracuse

Upstate Medical University Early Admissions Program is an early admission program for high school seniors who excel in math and science and are committed to careers in the health professions. Students accepted into the program are guaranteed admission into an upper division bachelor/master's degree program at the SUNY Upstate Medical University at Syracuse after attending their first two years at SUNY Canton and completing all admission requirements.

# THE UPSTATE MEDICAL UNIVERSITY EARLY ADMISSIONS PROGRAMS ARE:

- Cardiovascular Perfusion, BS
- Medical Biotechnology, BS
- Medical Technology, BS
- Medical Imaging Sciences, BS or BPS
- Physical Therapy, DPT
- Respiratory Care, BS
- Radiation Therapy, BS or BPS

Interested students need to apply for Liberal Arts and Sciences: General Studies (Curriculum 0250) program. Call the Office of Admissions 315-386-7123 or 800-388-7123 for further details.

### NOTES:

- —All science courses must include laboratories. —Upstate Medical University Early Admissions
- Program students are required to complete the associate degree and all requirements outlined in the program acceptance letter.
- Accepted students must demonstrate leadership qualities by getting involved in extracurricular activities at SUNY Canton.

This represents a listing of courses available to the campus at large. Courses fulfilling General Education Requirements of the ten SUNY knowledge and skill areas are designated as: GER 1-Mathematics; GER 2-Natural Sciences; GER 3-Social Sciences; GER 4-American History; GER 5-Western Civilization; GER 6-Other World Civilizations; GER 7-Humanities; GER 8-The Arts; GER 9-Foreign Language; GER 10-Basic Communication

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### ABAP 135

### PARENTING KNOWLEDGE & SKILLS Fall/Spring, 3 credit hour(s)

This course examines the application of the natural science and technology of behavior to improvements both in knowledge of parenting and in childrearing skills. The range of advances in behaviorologically- based child rearing practices discovered since the 1950's is covered after reviewing scientifically uninformed practices used earlier. Behavior management-related skills for application in everyday public and personal situations involving children and their caregivers are included.

### ABAP 245

### INTRODUCTION TO THE SCIENCE AND TECHNOLOGY OF BEHAVIOR

Fall/Spring, 3 credit hour(s)

The first of a two course sequence, this course introduces students to the natural science and technology of behavior, behaviorology, encompassing the areas of fundamental principles, basic methods and measurements, and elementary technologies of applied behavior analysis including techniques applied in prevention and intervention settings, plus historical and philosophical perspectives, ethics, and current trends.

### ACCT 101

### FOUNDATIONS OF FINANCIAL ACCOUNTING

Fall/Spring, 4 credit hour(s)

This course builds the underlying framework of financial accounting and serves as an introduction to accounting concepts and financial reporting. Students will learn how to record business transactions in an accounting system, interpret financial statements, and communicate information for economic decision-making. Topics include accounting for sole proprietorships, partnerships, and corporations. A concentrated emphasis is placed on the accounting cycle, accruals and deferrals, notes and interest, and internal controls.

#### ACCT 102 FOUNDATIONS OF MANAGERIAL ACCOUNTING Fall/Spring, 3 credit hour(s)

The basic principles of accounting are continued with their application to management and internal users to assess company performance. Managerial accounting focuses on providing accounting related data for decision-making, production management, and product/service pricing. Additional topics are: job-order costing, process costing, budgeting, and variance analysis.

Prerequisites: Foundations of Financial Accounting (ACCT 101) or permission of instructor

### ACCT 104

SURVEY OF ACCOUNTING

Fall/Spring, 3 credit hour(s)

This course is designed for non-business majors who need to develop an understanding of fundamental accounting principles and their application in the business environment. The content surveys both financial and managerial accounting with an emphasis placed on how the information is used in decision making and problem solving. (Course may not be used for credit in any one of the following programs: Accounting, Business Administration, Finance, Legal Studies, and Health Care Management.)

#### ACCT 242

### ACCOUNTING FOR GOVERNMENT AND NONPROFIT ORGANIZATIONS *Fall/Spring, 3 credit hour(s)*

This course is designed to introduce students to the Internal Revenue Code, preparation of federal and state tax returns for individuals and small businesses. The course prepares students to participate in the IRS Volunteer Income Tax Assistance (VITA) program.

Prerequisites: Foundations of Financial Accounting (ACCT 101) and knowledge of spreadsheets.

### ACCT 245

FORENSIC ACCOUNTING

Fall/Spring, 3 credit hour(s)

Forensic Accounting is concerned with the detection, prevention, and correction of financial fraud and white-collar crime activities. This course identifies areas of financial risk, develops internal control policies and procedures, as well as defines the role of the forensic accountant in the courtroom. Students will also spend time evaluating forensic accounting case studies, determining damage calculations, and the affects of cybercrime on an organization.

Prerequisites: Foundations of Financial Accounting (ACCT 101) or Survey of Accounting (ACCT 104) or permission of instructor.

#### ACCT 300 INTERMEDIATE ACCOUNTING I Fall, 3 credit hour(s)

Students will be presented with knowledge and skills basic to accounting theory and practice and advanced problems pertaining to the foundations of financial. The essential interrelationship between accounting and the activities of business is stressed throughout the course. The presentation of accounting elements necessary for business decision-making such as operating, financing, investing, earnings management and revenue recognition enhance the learning experience and prepare students for an evolving accounting profession. Accompanying accounting problems and various financial statements challenge students to develop critical thinking skills and promote core competencies. International Financial Reporting Standards are discussed when relevant to help students understand how accounting practices differ from country to country and reflect the increasingly global nature of business.

Prerequisites: Foundations of Managerial Accounting (ACCT 102) or permission of instructor.

### ACCT 302

### INTERMEDIATE ACCOUNTING II Spring, 3 credit hour(s)

Accounting concepts and standards which expound upon the foundation provided by Intermediate I are carried forward in this course. This course provides an engaging and comprehensive learning experience that helps develop essential understanding, critical thinking, and analytical skills via accounting's integral importance to an organization's decision-making capabilities and is presented as an essential element in business decision-making. Focus is placed on financing and investing activities such as: the behavior and classification of capital, acquisition management, general ledger requirements for the handling of non- current operating assets, handling of debt and equity securities, and accounting for common disclosures.

Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

#### ACCT 305

# ACCOUNTING THEORY & PRACTICE *Spring, 3 credit hour(s)*

This course is designed to assess and reinforce the skills necessary to enter the workplace as an entry-level employee in the field of Accounting. The students will maintain a complete set of books and related financial statements, through an accounting cycle, both manually and electronically. Students will use previously prepared financial statements to make informed judgments, solve problems, identify and apply ethical positions and effectively communicate this information to others both orally and in writing

Prerequisites: ACCT 300, BSAD 340, CITA 110, FSMA 210, MATH 106, or MATH 108, or permission of instructor

### ACCT 306 COST ACCOUNTING Fall, 3 credit hour(s)

*Fail, 3 creat hour(s)* This course is designed to expose the student to cost behavior, the elements of a cost, and cost classification on financial statements. The student will learn the responsibilities of a cost accountant and distinguish those of a financial and managerial accountant. Emphasis is placed on various cost models (job-order, process costing, activity based costing), preparing budgets and analyzing variances to standards as essential tools to formulating and achieving management goals and objectives in both

manufacturing and service enterprises. Prerequisites: MATH 106, MATH 108, or permission of instructor

### ACCT 310

### ACCOUNTING INFO SYSTEMS Fall/Spring, 3 credit hour(s)

Students utilize an accounting software system

complimented by a manual accounting information system to complete a full accounting cycle. Heavy emphasis is placed on section 404 requirements of the Sarbanes-Oxley Act of 2002. The importance of proper documentation, internal controls, enterprise systems, and an examination of E-business sets the stage for this course. Students prepare the necessary documents (electronically and manually), journal entries, special journals, reconcile accounts, generate financial statements, and close an entire accounting cycle.

Prerequisites: ACCT 102, or permission of the instructor

### **ACCT 335**

# INDIVIDUAL TAXATION *Fall, 3 credit hour(s)*

This course is designed to introduce students to the Internal Revenue Code, preparation of federal and state tax returns for individuals and small businesses. The course prepares students to participate in the IRS Volunteer Income Tax Assistance (VITA), program.

Prerequisites: MATH 106 and CITA 110, or permission of the instructor

### ACCT 410

# INTERNATIONAL ACCOUNTING *Fall/Spring, 3 credit hour(s)*

International Accounting is the study of an entity reported as either a multinational company or an entity whose reporting obligations to stakeholders are located in a country other than that of the reporting entity. A detailed investigation on the convergence of U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting

Standards (IFRS) serves as a foundation for this course. Also discussed are the effects of financial reporting, international taxation, and international financial statement analysis on a multinational reporting entity. Employing and critiquing the use of global accounting and auditing standards will integrate the student's existing skills with domestic accounting standards.

Prerequisites: ACCT 102, MATH 106 (or equivalent), ECON 101 or permission of instructor.

#### ACCT 430 AUDITING

### Fall/Spring, 3 credit hour(s)

This course is designed to expose the student to the vocabulary, concepts, principles, and techniques of auditing. Emphasis is placed on the use of Generally Accepted Auditing Standards and their practical application to professional standards, ethics, internal controls, legal liability, audit planning, audit evidence, audit sampling, and the production of standard reports.

Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

### ACCT 440

# ADVANCED ACCOUNTING *Fall, 3 credit hour(s)*

This course completes the financial accounting sequence as learned in Intermediate Accounting. Advanced accounting issues address: consolidations, mergers and acquisitions, governmental and nonprofit organizations, foreign currency transactions, and partnerships.

Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

### ACHP 201

### BUILDING CONTROLS Spring, 3 credit hour(s)

Introduction to building automation systems and building controls, with an emphasis on HVAC. It covers wiring sensors and actuators to controllers and programming the controllers.

### ACHP 243

### AIR CONDITIONING I

Fall, 3 credit hour(s)

The properties of air and water vapor mixtures are determined by calculation and by the use of psychometric charts. Air conditioning processes are studied leading to selection of systems. Cooling and refrigeration loads are calculated for commercial and residential structures. The performance of air conditioning systems and the use of instruments is covered in the laboratory.

Prerequisites: MECH 103

#### ACHP 253

#### DOMESTIC & COMMERCIAL HEATING I Fall, 4 credit hour(s)

A study of basic theory, including the technical considerations which enter into the design of a heating system. Particular emphasis is given to warm air heating systems, selection of furnaces, air diffusers and duct sizing. Includes study of steam and hot water heating equipment, radiators, convectors, baseboard heating units and fan coil units.

Prerequisites: Introduction to Heating (ACHP 111) or permission of instructor

#### ACHP 254

### DOMESTIC & COMMERCIAL HEATING II Spring, 4 credit hour(s)

This course is a continuation of ACHP 253 focusing on steam boiler selection, design and layout, selection of equipment and pipe sizing. Particular emphasis is given to commercial systems such as fans and pumps. The student will design and layout of control systems based zone and occupant levels. Laboratory covers modern methods of testing heating equipment and systems. prerequisites: achp 253 or permission of instructor

#### **ACHP 264**

# AIR CONDITIONING SYSTEMS DESIGN Spring, 1 credit hour(s)

Air conditioning systems are designed for specific buildings, equipment selected, working drawings made and specifications written.

Prerequisites: ACHP 243, ACHP 253, SOET 250 or permission of instructor

### **ACHP 306**

### ENERGY SYSTEMS TECHNOLOGY Fall/Spring, 3 credit hour(s)

The student will develop skills utilized in HVAC systems design, from the basic principles of heat transfer through detailed sizing and selection of various HVAC systems.

Prerequisites: Junior level status

#### **ACHP 323**

### HVAC EQUIPMENT SELECTION Fall/Spring/Summer, 3 credit hour(s)

This course will cover the selection and layout of modern HVAC equipment for commercial buildings. Special concern applied to ASHRAE standards, codes and cost analysis. Three hours of lecture per week. Pre-requisites: Domestic and Commercial Heating II (ACHP 254) or permission of instructor. Prerequisites: ACHP 254, or permission of

instructor

### ACHP 324

# HVAC LOAD CALCULATION *Fall/Spring, 3 credit hour(s)*

This course instructs the student to the principles and methods of calculating the heating and cooling load of an HVAC system for residential and commercial buildings. The student learns how to design the HVAC systems following the codes and standards of ASHRAE publications. Energy efficiency and conservation are incorporated into the system design for optimal performance. The course is emphasized on computer-based calculations. Computer-assisted calculation and practice are carried out throughout the course. Three hours of lecture per week.

Pre-requisite: Refrigeration I (ACHP 101). Corequisites: Thermodynamics (MECH

342) and Heat Transfer (MECH 343).

Prerequisites: ACHP 101; Co-requisites: MECH 342, MECH 343, or permission of instructor

### ACHP 401

# BUILDING AUTOMATION SYSTEMS *Fall, 3 credit hour(s)*

This course presents detailed study of building automation controls as applied in our modern facilities. Integration of building environmental control along with life safety, security, and maintenance functions are studied. The various proprietary protocol, as well as BACNET are presented. Digital and analog inputs to central and remote processors which in turn control devices to maintain building environmental conditions, safety, and security will be studied. Networking topics studied in prerequisite courses will be integrated into the application of these automation systems. Students will work with software to operate these systems as well as specify equipment to meet the goals within the facility.

Prerequisites: CITA 200, ACHP 306 or ACHP 244, or permission from instructor.

#### ACHP 412

### ENERGY ANALYSIS AND AUDIT Fall/Spring, 3 credit hour(s)

This course provides skills to perform an energy analysis of future commercial buildings and the audit of existing building through the study of energy standards and codes use in the United States. HVAC and architectural drawings are reviewed through

case studies and actual buildings are audited providing students with the necessary skills to reduce energy cost in to the future of building development.

Prerequisites: Junior level status

### ACHP 415

# COMMISSIONING OF MECHANICAL SYSTEMS

### *Fall/Spring*, 3 credit hour(s)

This course explores the modern building practice of implementing a quality-oriented process for achieving, verifying, and documenting the performance of facilities, systems and assemblies. Students develop and analyze the owner's project requirements and translate these requirements into a commissioning plan. Students will transform the commissioning plan into an operational and maintenance plan for the building owner and operators. Prerequisites: ACHP 324 or permission of instructor

#### AGET 105

### AGRICULTURAL EQUIPMENT MAINTENANCE AND OPERATION Fall/Spring, 3 credit hour(s)

An introduction to the maintenance of equipment utilized in agricultural applications such as farms, landscape businesses, tree services, and any business with outdoor equipment. Hybrid elective course where the lecture is delivered on-line and the lab is delivered at a remote locations such as agricultural equipment dealerships when the equipment is not located at SUNY Canton. 2-hourlecture, 3-hourlab

### AGMT 100

### INTRO TO AGRIBUSINESS

Fall, 3 credit hour(s)

An introduction to the management, entrepreneurship, and other tools needed to solve practical problems in agribusiness. The course will help students place agribusiness management in perspective and develop an understanding of agribusiness organizations, the challenges they face, and how to measure their effectiveness. Particular emphasis will be placed on how to develop successful agribusiness ventures, including overall organization, human resource management, finance, and marketing.

#### **AGMT 305**

#### AGRICULTURAL POLICY Fall, 3 credit hour(s)

This course introduces students to the role of government and other, institutions in setting agricultural and food policy. It develops an understanding of the application of economic theory to agricultural problems and the

policy decision process. Topics such as macroeconomic policies, farm policies, rural development policies, agricultural trade policy, environmental policy, food safety and security policy, and food assistance and nutrition policy are discussed.

Prerequisites: ECON 101 and ECON 103 and a minimum 45 credit hours, or permission of instructor.

### **AGMT 310**

### AGRIBUSINESS MANAGEMENT Spring, 3 credit hour(s)

This course provides students with understanding of the size, scope and importance of the agribusiness food chain including agricultural producers, processors, distributors, farmers and ranchers. It examines marketing, financial, operations and human resource management principles applied to agribusiness firm.

Topics such as organization of an agribusiness, economics for agribusiness managers, international agribusiness, financing agribusiness, evaluation of operating and investment decisions, production planning and management, and supply chain management for agribusiness are discussed.

Prerequisites: ECON 103, FSMA 210 and or permission of instructor - Co-requisite: BSAD 301

### **AGMT 320**

# AGRICULTURAL MARKETS AND PRICE ANALYSIS

Fall, 3 credit hour(s)

This course introduces students to the agricultural price analysis, agricultural market structures and agricultural marketing strategies. It utilizes the economic concepts to help students understand and develop practical agribusiness marketing strategies. Topics such as agricultural price seasonality, market adjustments, price analysis using supply and demand, equilibrium displacement models, food marketing channel, international agricultural trade, and agricultural futures and options markets are discussed.

Prerequisites: Principles of Microeconomics (ECON 103), Marketing (BSAD 203) and MATH 141 Statistics, or permission of instructor.

### **AGMT 330**

### FARM BUSINESS MANAGEMENT

Spring, 3 credit hour(s)

This course provides students with tools needed to measure management performance and financial condition of the farm business. It develops decisionmaking skills in planning, organizing, directing, and controlling farm business. Topics such as farm record keeping an accounting system, financial statement analysis, investment analysis, crop and livestock enterprise budgeting and analysis, risk management, income tax management are discussed.

Prerequisites: BSAD 100, ECON 103 and FSMA 210 or permission of instructor.

### AGMT 385

### AGRICULTURAL LAW

Spring, 3 credit hour(s)

This course examines areas of law applicable to agriculture, including agricultural law; acquisition and disposal of farmland; farm tenancies; rights and limitations in the use and ownership of farmland; water law; environmental protection; protection of the productivity of agricultural land; and the law of sales and secured transactions in an agricultural context. Critical legal issues facing the industry and consumers will be discussed, including federal farm programs, the structure of farms and industrialized agriculture, migrant labor issues, farm animal welfare, as well as agriculture commercial law.

Prerequisites: Business Law I (BSAD 201) or permission of instructor.

#### AGMT 410 AGRIBUSINESS MANAGEMENT INTERNSHIP

### Spring, 6-12 credit hour(s)

The Agribusiness Management Internship integrates classroom work and practical experience with cooperating businesses or agencies. The Internship allows seniors the opportunity to apply classroom learning in an agricultural management setting. It is a structured field experience in which an Intern, under the guidance of a supervisor, acquires and applies knowledge and skills while working in a responsible role. The internship site and completed documentation must be completed by the student and turned into the supervising faculty by the end of the semester prior to the start of the internship. Internship assignments and activities may include, but not be limited to, information gathering, research, drafting of documents, office management, and other tasks and responsibilities deemed necessary.

Prerequisites: Senior status in the Agribusiness Management program. Student must have a GPA of 3.0 or higher before the internship begins, or permission of the instructor in consultation with the student's academic advisor.

#### AGMT 450

# AGRIBUSINESS MANAGEMENT CAPSTONE

Spring, 3 credit hour(s)

This multidisciplinary capstone course integrates materials from Agribusiness Management courses to allow students to gain practical skills and knowledge of the varied fields of Agribusiness and the role agribusiness managers have within the multiple systems. Students analyze and evaluate advanced Agribusiness issues, i.e. impact from evolving Federal and State laws relating to Agribusiness facilities, providers, and consumers. Students also study contemporary challenges by incorporating knowledge gained through Agribusiness courses and required readings.

Prerequisites: 90 credits carned, in Agribusiness Management; or permission of instructor.

### AMSL 101

# INTRODUCTION TO AMERICAN SIGN LANGUAGE

Fall, 4 credit hour(s)

American Sign Language (ASL) is the third most frequently used language in the United States after English and Spanish. this course introduces students to ASL: the visual-gestural language of the deaf. It incorporates no-verbal communication techniques: fingerspelling, basic vocabulary, grammar and syntax, and conversational skills. In addition, students gain an understanding of the deaf community, its history, culture, and the issues that impact the deaf community in the 21st century.

### ANTH 101 INTRO TO PHYSICAL ANTHROPOLOGY & ARCHEOLOGY

*Fall/Spring, 3 credit hour(s)* This course provides an overview of the theory of evolution, comparative analysis of primates, natural selection, the genetic basis of variation, the fossil record leading to and including human evolution,

and a look toward the future of our species. Fundamental methods and theories in archaeology will also be covered.

### ANTH 102 INTRODUCTION TO CULTURAL ANTHROPOLOGY

Fall/Spring, 3 credit hour(s), GER 3 & GER 6

Cultural anthropology is an academic discipline that seeks to understand human cultural diversity, the reasons for that diversity, and its implications for peoples' social and economic life, using research methodologies that seek to find out how people understand themselves, others, and appropriate ways of living in the world. The course introduces the discipline's core concepts and methodologies, and also explores classic themes and issues in the anthropological study of cultural and social issues and arrangements both in the United States and around the world.

### AREA 110 INTRODUCTION TO ALTERNATIVE ENERGY

#### Fall, 3 credit hour(s)

Students will discuss the usefulness of various types of energies as they relate to the future of this planet. Topics will include passive and active solar systems, fuel cells, hydroelectric power, geothermal heat transfer, and wind energy.

### AREA 210 SUSTAINABLE BUILDING Spring, 3 credit hour(s)

This course is an introduction to building science. Basic topics are introduced such as air leakage, heating, cooling, and insulation. Students will also see different types of building construction and how they relate to building science.

#### **AREA 224**

# RENEWABLE ENERGY ELECTRICAL CODE *Fall/Spring, 3 credit hour(s)*

This course deals with the National Electrical Code (NEC) for renewable energy systems. The various aspects of the electrical code are studied to ensure proper system design and installations. Safety issues as related to the various sections of the code are emphasized.

Prerequisites: ELEC 261 Electricity or ELEC 171 & ELEC 172 Electrical Construction and Maintenance I & II

### **AREA 300**

### FUEL CELLS

*Fall/Spring, 3 credit hour(s)* 

Students will discover the science involved in the operation of fuel cells and technical applications of a fuel cell in providing electricity and heat. Topics explored are hydrogen as a fuel, energy efficiency, and operational characteristics of a fuel cell. In depth studies of proton exchange membrane, alkaline electrolyte fuel cells, and direct methanol fuel cells will teach students about the conversion of hydrogen fuel to useable forms of energy.

Prerequisites: CHEM 150, College Chemistry I

### **AREA 303**

WIND TURBINES

### *Fall/Spring, 3 credit hour(s)*

This course is an introduction to issues related to the production of electricity from wind power. The study of the atmospheric science necessary to locate wind turbines for the production of electricity will teach students how to interpret data. In addition, the study of design and control will allow for a comprehensive knowledge of all sub- components of a wind turbine.

A complete analysis of all the technology utilized in the production of electricity will assist students in knowing the details involved in sizing and siting of wind turbines.

Prerequisites: ELEC 261 and ELEC 215 or permission of instructor.

### AREA 310

### BIOFUELS

Fall/Spring, 3 credit hour(s)

This course covers alternative, renewable fuels derived from biological sources and their applications as an energy source for homes, industry and transportation. Wood, urban, and agricultural solid waste are discussed as potential sources of energy conversion. In addition, the production of methane and alcohol based fuels and their roles as a transportation fuel will lead to a re-discovery of opportunities to replace fossil-based fuels. Bio-diesel and vegetable oil topics are necessary to show a true alternate energy source for internal combustion engines. Throughout this course, students will examine both advantages and disadvantages of Biofuels as an energy source.

Prerequisites: CHEM 101 and junior level status or permission of instructor.

### **AREA 320**

### **EXPERIMENTATION & MEASURMENT I** Fall, 3 credit hour(s)

In this laboratory students will learn experimental methods, instrumentation for engineering measurements, statistical estimates of experimental uncertainty, and calibration techniques. Students will perform laboratory experiments that are applicable to energy systems as well as to broader engineering applications. This course serves as the foundation for higher level lab and design courses in this curriculum.

Prerequisites: SOET 110, MATH 150, PHYS 104, MECH 241, ENGS 102 or permission of instructor.

#### **AREA 321**

### SOLAR ENERGY UTILIZATION Fall, 3 credit hour(s)

Solar Energy Utilization is an introductory course on solar energy with an emphasis on thermal processes. Topics include solar radiation, heat transfer, flat-plate collectors, thermal energy storage, and solar thermal applications.

Prerequisites: MECH 225 or permission of instructor.

### AREA 322

### PASSIVE SOLAR BUILDING Spring, 3 credit hour(s)

Passive Solar Building explores the use of solar energy to passively heat and cool buildings. Topics include solar radiation, building heating and cooling loads, energy efficient design and construction, passive solar heating, proper implementation of thermal mass, and passive cooling.

Prerequisites: MECH 225, ACHP 306, or permission of instructor.

### AREA 323

### PHOTOVOLTAIC SYSTEMS

Fall/Spring, 3 credit hour(s)

Photovoltaic Systems examines the direct conversion of solar energy to electricity. Topics include photovoltaic (PV) cell physics, types of PV cells, PV system components, and PV energy storage.

Prerequisites: MECH 225

### **AREA 324**

### SUSTAINABLE CONSTRUCTION Fall, 3 credit hour(s)

This course is an introduction to sustainable building design. It focuses on the application of building science to the design and construction of durable and functional buildings that optimize the balance between operating costs, construction costs, and life-cycle carbon footprint

Prerequisites: Junior Level Status or permission of instructor

### **AREA 340**

### GEOTHERMAL ENERGY

Fall/Spring, 3 credit hour(s)

Applications of thermodynamics and heat transfer principles will explain how energy is transformed from geothermal energy to useable energy for large and small scale systems. Students will determine heating and cooling loads leading to the selection of the correct system installation to meet the demand. Correct system sizing and installation procedures will be explored along with the environmental issues related to geothermal energy production.

Prerequisites: AREA 110 or ENGS 101

#### **AREA 370**

### **EXPERIMENTATION & MEASUREMENT II** Spring, 3 credit hour(s)

In this laboratory course students will perform engineering measurements to acceptable standards. They will also choose the method of measurement to achieve the accuracy necessary for use in alternative energy experiments. A hands-on approach will furnish practical knowledge of the operation of various alternative energy devices and diagnostic tools. The labs will reflect topics discussed in the AREA electives.

Prerequisites: AREA 320

#### AREA 424

### SUSTAINABLE BUILDG RATINGS AND CERTIFICATIONS Fall, 3 credit hour(s)

This course explores popular sustainable building rating and certification systems comparing their requirements, pros, and cons. The vitality and viability of these systems will be analyzed, compared, and discussed. Students will work as a group to perform a conceptual implementation and documentation of one of the rating systems. Examples of these ratings or certification systems include Energy Star, LEED, Green Globes, Living Building Challenge, Net Zero Energy, and Passive House Institute US

Prerequisites: AREA 324/CMGT 324

#### **ARTS 101**

### INTRODUCTORY DRAWING Fall/Spring, 3 credit hour(s), GER 8

This course is an introductioin to the fundamental principles and processes of drawing. Students will begin to develop a facility for the creative process and aesthetic expression. We will work from still-life, nature, the model and the imagination.

Specific problems will be assigned to explore various drawing media, promote an understanding of pictorial structure, and cultivate good compositional judgement.

#### **ARTS 201**

### ART HISTORY: BC TO 16TH CENTURY Fall, 3 credit hour(s), GER 7 & GER 8

This course is a study of the history of art from cave Art to the Renaissance.

Emphasis will be placed on the development of the art and architecture and its relationship to the cultural, political, social, and religious climate in which it was produced.

#### **ARTS 202**

### ART HISTORY: 16TH TO 20TH CENTURY Spring, 3 credit hour(s), GER 7 & GER 8

This course is a study of the history of art from the Renaissance to modern times. Emphasis will be placed on the development of the art and its relationship to the cultural, political, and social climate of the time in which it was produced.

Three hours lecture per week.

### **ARTS 203**

### ART AND SOCIETY

Fall/Spring/Winter/Summer, 3 credit

hour(s), GER 8

Art and Society explores the development of the Fine Arts and its relationship to social, political, and economic structures of both contemporary and historical cultures. Through the research, discussion, and presentation of several case studies in

historical and contemporary art practices, students will develop their critical awareness of interdisciplinary relationships in present and past cultures. This course explores the artistic practice and production of several cultural epochs as both a symptom and parameter of social-political trends/events. Students will develop their understanding of significant contemporary and historical issues and explore their bearing and relationship to the Fine Arts.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of instructor.

#### **ARTS 204**

### INTRODUCTION TO PAINTING Fall/Spring, 3 credit hour(s), GER 8

Students practice basic approaches to watercolor, acrylic and oils, applying these techniques towards more accomplished works. Class work includes exercises, studies, and analysis of professional works. Students will develop ability to apply compositional terms and concepts in analysis of paintings. At the conclusion of the course students will develop a portfolio of completed works.

#### ARTS 301

### DIGITAL STORYBOARDING Fall/Spring, 3 credit hour(s)

This course sequentially builds on the skills,

techniques, and concepts introduced in ARTS 101 and GMMD 201. Through research, demonstrations and studio-based assignments, students develop skills in conceptual schematics, sequential storyboarding, and digital illustration using industry current digital design software and digital tablets. The student projects culminate in a portfolio of digital works.

Prerequisites: ARTS 101 Intro Drawing AND GMMD 102 Intro Design OR GMMD 103

### **ASTR 101**

### ASTRONOMY OF THE SOLAR SYSTEM Fall, 3 credit hour(s), GER 2

This course is an introduction to the science of astronomy and is a study of our immediate neighborhood in the universe, the solar system. Topics included are the appearance of the sky, the earth as a planet, light, telescopes and their applications, the physical nature of the planets, the motion and surface of the moon, lesser bodies in the solar system, origin and evolution of the solar system, and the possibilities for extraterrestrial life.

Prerequisites: high school algebra or equivalent

#### **ASTR 102**

#### ASTRONOMY OF SOLAR SYSTEM LAB Fall, 1 credit hour(s)

This course is an introduction to the science of astronomy and is a study of our immediate neighborhood in the universe, the solar system. Topics included are the appearance of the sky, the earth as a planet, light, telescopes and their applications, the physics nature of the planets, the motion and surface of the moon, lesser bodies in the solar system, evolution of the solar system and the possibilities for extraterrestrial life. Three hours lecture per week. If lab is elected, an additional two hours laboratory per week is required.

Prerequisites: high school algebra or equivalent

### ASTR 103

### STELLAR ASTRONOMY Spring, 3 credit hour(s), GER 2

This is a survey course examining the structure, evolution and classification of stars. Topics covered will include the history of astronomy, the sun, classification of stars, multiple star systems, birth and death of stars, gravitational collapse, pulsars, black holes, galaxies, quasars, special theory of relativity, and cosmology. An observation project is also required. Three hours lecture per week. If lab is elected, an additional two hours laboratory per week is required. Recommended prerequisite: high school algebra or equivalent.,,

Prerequisites: high school algebra or equivalent

### **ASTR 104**

### STELLER ASTRONOMY LAB

Spring, 1 credit hour(s)

This is a laboratory course to accompany ASTR 103 – Stellar Astronomy.

Laboratory exercises will both explore fundamental concepts and physical principles introduced in lecture such as the properties of light in the Introduction to Spectroscopy Lab, as well as give the students a feel for the work of a modern Astronomer with computer based simulation exercises.

Prerequisites: high school algebra or equivalent

### AUTO 101 AUTOMOTIVE SERVICES

Fall. 2 credit hour(s)

Automotive Services is an introductory course in vehicle systems theory of operation and maintenance. Topics include automotive shop procedures involved in general maintenance of vehicles related to suspension, engine, and driveline. Safety and customer relations skills will also be stressed. Students who have successfully completed a high school vocational program in Automotive Mechanics/ Technology may be eligible for transfer credit. Two hours lecture per week.

Prerequisites: Corequisite: AUTO 111 Automotive Services Laboratory

#### AUTO 102

### DIESEL ENGINES

Spring, 2 credit hour(s)

A course which considers the basic construction of the diesel engine. Topics will include classification of diesel engines, fuels, turbochargers, injection systems, and pre-heater systems. Laboratory will consist of hands-on experience in engine troubleshooting, parts identification, adjustments and testing.

Prerequisites: AUTO 112 Automotive Electrical Systems AND AUTO 101 Automotive Services or MSPT 101 Motorsports Service

### AUTO 103

# AUTOMOTIVE AIR CONDITIONING *Spring, 2 credit hour(s)*

A study of the component parts of automotive air conditioning systems, their function and operation. Laboratory will consist of hands-on experience in testing, evacuation, and charging of the system.

Refrigerant identification, safety, and environmental issues are addressed, along with fundamentals of manual and automatic controls. One hour lecture, two hours laboratory per week.

Prerequisites: Automotive Electrical Systems (AUTO 112) and (AUTO 122), or permission of instructor.

### AUTO 104 BASIC WELDING Fall, 1 credit hour(s)

This course in welding will include all basic processes and procedure in joining and cutting ferrous and nonferrous metals found in automotive/ industrial applications. Focus will include safety, proper techniques and quality control.

Corequisite: AUTO 101 Automotive Services

### AUTO 111

### AUTOMOTIVE SERVICES LABORATORY Fall, 1 credit hour(s)

Topics include automotive shop procedures involved in general maintenance of vehicles related to suspension, engine, and driveline. Additional information addresses New York State inspection.

Students who have successfully completed a high school vocational program in Automotive Mechanics/Technology may be eligible for transfer credit. Two hours laboratory per week. Corequisite: Automotive Services (AUTO 101) or permission of instructor.

### AUTO 112

# AUTOMOTIVE ELECTRICAL SYSTEMS *Fall, 3 credit hour(s)*

This course is a study of fundamental electrical circuits and relative theory as applied to the automobile. Series, parallel, series-parallel circuits, magnetism, direct and alternating current fundamentals, charging systems, starters, lighting systems, and basic electronics are studied.

Prerequisites: AUTO 122 Automotive Electrical Systems Lab

### AUTO 113

### ENGINE PERFORMANCE I Spring, 3 credit hour(s)

With the completion of this course, the student will be able to diagnose a performance condition resulting from an engine mechanical, fuel or ignition problem. Students will analyze engine mechanical condition, such as cylinder compression, cylinder leakage, and valve timing issues. In the engine ignition and fuel delivery systems, students will diagnose using electronic computer based scanners, digital multimeters, oscilloscopes and other diagnostic devices.

Prerequisites: AUTO 112 Automotive Electrical Systems AND AUTO 101 Automotive Services or MSPT 101 Motorsports Service. Corequisite: AUTO 114 Engine Performance I Lab

### AUTO 114

ENGINE PERFORMANCE I LAB Spring, 1 credit hour(s)

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, while testing systems with digital volt/ohm meters and computer scanners. Fuel and powertrain control systems are diagnosed with the latest tools available. With the completion of both components of Engine Performance 1, (AUTO 113 and AUTO

114) students will be able to diagnose and repair a vehicle with a no-start condition

resulting from a fuel or ignition problem. The student will be able to access vehicle computer information, including inputs, outputs, and miscellaneous tests.

Prerequisites: AUTO 112 Automotive Electrical Systems AND AUTO 101 Automotive Services or MSPT 101 Motorsports Service. Corequisite: AUTO 113 Engine Performance I

#### **AUTO 122**

# AUTOMOTIVE ELECTRICAL SYSTEMS LAB

### Fall, 1 credit hour(s)

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, both hard-copy and electronic. Testing involves batteries; series, parallel, and series-parallel circuits, as well as charging and starting systems component identification and service.

Prerequisites: None - Co-requisite: AUTO 112

#### AUTO 141

### AUTOMOTIVE BRAKING SYSTEMS Spring, 3 credit hour(s)

This course consists of theory and operation of automotive brake systems. Topics covered include: foundation brake components of disc and drum brake systems, hydraulic brake system components, and brake enhancements including antilock brake system and stability control.

Prerequisites: AUTO 112 Automotive Electrical Systems AND AUTO 101 Automotive Services or MSPT 101 Motorsports Service. Corequisite: AUTO 144 Automotive Braking Systems Lab

#### **AUTO 144**

### AUTOMOTIVE BRAKING SYSTEMS LAB Spring, 1 credit hour(s)

This course is designed to teach entry level skills in the repair, replacement, and service of automotive brake systems. Brake service areas covered include disc brake, drum brake, parking brake, brake hydraulic system, and brake component measuring tolerance. Services include, resurfacing rotors and drums, flaring hydraulic line.

Prerequisites: AUTO 112 Automotive Electrical Systems AND AUTO 101 Automotive Services or MSPT 101 Motorsports Service. Corequisite: AUTO 141 Automotive Braking Systems

#### **AUTO 212**

### AUTOMOTIVE ELECTRICAL SYSTEMS II Spring, 4 credit hour(s)

This course begins where Automotive Electrical Systems terminates. Topics covered include lighting, gauges, warning devices, driver information systems, horn and wiper operations, and electrical accessory diagnosis and repair.

Prerequisites: AUTO 112 Automotive Electrical Systems - Corequisites: AUTO 214

#### **AUTO 213**

### ENGINE PERFORMANCE II Fall, 4 credit hour(s)

This course begins where Engine Performance I terminates. Sophisticated engine control systems are studied which include Variable Valve Timing and Lift, Boost, and Emissions Controls. The student learns and applies knowledge of the integration of the above systems and powertrain/engine control computer (PCM). Diagnosis and repair include test equipment such as digital volt-ohm meters, oscilloscopes, and interactive computer scanners. Students continually utilize the latest automotive reference materials in diagnosis and repair procedures.

Prerequisites: AUTO 112, AUTO 122,

AUTO 113, and AUTO 114

### **AUTO 214**

### AUTOMOTIVE COMPUTER SYSTEMS Spring, 3 credit hour(s)

Review of electrical and electronic devices used in automobiles. Study of on-board diagnostic systems for both domestic and import vehicles. Diagnosis of computerized automotive systems. A writing intensive course.

Prerequisites: AUTO 111, AUTO 213 Corequisites: AUTO 212

### **AUTO 220**

### INTERNAL COMBUSTION ENGINES Fall, 4 credit hour(s)

This course concerns the principles of operation of the gasoline internal combustion engine. Each student participates in an actual engine overhaul including measuring to factory specification and machining operations with the latest tools and equipment. Designed for Automotive majors principally, applicants from other curricula will be interviewed by department personnel. Tool kit required. This course is the writing intensive course of the Automotive Program.

Prerequisites: AUTO 113 Engine Performance I, AUTO 114 Engine Performance I Lab, ENGL 101 Composition and the Spoken Word, MATH 101 Applied College Mathematics or higher

### AUTO 221

AUTOMATIC TRANSMISSIONS Spring, 4 credit hour(s)

Students study fundamental principles of automatic transmissions. Topics include torque converters, planetary gearsets and hydraulics. Various powerflows are compared using specific transmissions as examples.

Prerequisites: AUTO 113 Engine Performance, AUTO 114 Engine Performance Lab, AUTO 141 Automotive Brake Systems, and AUTO 144 Automotive Brake Systems Lab

#### AUTO 225 DRIVELINES & MANUAL TRANSMISSIONS Fall, 3 credit hour(s)

Topics include transmission theory, design, and operation of manually shifted front- wheel and rear-wheel drive transmissions in automotive applications. Related topics necessary to include with transmissions also include axles, drive shafts, differentials, universal joints, transfer cases, and the manual and electronic controls associated with each. Students receive equal lecture and lab sessions.

Prerequisites: AUTO 112, AUTO 113, AUTO 114, AUTO 122, AUTO 141, AUTO 144, AUTO 213 or permission of instructor.

### AUTO 230

### SERVICE MANAGEMENT & OPERATIONS Spring, 1 credit hour(s)

This seminar type course will meet to discuss topics such as satisfaction, shop management, management techniques, equipment purchase/ utilization and dealership structure. Students will perform interviews and write about their findings. Each student will write five research papers from a list of topics concerning the automotive repair business. Weekly summaries from trade journals will be completed. These will relate to topics in Automotive Service Management.

Prerequisites: AUTO 213 Engine Performance II

#### BASK 051

### COLLEGE SUCCESS STRATEGIES Fall/Spring, 1 credit hour

This course is designed to help students successfully make the transition to college while developing a sense of responsibility for their own learning. Students practice a set of learning strategies focusing on such topics as time management, note-taking, textbook reading/memory improvement, goal setting, test preparation/taking, and critical thinking. Students learn and demonstrate basic library research skills, computer skills, and explore/identify personal learning styles, values, career choice, and attitudes toward diversity. Two hours lecture/lab per week. Course is required for all first-time EOP students

### BASK 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ACADEMIC DEVELOPMENT

### Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of topics not covered or only partially covered by other courses currently available. The course will be specified in the semester class schedule. Students may take two special topics courses for preparatory credit/credit as long as the topic is different.

### BIOL 101

### INTRO TO BIOLOGY

Fall/Spring, 4 credit hour(s), GER 2

A study of the major concepts in the life sciences presented for the non-major. The concepts of cell theory, cellular organization and function, inheritance, and evolution will be covered with the laboratory portion of the course designed to elaborate on these concepts. Two hours lecture, two hours laboratory per week.

Conditions: For students scoring less than 75 on the NYS Biology Regents exam or who did not take HS biology OR permission of instructor. Cannot be taken for credit by students with credit in Introduction to Human Biology (BIOL 102).

### BIOL 117

### HUMAN REPRODUCTION

Spring, 3 credit hour(s), GER 2

This course will discuss human reproduction from a biological point of view. Topics of interest will include anatomy, reproductive physiology, genetics, conception, embryology, pregnancy and parturition, and disease states.

Consideration will be given to medical, psychological, sociological, and legal and ethical perspectives.

#### BIOL 150

### COLLEGE BIOLOGY I

Fall, 4 credit hour(s), GER 2

An introduction to the fundamental biological concepts common to plants, animals, and microorganisms. Topics include the chemical and molecular basis of life, metabolism, cell biology, cellular reproduction, Mendelian and molecular genetics, gene regulation, DNA technology, and evolution. The laboratory includes the study of cells, osmosis, enzymes, cellular respriation, genetics, molecular techniques, and the dissection of a representative mammal.

Prerequisites: New York State Regents Biology examination grade of 75 or above or BIOL 101 or BIOL 102; AND HS chemistry or CHEM 101/100 or CHEM 107/108; or permission of instructor.

### BIOL 155 COLLEGE BIOLOGY II Spring, 4 credit hour(s)

This course consists of the study of the evolutionary history of biological diversity, plant form and function, animal development, and aspects of animal form and function including the immune system, nervous systems, homeostasis and chemical signals. The laboratory includes structural and functional studies of representative plants and animals, bacterial transformation, photosynthesis, plant growth and deevelopment, animal tissues, and population dynamics.

Prerequisites: College Biology I (BIOL 105) or permission of instructor.

#### BIOL 207

### HUMAN ANATOMY

### Spring, 4 credit hour(s)

This course is a detailed study of the human body with the emphasis on structure and general function. Included topics are cells, tissues, skeletal, muscular, digestive, circulatory, respiratory, reproductive, urinary, nervous, endocrine systems and sense organs. This course is most suitable for students in health-related, biology, or Mortuary Science curriculums requiring in- depth knowledge of the human body.

Prerequisites: New York State Regents Biology examination score of 75 or above or BIOL 101, BIOL 102, BIOL 150 or permission of instructor.

### BIOL 209

### MICROBIOLOGY

Fall/Spring, 4 credit hour(s)

A study of the basic characteristics of microbes, with an emphasis on disease causing organisms. Includes morphology, growth, physiology, and control.

Laboratory techniques including microscopy, staining, aseptic technique, culture media, isolation, and identification of microbes. Three hours lecture, two hours laboratory per week. Prerequisite: Introduction to Biology (BIOL 101) or Introduction to Human Biology (BIOL 102) or College Biology I (BIOL 105) or Human Anatomy & Physiology I (BIOL 217) or permission of instructor.

Prerequisites: BIOL 101, BIOL 102, BIOL 105 or BIOL217; AND HS chemistry or CHEM 101/100 or CHEM 107/108; or permission of instructor.

#### **BIOL 217**

### HUMAN ANATOMY & PHYSIOLOGY I Fall/Spring, 4 credit hour(s), GER 2

This course is the first course in a sequence which studies the anatomy and physiology of the human body in detail. Topics covered in this first semester course include an introduction to the basic plan and organization of the body, basic biochemistry, basic cell structure and cell physiology and the anatomy and physiology of the integumentary, skeletal, muscular, nervous and endocrine systems. The laboratory sessions will explore detailed anatomy using models and specimens, and experimental physiological concepts. This course is appropriate for students in the nursing, physical therapy assistant, occupational therapy assistant and other healthrelated fields that require a two semester Anatomy and Physiology sequence.

Prerequisites: High School Biology Regents score of 75 or above, BIOL 101 or BIOL 102 and High School Chemistry Regents score of 65 or above or CHEM 101 or CHEM 107/108; or permission of instructor.

#### **BIOL 218**

### HUMAN ANATOMY & PHYSIOLOGY II Fall/Spring, 4 credit hour(s)

This is the second in a sequence of two courses that studies the detailed anatomy and physiology of the human body. Topics include the anatomy and physiology of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Also covered will be the immune system, metabolism, fluid- electrolyte-acid-base balance, and pregnancy and development. The laboratory will include a dissection of the cat. Three hours lecture, three hours lab per week.

Prerequisites: BIOL 217 or permission of instructor.

### BIOL 310

THE GENOME Spring, 3 credit hour(s)

This course covers the fundamental concepts of molecular genetics and heredity, as well as mutations, the genetics of sex and gender, the human genome, complex traits, genetic testing, gene therapy, and the near future of genetics. Besides providing a basis for understanding the current state of genetic knowledge, future discoveries, and novel applications, a major focus of the course is developing the sophistication necessary to sort out myths and misconceptions about heredity.

Prerequisites: BIOL 150 or BIOL 217 and junior level status, or permission of instructor.

#### BIOL 325 **BIOLOGY IN SOCIETY**

Spring, 3 credit hour(s)

This course is designed to develop critical thinking concerning the growing presence of biology in society. Students apply biological principles and the scientific method to problems and decisions confronting society. Students use and expand upon their basic biological knowledge of DNA, molecular biology and physiology to discuss the importance and ethical impact of the use of biology in society. General topics will include DNA technology, stem cells, GMOs, and medical and forensic applications. Specific topics discussed may vary from one semester to the next as new issues or developments warrant. The central goal of the course is to have students leave as highly informed citizens with a greater understanding of the science behind current biological applications. Three lecture hours per week.

Prerequisites: A grade of C or higher

for one of the following courses or its equivalent: BIOL 101, BIOL 102, BIOL 105, BIOL 217/218, or permission of instructor.

#### BIOL 335 PATHOPHYSIOLOGY Fall, 3 credit hour(s)

This course focuses on the central concepts of cellular and tissue pathophysiology. A systematic survey is undertaken of genetic diseases, cancer, and the diseases of the immune, nervous, endocrine, hematologic, cardiovascular, lymphatic, pulmonary, renal, reproductive, digestive, musculoskeletal and integumentary systems. The etiology, pathophysiology, and clinical manifestations of diseases are discussed.

Prerequisites: BIOL 209, BIOL 218, VSCT 144

#### **BSAD 100**

### INTRODUCTION TO BUSINESS Fall/Spring, 3 credit hour(s)

This course is a survey of business, introducing the major operations of a business, including production, marketing, finance, and human resources management. The course also examines the economic, social, and political environment of business. This course will expose students to speakers from varying business disciplines throughout the semester. Students should anticipate devoting at least 9 hours per week on class material and preparation.

### BSAD 111

#### INTRODUCTION TO PERSONAL FINANCE Fall, 3 credit hour(s)

Students learn about financial decision making, setting personal financial goals, income and careers (the money you earn), savings, investing, retirement planning (the money you keep), and principles of money management (the money you spend).

#### **BSAD 120**

### PRINCIPLES OF BANKING Spring, 3 credit hour(s)

This course is an in depth introduction to the diversified services offered by the banking industry today, especially banking role in money creation and in the distribution of funds. Attention is paid to banking history, currency, deposits, negotiable instruments, loans, mortgages, security, and fraud.

#### **BSAD 200**

### **BUSINESS COMMUNICATIONS** Fall/Spring, 3 credit hour(s)

This course is designed to help develop strong oral and written communication skills. The student

will be given opportunities to practice writing and editing professional correspondence. Additionally, the student will compose and deliver oral presentations. Assignments will include the use of inductive and deductive approaches to conveying a variety of messages and applying the rules for proper

### **BSAD 201**

**BUSINESS LAW I** 

Fall/Spring, 3 credit hour(s)

grammar and punctuation.

Test and case study of the American court system as well as the origin, nature, and classification of law with emphasis on general contract law and the impact of negligence, and criminal law on business.

#### **BSAD 202**

**BUSINESS LAW II** 

Fall/Spring, 3 credit hour(s)

Continuation of Business Law I. Areas of study include Bankruptcy and Reorganization, Labor Law, Administrative Law, Bailment and Agency. Prerequisites: BSAD 201

### **BSAD 203** MARKETING

### Fall/Spring, 3 credit hour(s)

This course provides students with an introduction to marketing as a functional area of business. Students build an understanding of the marketing mix (price, product, promotion, and placement) and its role in contributing to successful business operations. Students explore the impact of legal, political, social, ethical, technological, economic, and competitive factors on marketing activities.

Prerequisites: ACCT 101, or BSAD 100, or ESPT 100, or HSMB 101, or permission of instructor.

#### **BSAD 204** INTRODUCTION TO BUSINESS STATISTICS

### Fall, 3 credit hour(s)

In this course, the students are introduced to the subject of business statistics to include the need for quantitative analysis in business, the basic procedures in problem solving, and the sources and types of data used by business firms using business application software. Basic probability concepts and normal probability distribution are used by the student to solve real world business problems which involve business applications.

Prerequisites: MATH 141 and CITA 110, and ACCT 101 or ECON 103, or permission of instructor.

### **BSAD 206 INTRODUCTION TO THE** HOSPITALITY MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course introduces students to the hospitality industry, providing a general overview of trends and issues in key industry segments such as lodging, foodservice, tourism, recreation, and attractions, and MEEC (meetings, events, exhibitions, and conventions). The course also examines career and educational opportunities in the hospitality industry and provides a foundation for higher-level hospitality courses.

### **BSAD 207**

### PUBLIC ADMINISTRATION Fall/Spring, 3 credit hour(s)

This course is designed to provide students with an introduction to the field of public administration, including its practice, contemporary challenges and future trends. Public administration includes activities taken directly by government, or in partnership with others, to meet the democratically expressed needs of the public. These activities include policy design, implementation, evaluation of outcomes, and re-design or re-direction.

Prerequisites: BSAD 100 or HSMB 101

#### **BSAD 215**

### SMALL BUSINESS MANAGEMENT Fall/Spring, 3 credit hour(s)

This course will examine the nature of small business and the people who are successful in starting them. Topics will include the requirements and steps of conducting a comprehensive pre-business feasibility study, the types of decisions faced by managers of small firms, and the application of business disciplines to these situations.

The student will be required to formulate their own business plan.

Prerequisites: ENGL 101, or permission of instructor

#### **BSAD 220**

### PRINCIPLES OF RETAILING Fall, 3 credit hour(s)

This course represents a pragmatic approach to the study of retailing. Students identify best practices in retailing by examining case studies of real- world retail businesses. Students explore retail management alternatives relating to buying, pricing, sales promotion, customer service, store design, and staffing.

Prerequisites: 15 credits earned, or permission of instructor

### BSAD 222

### PRINCIPLES OF SELLING Fall, 3 credit hour(s)

This course focuses on the personal selling process and is designed to benefit students across multiple disciplines, especially students wishing to develop a competency in sales. Students focus on the role of consumer behavior and effective communication as applicable to personal selling. Students identify and examine selling principles such as persuasive communication, negotiating, prospecting, preparing and delivering sales presentations, overcoming objections, and closing the sale.

#### BSAD 235

# BUSINESS AND ACCOUNTING FIELD EXPERIENCE

### *Fall/Spring, 3 credit hour(s)*

This internship is designed as an elective course for students on a space-available basis who would like to obtain hands-on experience working with entrepreneurs and small business owners. The accounting portion of the internship is an academic program which integrates classroom work and practical experience with businesses and nonprofit organizations. The internship will be tailored to the individual student's career interests and the needs of the supervisor and supervising organization.

Prerequisites: ACCT 102 or permission of instructor.

#### BSAD 241

### INVESTMENT AND TRADING Spring, 3 credit hour(s)

This course is designed for students interested in securities markets. This course will provide an opportunity for students to blend the theory of investments with the practical demands of investment management. The course objectives include an understanding of the process of establishing a portfolio strategy with a real portfolio, gaining knowledge of the mechanics of trading, principles of equity valuation and technical analysis. Students actively manage a portfolio throughout the semester.

Prerequisites: ACCT 101 or permission from the instructor

### BSAD 301 PRINCIPLES OF MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course applies key management concepts to all organizations; domestic and international, profit and non-profit, manufacturing and service, brick and mortar and virtual. It provides direction to the management philosophy, realities and imperatives for efficient and effective decision making, planning, organizing, leading, and controlling used for superior organizational performance. It equips students with skills and tools needed to contend the challenges encountered in domestic and/or global environment of the 21st century and the implication for IT. It allows students to transfer this knowledge to practice.

Prerequisites: BSAD 100, HSMB 101, EADM 201 or BSAD 200 or BSAD 201

and minimum 30 credit hours with 2.0 GPA or permission of instructor.

### BSAD 304 BUSINESS ANALYTICS Fall/Spring, 3 credit hour(s)

This course will introduce students to business analytics with a focus on prescriptive analytics and spreadsheet (Excel) modeling. Topics will include linear, integer, and nonlinear programming models (product mix, make or buy, plant location, etc.), distribution and network models (transportation, transshipment, shortest- route, etc.), and forecasting.

Prerequisites: CITA 108 or 110 and MATH 111 or MATH 121 and minimum of 30 credit hours

#### **BSAD 306**

# FOOD AND BEVERAGE MANAGEMENT Fall/Spring, 3 credit hour(s)

This course discusses the roles and responsibilities of food and beverage management in the hospitality industry. Emphasis is placed on restaurant and bar operations in the hospitality industry including resort, hotel and conference activities. The receiving, process and storage of food and beverages are emphasized along with compliance of federal regulations regarding food and beverage operations.

Sustainability in food and beverage management are addressed.

Prerequisites: BSAD 100; ACCT 101 or ACCT 104 and completion of 45 credit hours.

#### **BSAD 309**

### SUPPLY CHAIN MANAGEMENT Fall, 3 credit hour(s)

This course introduces students to supply chain management. Students will learn about supply chain design, planning, and operations, and how to use supply chains to gain strategic advantage. Supply chain topics covered include: distribution & transportation networks, sustainability, planning and coordination, customer and supplier relationships, sourcing, current events and trends.

Prerequisites: (BSAD 100 or HSMB 101 or EADM 201) and minimum 30 credit hours.

#### **BSAD 310**

### HUMAN RESOURCE MANAGEMENT Fall/Spring, 3 credit hour(s)

This course provides a foundation for the study of human capital management.

Topics include job analysis and design, recruiting, training, motivating employees, performance appraisals, current doctrine on employee's rights, responsibilities, and compensation issues.

Prerequisites: BSAD 100 or BSAD 201 or EADM 201 and completion of 45 semester credit hours or permission or instructor.

#### **BSAD 319**

### PROFESSIONAL ETHICS

Fall/Spring, 3 credit hour(s)

This course acquaints students with the major frameworks for ethical decision making in the professions based on Kantian, Utilitarian and Aristotelian ethics and the principles of consequence, liberty, opportunity, need and justice. The course examines ethical questions that can arise in the professional practice, the relationship between professionals and clients, as well as, the connection between ordinary and professional morality. Students will analyze and synthesize ethical theories that affect thinking, policy formulation, and professional conduct

Prerequisites: ENGL 101 and junior level status

### BSAD 322 ADVERTISING AND PROMOTION Fall/Spring, 3 credit hour(s)

Students explore the fundamentals of advertising and promotion and apply this knowledge in creating an advertising plan and integrated brand promotion (IBP) strategy for a real world product. In addition to traditional advertising media, special attention is given to progressive advertising media, such as: the Internet, social media, mobile marketing, and other forms of digital marketing. The social and economic role of advertising and promotion is explored in relationship to such established disciplines as psychology and sociology.

Prerequisites: BSAD 203, or GMMD 101 and GMMD 102; and 45 credits earned; or permission of instructor

#### BSAD 325

### CONSUMER BEHAVIOR Fall/Spring, 3 credit hour(s)

Students explore consumer behavior and its internal and external influencers. Emphasis is placed on the consumer decision-making process. Consumer behavior is analyzed as a key component in developing effective product design, positioning, and promotional strategies. Students also examine the role of consumer lifestyle data in segmenting the market into target markets.

Prerequisites: BSAD 203 and 45 credit hours, or permission of instructor

#### **BSAD 330**

### SALES FORCE MANAGEMENT

Spring, 3 credit hour(s) Students explore the prin

Students explore the principles of sales force management. This course is designed to benefit students across multiple disciplines, especially students planning to pursue a career in sales. Emphasis is placed on the following principles of sales force management: formulating and evaluating sales strategy, recruitment, training, motivation, performance evaluation, and sales force structure.

Prerequisites: BSAD 203 Marketing and 45 credits earned, or permission of instructor

#### **BSAD 335**

### ADVANCED BUSINESS AND ACCOUNTING FIELD EXPERIENCE Fall/Spring, 3 credit hour(s)

This advanced business internship program offers hands-on experience working with small business entrepreneurs in a confidential and professional environment. Students have the opportunity to apply their educational, organizational and time management skills in solving real life business issues and assist less experienced interns.

Prerequisites: ACCT 102

#### BSAD 340

### MANAGEMENT COMMUNICATIONS Fall/Spring, 3 credit hour(s)

This course introduces students to the foundations of effective management communication. It focuses on communicating strategically and persuasively in a professional environment. Skills such as advocacy, framing issues clearly and strategically, preparing a team for communicating in a competitive environment, facilitating meetings, and adapting arguments to audiences' needs are developed.

Prerequisites: ENGL 101 and completion of 45 semester credit hours or permission of the instructor

### BSAD 345 TECHNICAL INNNOVATIONS & ENTREPRENEURSHIP Spring, 3 credit hour(s)

Technology entrepreneurship is a spirited approach to business leadership that involves identifying high-potential, technology-intensive commercial opportunities, gathering and analyzing resources such as talent and capital, and managing rapid growth and significant risks using principled decision-making skills. It is a recent global phenomenon that has driven vital changes in society by empowering individuals to seek opportunity in technological and business solutions when presented with what others see as insurmountable problems. This course will introduce the fundamentals of technology entrepreneurship. It is aimed at guiding students who may be starting their own businesses in the future or working for a high-growth company.

Prerequisites: ECON 101, FSMA 210 and CITA 110 or permission of instructor

#### **BSAD 365**

### FINANCIAL STATEMENT ANALYSIS Fall/Spring, 3 credit hour(s)

This course explores both the underlying theory and practical applications of financial reporting and analysis. Students will expand their existing knowledge of financial statement preparation developed from their accounting coursework extending their critical thinking acumen into forecasting and various valuation models. Within this course an emphasis of the importance of using financial statements as a source of information to evaluate historical and future economic performance is the overarching learning objective. Discussion of the convergence of Generally Accepted Accounting Principles and International Financial Reporting Standards will occur when appropriate.

Prerequisites: ACCT 102 or ACCT 104, MATH 141, and junior level standing, or permission of instructor.

#### BSAD 372

### E-COMMERCE

Spring, 3 credit hour(s)

This course is designed to provide an overview of e-commerce models, applications, decisions, and issues. Major topics associated with e-commerce such as security, privacy, intellectual property rights, authentication, encryption, acceptable use policies, and legal liabilities are examined. In addition, business and revenue models, startup strategies, the evolution of social commerce, and additional emerging technologies are explored.

Prerequisites: CITA 110 and ENGL 101 and junior level standing or permission of the instructor

### **BSAD 407**

### THE MEETING, EXPOSITIONS, EVENTS, AND CONVENTIONS (MEEC) INDUSTRY *Fall/Spring*, *3 credit bour(s)*

This course presents the scope, components, development and future of the Meetings, Expositions, Events and Conventions (MEEC) industry. Industry structure, specific areas related to food service management, exhibitions and events operations, and the techniques and procedures required for producing successful and sustainable events will be covered.

Prerequisites: BSAD 206 or permission of the instructor.

### BSAD 410 SENIOR PROJECT Fall/Spring, 6 credit hour(s)

Student will complete a senior research project specifically addressing issues facing the management environment today.

Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee.

Prerequisites: Senior status in the BBA in Management Program and approval by instructor

### BSAD 411

### MARKET RESEARCH Fall/Spring, 3 credit hour(s)

This course integrates the program material from the BBA in Management into a summative evaluation through company simulation software. Students incorporate knowledge of human resource management, operations management, managerial economics, professional ethics, business strategy, accounting and finance, and management of technology by running a virtual company.

Prerequisites: MATH 141 and BSAD 203

### BSAD 420 APPLIED ORGANIZATIONAL MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course emphasizes individuals' and groups' behavior in organizations. The rationale for the existence of organizations is discussed with the strategic objectives of improving productivity, performance, effectiveness, and efficiency to accomplish goals. Theories of human behavior in organizations will be examined. Additional topics covered will include group development, group decision making and problem solving, leadership roles, power and politics within organizations. Other important areas of analysis will be the norms and values of groups, group power, influence, coalition formation and organizational culture.

Prerequisites: BSAD 100 or junior level status

#### BSAD/HTMT 302

### CUSTOMER SERVICE AND THE GUEST EXPERIENCE IN HOSPITALITY *Fall, 3 credit hour(s)*

Today's customers have access to more information about products and services than ever before. Customer satisfaction is,therefore critical for hospitality organizations to establish, maintain, and enhance market share. This course focuses on the provision of excellent customer service in hospitality and its impact on the guest experience and hospitality organizations. Coursework will include the analysis of case studies involving top hospitality organizations, enabling students to develop strategic plans to provide the "wow" in customer service and the guest experience.

Prerequisites: BSAD 100 or permission of instructor

#### BSAD/HTMT 303 GLOBAL TOURISM: PERSPECTIVES AND PRACTICES Spring, 3 credit hour(s)

This course offers an overview of the global tourism industry as it relates to hospitality services. Traveler behavior, tourism planning, and the economic and social impacts of tourism are studied.

Prerequisites: BSAD 100 or permission of instructor

### BSAD/SOET 361 PROJECT MANAGEMENT Fall, 3 credit hour(s)

This course is an introduction to projects and project management as it pertains to Industry. Students will be introduced to principles of project selection, project planning & scheduling, duties of a project manager, project organization, implementation and termination.

Prerequisites: Junior standing or permission from instructor.

### BSAD/SOET 361

### PROJECT MANAGEMENT Fall, 3 credit hour(s)

This course is an introduction to projects and project management as it pertains to Industry. Students will be introduced to principles of project selection, project planning & scheduling, duties of a project manager, project organization, implementation and termination.

Prerequisites: Junior standing or permission from instructor.

### BSAD/SOET 370 ENGINEERING ECONOMICS Fall/Spring, 3 credit hour(s)

This course emphasizes the strong correlation between engineering design and manufacturing of products/systems and the economic issues they involve. The basic concepts of the time value of money and economic equivalence are applied throughout the course. Each assignment progressively incorporates different cash flows, the cost of funds, capital, operational and maintenance costs, salvage value, depreciation, and taxation. Students learn to apply different economic analysis methods - like discounted cash flow analysis, present worth, annual-equivalent worth, rate-of-return, cost/ benefit etc - in evaluating the economic viability of a project, as well as the comparison of mutually exclusive alternatives. The course also introduces concepts of replacement decisions, a few methods of describing project risk, and exposes students to specific issues of economic analysis of the private sector versus the public sector. Applications to a variety of engineering fields' actual cases are stressed throughout the course.

Prerequisites: MATH 121, MATH123, Junior status or permission of instructor.

### BSAD/SOET 421

# SIX SIGMA AND LEAN MANUFACTURING Spring, 3 credit hour(s)

This course discusses the origin and implementation of six sigma processes into manufacturing. The course investigates both the management and leadership of successful continuous improvement projects. The course introduces the students to the DMAIC process and applies the DMAIC process to class projects. student preparation toward a green belt in six sigma.

Prerequisites: MATH 141, BSAD 301, or MECH 350

#### BSAD/SOET

430 SYSTEMS ANALYSIS

Fall/Spring, 3 credit hour(s)

This course will enable students to learn and apply the skills a systems analyst needs to improve organizational processes. It will focus on the assessment of the users' interaction with technology and business functions, and on the analysis of data flow and its conversion into information. The course also explores some concepts of requirements engineering. A familiarity with MS Office (or similar product) is expected.

Prerequisites: Junior/Senior status; GER math

#### **CHEM 100**

### INTRO TO CHEMISTRY LABORATORY Fall/Spring, 1 credit hour(s), GER 2

This is a laboratory course to accompany CHEM 101. The activities and experiments in this course are hands-on applications of the concepts covered in CHEM 101. It is designed for those students who have had little or no chemistry laboratory experience. Students must enroll in both CHEM 101 and CHEM 100 simultaneously, unless they have previously passed one of the courses. Students must also pass both CHEM 101 and CHEM 100 to receive Natural Science General Education credit.

Prerequisites: None - Co-requisite: CHEM 101, or permission of instructor.

### CHEM 101

### INTRO TO CHEMISTRY

Fall/Spring, 3 credit hour(s), GER 2

This is an overview of chemistry which will include atomic structure, English-metric unit conversions, chemical nomenclature, the mole concept, stoichiometry, chemical reactions, physical behavior of gases, solutions, acid-base theory, and nuclear chemistry. It is designed for those students who have little or no chemistry background. Three hours lecture, two hours laboratory per week.

Prerequisites: For students who did not pass the NYS Chemistry Regents exam (

#### **CHEM 107**

### INVESTIGATIVE CHEMISTRY Spring, 3 credit hour(s), GER 2

This is a basic introduction to chemistry course designed to cover topics and methods used in forensic science. This course will include atomic structure, measurements and conversions, inorganic and organic chemical nomenclature, the mole concept, chemical reactions and stoichiometry, solution chemistry, acid-base theory, physical behavior of gases, calorimetry, chemical kinetics, dynamic equilibrium, and nuclear chemistry. In addition, it will discuss the chemistry of explosions, the nature of drug molecules and how they relate to addiction, as well as the use of DNA in analyzing evidence. It is designed for those students who have little or no chemistry background. Conditions: For students who did not pass the NYS Chemistry Regents exam (

Prerequisites: MATH 100 or high school equivalent or permission of instructor. Co-requisite: CHEM 108. A student cannot receive credit for both CHEM 101 and CHEM 107.

#### **CHEM 108**

### INVESTIGATIVE CHEMISTRY LAB Spring, 1 credit hour(s), GER 2

Investigative Chemistry Laboratory is a laboratory course to accompany Investigative Chemistry (CHEM 108). This laboratory course is designed to provide scientific laboratory experiences in chemistry relevant to forensic science. Each exercise involves the collection of data, manipulation of the collected data, and analysis of the data. The experiments include density of plastic material, chromatographic analysis of ink, types of chemical reactions, factors that affect the rate of chemical reactions, detection of common gases, spectroscopic analysis of analgesics, qualitative analysis of blood and urine, breathalyzer test, detection of blood, heat capacity of building materials, fingerprint development methods, and detection of gunshot residue. Two hours per week.

Prerequisites: None - Co-requisite: CHEM 107 or permission of instructor. A student cannot receive credit for both CHEM 108 and CHEM 100.

### CHEM 120

### GENERAL ORGANIC & BIOCHEMISTRY Fall/Spring, 3 credit hour(s), GER 2

An integration of general chemistry, organic chemistry and biochemistry providingn the student with a basic understanding of chemical processes and knowledge useful in a variety of degree programs. Topics include matter/atomic structure review, chemical bonding, intermolecular forces, physical behavior of gases, solutions, chemical kinetics, chemical equilibrium, acid/base equilibrium including buffers, an overview of organic chemistry, and an overview of biochemistry. The course is particularly useful to students in health related curricula where an understanding of life processes at the molecular level is essential. This course requires the corequisite of CHEM 121 the first time CHEM 120 is attempted.

Prerequisites: High School Regents Chemistry (65 grade minimum), or CHEM 101 and High School Algebra or MATH 106. - Co-requisites: CHEM 121

#### **CHEM 121**

### GENERAL ORGANIC & BIOCHEM LAB Fall/Spring, 1 credit hour(s), GER 2

The laboratory component of CHEM 120 (General, Organic, and Biochemistry). The course includes experiments in measurement principles, thermodynamics, kinetics, gravimetric analysis, physical behavior of gases, spectroscopy, radiochemistry, solutions, organic chemistry separation techniques and organic chemical synthesis. This course must be taken with CHEM 120 or after CHEM

120 has been successfully completed.

Prerequisites: NYS Chemistry Regents (65 grade minimum) or Introduction to Chemistry (CHEM 101) and HS algebra or Intermediate Algebra (MATH 106), or permission of instructor. Corequisites: General, Organic, and Biochemistry (CHEM 120) or after CHEM 120 has been successfully completed, or permission of instructor.

### CHEM 150

### COLLEGE CHEMISTRY I Fall, 4 credit hour(s)

This is the first semester of a two-semester college level course in chemistry. Topics include atomic structure, the periodic chart, moles, chemical reactions, stoichiometry, aqueous solutions, gas laws, gases in the atmosphere, thermochemistry, and chemical bonding theory.

Prerequisites: NYS Chemistry Regents Exam of 65 or above or Introduction to Chemistry (CHEM 101/100) or Investigative Chemistry (CHEM 107/108), and Intermediate Algebra (MATH 106) or high school equivalent, or permission of instructor.

### CHEM 155 COLLEGE CHEMISTRY II Spring, 4 credit hour(s)

This is the second semester of a two semester college level course in chemistry. Topics include:

bonding, intermolecular forces, solutions, chemical kinetics, chemical equilibrium, acids and bases, free energy conce,pts, and nuclear chemistry.

Prerequisites: College Chemistry I (CHEM 150) or permission of instructor.

### CHEM 301

### ORGANIC CHEMISTRY I Fall, 4 credit hour(s)

Organic Chemistry I is the first semester of a two semester sequence of organic chemistry which is applicable for Liberal Arts: Science and Engineering Science curricula. The lecture portion of the course will include chemical bonding, acid/base theory, thermodynamics, kinetics, organic structure, isomerism, stereochemistry, infrared spectroscopy, CMR/PMR nuclear magnetic resonance spectroscopy, mass spectroscopy, nomenclature principles, and the chemistry of several organic chemical functional groups. The laboratory portion of the course will include methods of purification/separation of organic chemicals, chemical kinetics, instrumental analysis techniques, and several organic syntheses.

Prerequisites: College Chemistry II (CHEM 155) or permission of instructor.

### CHEM 302 ORGANIC CHEMISTRY II Spring, 4 credit hour(s)

This course is a continuation of Organic Chemistry I. The lecture portion of the course will include oxygen containing functional groups, aromaticity, benzene and its derivatives, carbanions, nitrogen containing functional groups, and heterocyclics. The laboratory portion of the course will be comprised of organic syntheses.

Prerequisites: Organic Chemistry I (CHEM 301) or permission of instructor.

### CHEM 430

### BIOCHEMISTRY

Fall, 4 credit hour(s)

This course provides an introduction to the structure and function of biological macromolecules, bioenergetics, and transfer of genetic information. Emphasis will be on protein structure and function, enzyme catalysis, an overview of energy metabolism, and the maintenance and expression of genetic information.

Prerequisites: Organic Chemistry II (CHEM 302) or permission of instructor.

### CITA 100

# COMPUTER FLUENCY

Fall/Spring, 3 credit hour(s)

This course is s survey of the knowledge required for the programming courses in the CIS and IT degrees. It introduces basic computing concepts of number systems common to computers, logic operators and expressions, file management, and computer programming techniques. The course is intended for students who do not meet the minimum academic requirements to enter either the Computer Information Systems or Information Technology majors but desire to pursue a major in one of those programs.

#### **CITA 101**

### LIBRARY/INFORMATION LITERACY Fall/Spring, 1 credit hour(s)

This course will focus on the organization, use and retrieval of information, both within and outside of the library. Students will gain an understanding of the characteristics of information and be able to locate and critically evaluate it. Instruction will focus on both print and electronic information resources.

#### **CITA 103**

#### INTRODUCTION TO WORLD WIDE WEB Fall/Spring, 1 credit hour(s)

This course will introduce students to the World Wide Web (WWW) and Microsoft

Outlook. This course will offer instructions on how to use Internet Explorer and Microsoft Outlook for searching information on the internet, send and receive email, maintain a contact list, keep a calendar, and schedule meetings and events.

#### **CITA 104**

#### INTRODUCTION TO DATABASE Fall/Spring, 1 credit hour(s)

This course introduces the student to the fundamentals of database programs.

Students will be exposed to the creation, maintenance and organizing of a database. The students will also create listings and reports.

#### CITA 105

# INTERMEDIATE DATABASE

Fall/Spring, 1 credit hour(s)

This course is designed to increase the students' knowledge of database fundamentals using an industry standard database package as the instructional platform. The student will learn to do more advanced querying of the database, create and use custom forms, create and use custom reports, use the briefcase wizard, create action queries and macro writing.

Prerequisites: Introduction to Database (CITA 104) or permission of instructor. Two hours lecture per week for seven weeks.

#### **CITA 106**

#### INTRO TO WORDPROCESSING Fall/Spring, 1 credit hour(s)

This course is designed to help students attain the necessary skills and knowledge needed for effective operation of word processing software and equipment. This course will introduce concepts of word processing equipment, input, output, storage and retrieval, distribution and software. Major emphasis will be put on hands-on experience. Two hours lecture per week for seven weeks.

#### **CITA 107**

## INTERMEDIATE WORD PROCESSNG Fall/Spring, 1 credit hour(s)

This course is designed to help students attain advanced skills and knowledge needed for effective operation of word processing software and equipment. Major emphasis will be put on hands-on experience in learning how to design letterheads and newsletters, understanding the merging process, and creating tables.

Prerequisites: Introduction to Word Processing (CITA 106) or permission of instructor. Two hours lecture per week for seven weeks.

# CITA 108 INTRO TO SPREADSHEETS

# Fall/Spring, 1 credit hour(s)

A course designed to introduce the student to the fundamentals of spreadsheets using Microsoft Excel as the instructional platform. Students will create worksheets with literal and numeric data. The numeric data will be constants and/or formulas.

Students will also learn and use the relative and absolute cell reference system in formulas. Printing of spreadsheets creating line, bar, and pie graphs will also be included.

#### CITA 109

# INTERMEDIATE SPREADSHEETS

Fall/Spring, 1 credit hour(s)

This course is designed to increase knowledge of spreadsheet fundamentals using an industry standard spreadsheet package as the instructional platform. The student will learn to work with lists, pivot tables, object linking and embedding, developing a complete worksheet application and macro writing.

Prerequisites: CITA 108 Introduction to Spreadsheets or SOET 101 Intro to Comp Usage for Technicians

### CITA 110

#### INTRODUCTION TO INFORMATION TECHNOLOGY

Fall/Spring, 3 credit hour(s)

This course is an introduction to information technology focusing on microcomputer applications and application software. It includes word processing, spreadsheet, database, electronic presentation and an introduction to HTML. Personal computer terminology, hardware system components, operating systems, and current web applications are covered. Hands-on experience is utilized throughout. A student who completes CITA 110 may not receive credit for any of the following one-credit courses in a degree program: CITA 106 Introduction to Word Processing, CITA 108 Introduction to Spreadsheets, nor CITA 112 Introduction to Electronic Presentations.

#### CITA 111

# WEB PAGE DEVELOPMENT

*Fall/Spring, 2 credit hour(s)* 

This course will introduce students to the development process of web pages. The student will learn how to create and edit text (HTML) with a web authoring tool. They will learn how to use a draw/graphics software program to create, edit and use various types of graphic images (.GIF &

.JPEG) to help maintain the "surfer's" interest. The student will learn how to setup and maintain hyperlinks to various sites and within the original document. Also, the student will learn how to create and use tables, image maps, thumbnails and animated GIFs.

Prerequisites: Introduction to World Wide Web (CITA 103) or permission of instructor.

## CITA 112 INTRODUCTION TO ELECTRONIC PRESENTATIONS

Fall/Spring, 1 credit hour(s) This course is designed to show the student how to use desktop presentation software to prepare professional-looking presentations, combining text, charts and graphics. The students will also learn how to create typical business charts using a spreadsheet and enhancing those charts with additional software. You will experiment with animation using a drawing program, and create a presentation using various types of charts and show it to the entire class. Two hours lecture per week for seven weeks.

#### **CITA 113**

# INTRODUCTION TO MOBILE CLOUD COMPUTING APPS

Fall/Spring, 3 credit hour(s)

This course is an introduction to information technology focusing on mobile computing applications and cloud storage. It includes word processing, spreadsheet, database, multimedia presentation and an introduction to project management, voice assistance and edge computing. Mobile computer technology, operating systems, and current web applications are covered. This is a project-based course. Students taking the course should have and plan to use a mobile device utilizing the most recent versions of iOS or Android OS. A student who completes CITA 113 will not receive credit for any of the following courses in a degree program: CITA 106, CITA 108, CITA 110, or CITA 112.

#### **CITA 116**

#### VERIZON COMPUTER APPLICATIONS Fall, 3 credit hour(s)

This course is an introductory course in basic computer orientation to hardware and implementation of software applications in Telecommunications. Students use various software packages to create documents, spreadsheets, graphs, and presentations. The student utilizes this knowledge to solve problems and transfer info,rmatio,n via electronic medium.

Prerequisites: Permission of instructor.

# CITA 163

# SURVEY OF INFORMATION TECHNOLOGY

*Fall/Spring, 3 credit hour(s)* 

This course is an introductory

survey of Information Technology (IT) and IT terminology. Emphasis is on current and emerging technologies. Topics include: computer system components, communications and networks including the Internet, basic concepts in programming languages, information system development, IT impact on society, security, privacy and ethics.

#### **CITA 171**

# OPERATING SYSTEMS USE AND ADMINISTRATION

*Fall/Spring*, 3 credit hour(s)

This is a project intensive course covering current operating systems. Projects are designed to give students an overview of operating systems, and encompass the major aspects of operating systems. This course may be used as a first step for students wishing to obtain industrial certification for current operating systems.

Prerequisites: None - Corequisite: Computer Concepts & Operating Systems (CITA 170) or permission of instructor.

#### CITA 175

#### COMPUTER CONCEPTS AND OPERATING SYSTEMS LAB Fall/Spring, 1 credit hour(s)

This laboratory course is to accompany the lectures of CITA 170 Computer Concepts and Operating Systems course. Students will disassemble and reassemble PCs, become familiar with hardware components, learn to collect information about the computer system, install and configure system software, and test and troubleshoot the system to apply the various concepts covered in the course.

Prerequisites: None - Corequisite: Computer Concepts & Operating Systems (CITA 170)

# CITA 202

# COMPUTER USER SUPPORT CONCEPTS AND SKILLS

#### Fall/Spring, 3 credit hour(s)

People interested in becoming a computer support specialist or systems administrator must have strong problem-solving, analytical, and communication skills because troubleshooting and helping others are vital parts of the job. This course prepares the support specialist to maintain customer satisfaction by focusing on the needs of the customer, establishing credibility and trust, and by handling the most difficult customer scenarios. Emphasis is given to problem solving and troubleshooting, team dynamics, and interpersonal communication skills. It also provides a broad overview of the back- office operations of a help desk, and exposes the student to common industry tools and technologies used in providing exceptional customer support.

Prerequisites: Computer related course or permission of instructor

#### **CITA 221**

# DATA COMMUNICATIONS AND NETWORK TECHNOLOGY LAB Fall/Spring, 1 credit hour(s)

This laboratory course is to accompany the lectures of CITA 220 Data Communications and Network Technology course. Students will obtain hands-on experience on data communications and network technology throughout this course.

Prerequisites: Operating system Fundamentals (CITA 171), Intermediate Algebra (MATH 106) or permission of instructor.

#### CITA 260 INTRODUCTION TO WIRELESS TECHNOLOGY Spring, 3 credit hour(s)

This course introduces various aspects of wireless technology including wireless networks, authentication, protocols, security, installation considerations, and standards. Projects to determine signal strengths from different antenna types and locations are assigned.

Prerequisites: Data Communications and Network Technology (CITA 220) or permission of instructor.

#### **CITA 310**

# WEB SERVER ADMINISTRATION *Fall, 3 credit hour(s)*

A comprehensive survey of all aspects of Web server administration. Students gain hands-on experience by actually installing and administering their own Web servers in a lab environment. Topics include: server installation and configuration, site planning, supporting dynamic content with CGI's and ASP's server maintenance and site security.

Prerequisites: Data Communications and Network Technology (CITA 220) or permission of instructor

#### CITA 325 BUSINESS INTELLIGENCE SUITE Fall, 3 credit hour(s)

This course exposes the students to a set of Microsoft Business Intelligence tools: Excel, SQL Server, Reporting Services, and PowerBI. These technologies provide skills on organization, strategy, performance, and competitiveness. Students examine how these tools are used in various fields.

Prerequisites: Introduction to Information

Technology (CITA 110), Database Systems with Web Applications (CITA 215), and Statistics (MATH 141).

#### CITA 330 EMERGING INFORMATION TECHNOLOGY APPLICATIONS Spring, 3 credit bour(s)

A comprehensive survey of emerging information technology applications. This course covers Web application development with XML, multimedia topics including graphics / audio / animation / video / presentations / desktop publishing / Web publishing, and input technologies including speech / handwriting recognition. The course also includes additional continuously updated topics on most current state-of-the-art IT applications.

Prerequisites: Junior level status in a 4-year program or permission of instructor

# CITA 342

#### VISUAL PROGRAMMING AND DEVELOPMENT TOOLS Fall, 3 credit hour(s)

An introduction to the development of computer applications using rapid development tools such as Visual Basic or Visual C++. Emphasis is on designing and managing graphical user interfaces, procedures, file management, debugging and testing.

Prerequisites: Introduction to Programming (CITA 180) or GMMD 121 Programming for Visual Arts and Design

#### CITA 354 CYBER INCIDENT RESPONSE AND DISASTER RECOVERY *Fall, 3 credit hour(s)*

This course presents methods to identify vulnerabilities within computer networks and the countermeasures that mitigate risks and damage. It covers market-leading content on contingency planning, effective techniques that minimize downtime in an emergency, and ways to curb losses after a breach in case of a network intrusion.

Prerequisites: CITA 250

## CITA 356

#### CYBERSECURITY DEFENSE AND COUNTERMEASURES Fall, credit hour(s)

This course provides a thorough guide to perimeter defense fundamentals, including intrusion detection and firewalls. It covers advanced topics such as security policies, network address translation (NAT), packet filtering and analysis, proxy servers, virtual private networks (VPN), and network traffic signatures. This course examines the latest technology, trends, and techniques

including virtualization, IPv6, and ICMPv6 structure, making it easier to stay on the cutting edge and one step ahead of potential security threats. Prerequisites: CITA 250

# CITA 371

# WORKING WITH DATA VISUALIZATION TOOLS

#### *Fall/Spring, 3 credit hour(s)*

The Power BI Desktop course provides a foundation to work with this handy data visualization tool. Data visualization allows us to see insight into our data that would not be visible by just looking at the numbers— it will enable us to see trends and patterns for better decision making. Perfect data does not always exist to support your data visualizations – data will need massaging. The Power Query editor uses the M language to extract, transform, and load data for use in the Power BI Desktop. The Power Query editor will allow you to shape data from various sources to power your data visualizations. Data can come from multiple sources and be fragmented. The Power Editor allows you to pull data from numerous data sources to produce a unified data set to perform data analysis. Data sources can be merged and stacked together.

Prerequisites: CITA 110, CITA 163 or permission of instructor

#### **CITA 380**

# INTEGRATED PROGRAMMING FOR ENGINEERS

# Spring, 3 credit hour(s)

This course develops methodologies and techniques for program creation and implementation to solve mathematical and engineering problems. The students will be exposed to solving mathematical problems such as simultaneous equations and to performing engineering data aquisition from local sources as well as remote sources using highlevel programming languages, scripting languages, and commercial off- the-shell products shcu as MATLAB.

Prerequisites: CITA 220, ENGS 203, MATH 263 (prior programming and networking knowledge preferred)

#### **CITA 400**

# QUANTITATIVE APPROACHES TO MANAGEMENT

Spring, 3 credit hour(s)

This is the study of the decision-making process and how quantitative methods are used to find solutions to business problems. Computer software tools are used to analyze and process data. Opportunities, problems and decisions that confront managers are analyzed and solutions are developed. Topics covered include, but are not limited to: Cost-volume-profit

analysis, forecasting, decision theory, linear programming, probability concepts and applications, inventory control, queuing theory, and game theory.

Prerequisites: Statistics (MATH 141) or permission of department.

#### **CITA 420**

# PROGRAMMING FOR THE WEB

Fall, 3 credit hour(s)

This is a course on programming languages and techniques for Web development.

Topics include server side programming, creating dynamic, database driven content, and developing Web based client/server database applications.

Prerequisites: Web Server Administration (CITA 310) and Emerging Information Technology Applications (CITA 330), or permission of instructor.

#### **CITA 441**

#### NETWORK MANAGEMENT LAB Fall/Spring, 1 credit hour(s)

This laboratory course is to accompany the lectures of CITA 440 Network Management course. Students obtain hands-on experience on various network management tools, protocols, applications, and systems throughout this course.

Prerequisites: Data Communications and Network Technology Lab (CITA 221) or permission of instructor.

# CITA 450

#### CYBERSECURITY BODY OF KNOWLEDGE Spring, 3 credit hour(s)

This course provides a comprehensive, trustworthy framework of practices for assuring cybersecurity. It helps future security professionals understand how the various roles and functions within cybersecurity practice can be combined and leveraged to secure an organization. The course content is derived from the Department of Homeland Security's Essential Body of Knowledge (EBK) for IT Security and the International Information System Security Certification Consortium's Common Body of Knowledge (CBK).

Prerequisites: CITA 250

#### **CITA 455**

#### ACCESS CONTROL, AUTHENTICATION, AND PUBLIC KEY INFRASTRUCTURE Fall, 3 credit hour(s)

This course defines the components of access control, provides a business framework for implementation, and discusses legal requirements that impact access control programs. It looks at the risks, threats, and vulnerabilities prevalent in information systems and IT infrastructures and how to handle them with risk mitigation strategies and techniques. Access control systems and stringent authentication are presented as ways to mitigate risk. It also covers Public Key Infrastructure (PKI) components and how the various components support e- business and strong security services.

Prerequisites: CITA 360

#### CITA 460 INFORMATION TECHNOLOGY AND NETWORKED ECONOMY

#### Fall, 3 credit hour(s)

This course examines the fundamental concepts and components of Information Technology from both managerial and professional end user perspective. The course also explores the foundations of information systems to the demands of electronic commerce, connectivity, and networked economy.

Prerequisites: Senior status in a four-year program or permission of instructor.

#### **CITA 479**

#### INFORMATION TECHNOLOGY INTERNSHIP ORIENTATION Fall/Spring, 1 credit hour(s)

This course is designed as the precursor to the Senior Culminating Experience for seniors in the Canino School of Engineering Technology BT programs. Seniors will meet on a weekly basis with faculty to discuss resume preparation, job interviewing, locating and establishing internships, and internship requirements.

The course will include an overview of transitional steps going from student to employee.

Prerequisites: All upper-level Information Technology core courses.

### CITA 480 INFORMATION TECHNOLOGY INTERNSHIP

#### Fall/Spring, 6-12 credit hour(s)

Supervised field work in a selected business, industry, government or educational setting. Students carry out a planned program of educational experiences under direct supervision of an owner, manager or supervisor of information technology in an organization. Each intern will be supervised by a member of the faculty on a regular basis. Written and oral reports of work experience activities will be required. Evaluation will be based on the quality of experiences gained from the internship.

Prerequisites: Information Technology Internship Orientation (CITA 479) and senior status in the Information Technology program or permission of instructor.

# CITA 481 SENIOR PROJECT IN INFORMATION TECHNOLOGY

Fall/Spring, 6 credit hour(s)

This course is an alternative course for students in Information Technology program who cannot find a 12-credit Internship position. The course requires extensive project development work to integrate the specialized skills and knowledge presented throughout other courses in the Information Technology curriculum. Under the guidance of a faculty mentor, the student prepares a project proposal, conducts literature review and project implementation, submits a project report, and makes an oral presentation.

Prerequisites: Information Technology Internship Orientation (CITA 479), and senior level status in Information Technology program, or permission of the program director.

### CITA/CYBR 152 COMPUTER LOGIC Fall/Spring, 3 credit hour(s)

This course provides a background in number systems, logic gates & logic circuit basics, relational and logical operators, and problem solving skills used in computing. It introduces students to programming concepts and program design through the study of a programming language with a reduced set of instructions.

Prerequisites: Leveled into at least into Intermediate Algebra (MATH 106) or permission of instructor

#### CITA/CYBR 170 COMPUTER CONCEPTS AND OPERATING SYSTEMS Fall/Spring, 3 credit hour(s)

A study of the terminology and concepts associated with computer systems hardware and software. Topics will include: system hardware components, memory organization and management, operating systems, troubleshooting fundamentals, etc. This course should be taken concurrently with CITA 175 Computer Concepts and Operating Systems Lab course.

Prerequisites: None. - Corequisite: CITA 175 Computer Concepts and Operating Systems Lab

#### CITA/CYBR 180

# INTRODUCTION TO PROGRAMMING *Fall/Spring, 4 credit hour(s)*

This course develops methodologies and techniques for program creation and implementation. Writing high quality, internally documented, well structured programs utilizing appropriate data structures is emphasized. Although the primary language for demonstrating programming theory is C, the various techniques will also be presented using several different languages to show the commonality of the theories.

Prerequisites: Computer Logic (CITA 152) or permission of instructor.

#### CITA/CYBR 204

#### SYSTEMS ANALYSIS AND DESIGN Spring, 3 credit hour(s)

A course designed to guide the student through the evolution of a system, an analysis of the present flow of information and the specifications, selection and implementation of information processing systems. The scope of a system development study will transcend mere knowledge of specific systems to include a study of the total management system.

Prerequisites: Introduction to Programming (CITA 180), and Database Systems with Web Applications (CITA 215), or permission of instructor

#### CITA/CYBR 215

# DATABASE SYSTEMS WITH WEB APPLICATIONS

### Spring, 3 credit hour(s)

Database management systems are studied in the context of an SQL-based product. Topics include: logical organization versus physical organization; relational, network and hierarchical models; normalization; and the creation of a webbased user-interface to manipulate tables. A term project is assigned. Two hours lecture, two hours laboratory per week.

Prerequisites: Computer Logic (CITA

152) or permission of instructor.

# CITA/CYBR 220 DATA COMMUNICATIONS AND NETWORK TECHNOLOGY

#### *Fall/Spring*, 3 credit hour(s)

A study of terminology, hardware and software associated with data communications and network technology. Areas of study include design principles for human-computer dialogue, selection criteria for communications devices, the technology of data transmission, techniques and message protocols for line control and error processing, local area networks, networking concepts, network topologies and access control, network performance, network services and design issues, and network media and access methods.

Design, configuration, operation and maintenance questions are explored. Topics include end-user perspective, network operating systems, cabling, hardware protocols, software and applications, design, and administration. This course should be taken concurrently with CITA 221 Data Communications and Network Technology Lab course.

Prerequisites: Computer Concepts and Operating Systems (CITA 171) and Intermediate Algebra (MATH 106) or permission of instructor.

#### CITA/CYBR 250

#### INFORMATION SECURITY Spring, 3 credit hour(s)

An introduction to various technical and administrative aspects of Information Security and Assurance. Students are exposed to the spectrum of Information Security activities, methods, methodologies, and procedures. Coverage include inspection and protection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical and managerial responses and an overview of Information Security planning and staffing functions.

Prerequisites: CITA 165 or CITA 220

# CITA/CYBR 352

# ETHICAL HACKING AND PENETRATION TESTING

#### Fall, 3 credit hour(s)

This course introduces students to a wide range of topics related to ethical hacking and penetration testing. The course provides an in-depth understanding of ho,w to e,ffectively protect computer networks. The topics cover the tools and penetration testing methodologies used by ethical hackers and provide a thorough discussion of what and who an ethical hacker is and how important they are in protecting corporate and government data from cyber-attacks.

Prerequisites: CITA 250 Information Security

#### CITA/CYBR 360 CRYPTOLOGY IN THEORY AND PRACTICE

Spring, 3 credit hour(s)

This course provides a background in the characteristics of different cryptologic schemes. It introduces students to protocols and key establishment methods required for certificates and public key infrastructure.

Prerequisites: CITA 165 or CITA 220

#### CITA/CYBR 440 NETWORK MANAGEMENT Spring, 3 credit hour(s)

An advanced study of network management concepts, architectures, protocols, models, tools, systems, and applications. The course concentrates on the implementation of the Simple Network Management Protocol (SNMP). Students are also introduced to the use of the Desktop Management Interface (DMI) standard and Web-based Management.

Prerequisites: Network Technology (CITA 220) or permission of instructor.

#### CITA/MINS 300

# MANAGEMENT INFORMATION SYSTEMS *Fall/Spring, 3 credit hour(s)*

Students learn the concepts underlying the design, implementation, control, evaluation, and strategic use of modem, computer- based information systems for business data processing, office automation, information reporting, decision-making, and electronic commerce. The major emphasis of the course will be on the managerial and strategic aspects of information technology.

Prerequisites: Junior standing or the sum of credits earned and credits currently enrolled in is at least 60 or permission of instructor.

# CITA/MINS 307 CUSTOMER RELATIONSHIP MANAGEMENT

#### Fall/Spring, 3 credit hour(s)

This course provides information systems tools for building a customer-focused organization based on customer data and information. The course focuses on using current data to enhance relationships with customers, gathering data for future marketing endeavors and providing strategic guidance to the organization. The course provides insights into life-cycle management, customer lifetime value and measuring customer profitability. Three lecture hours per week. Pre-requisites: MINS 300, junior standing or permission of the instructor.

Prerequisites: Management Information Systems (MINS/CITA 300) or permission of instructor.

#### CITA/MINS 315 DECISION SUPPORT SYSTEMS Fall/Spring, 3 credit hour(s)

This course enables the student to turn raw data into information to help an organization's managers make decisions. Students will develop decision making analytical models to provide organizational leaders with potential outcomes and their effects. Students will study the network's role in distributed systems, distributed systems development tools, and distributed systems issues. Students will apply datamining techniques supporting knowledge- management decisions. Three hours lecture per week.

Prerequisites: Management Information Systems (MINS/CITA 300) or permission of instructor.

# CITA/MINS 320

# INTRODUCTION TO DATA MINING *Spring*, *3 credit hour(s)*

A systematic introduction to the basic principles, applications, techniques and models of data mining including classification, estimation, prediction, affinity grouping, clustering, description and profiling. The emphasis is on various data mining problems and their solutions. Students will also be exposed to a sample of data mining applications. Topics include decision trees, artificial networks, nearest neighbor approaches, market basket analysis, and association rules. Three lecture hours per week. Pre-requisites: Introduction to Database (CITA 104) or Database Systems (CITA 215) and Statistics (MATH 141) or permission of the instructor.

Prerequisites: Introduction to Database (CITA 104) or Database Systems (CITA 215) and Statistics (MATH 141) or permission of instructor.

#### CITA/MINS 425

# ENTERPRISE RESOURCE PLANNING *Fall/Spring*, 3 credit hour(s)

This course provides information systems tools to ensure a comprehensive resource planning system for all functions of businesses. The course will discuss the development and employment of enterprise resource planning for marketing, accounting, supply chain management, and human resources. Content will focus on practical applications of enterprise resource planning to ensure businesses get the greatest return on information systems investment. Three lecture hours per week. Pre-requisites: Management Information Systems (MINS 300), Junior standing or permission of the instructor.

Prerequisites: Management Information Systems (MINS/CITA 300) and Junior standing or permission of instructor.

#### CITA/MINS 430

# DATA AND KNOWLEDGE MANAGEMENT *Fall/Spring, 3 credit hour(s)*

This course focuses on the development of a knowledge management system using an organization's tacit and explicit knowledge to execute its strategy. Course explores practices entailed in developing a knowledge infrastructure, managing the interaction of people and technology, valuing knowledge assets, leveraging teams, and knowledge transferring across organizations. Three lecture hours per week. Management Information Systems (MINS 300), Junior standing or permission of the instructor.

Prerequisites: Management Information Systems (MINS/CITA 300) and Junior standing or permission of instructor.

## CIVL 317

# FLUID MECHANICS LAB

#### Fall, 1 credit hour(s)

This laboratory course will provide experiential supplements to the Fluid Mechanics I lecture ENG 315;and experiential and computational activities which will demonstrate and investigate practical applications of fluid mechanics theories in the Civil Engineering realm.

Prerequisites: Corequisites: ENGS 315 Fluid Mechanics I

#### CIVL 339

# STRUCTURAL ANALYSIS LAB

Spring, 1 credit hour(s)

Students in this class will apply structural analysis software to perform a 3D frame structure analysis.

Prerequisites: CONS 336 Structural Analysis, or permission from the instructor

#### CIVL 381 INTRODUCTION TO ARCHITECTURAL ENGINEERING Fall, 3 credit bour(s)

This course introduces the functional parts and systems that make up a building as well as their interactions in delivering required sustainable and resilient performance.

There is a general overview of professional design services and documents of architecture and engineering disciplines that encompasses foundations, structures, building enclosures, heating and air conditioning, electrical, plumbing and fire safety systems. Concepts of building performance and aspects of pertinent building codes and standards are also discussed. This course incorporates basic principles of building science, green construction, and professional ethics.

Prerequisites: CONS 272 Strength of Materials for Technicians or ENGS 203 Engineering Strength of Materials, or permission from the instructor

#### **CIVL 384**

# ENGINEERING GEOLOGY

Spring, 4 credit hour(s)

This course introduces engineers to earth processes and phenomena that impact the design, construction, and performance of engineered structures. Students learn to identify common earth materials, study the mechanical properties of rocks, and learn how earth materials respond to stress and strain resulting from natural forces and engineered structures. The impact of weather, erosion, landforms, structural deformation, earthquakes, and coastal processes on engineered structures are studied. The natural stability of slopes and mass movement hazards that impact the design and construction of structures are discussed. Additional topics include, but are not limited to: the development and composition of earth, geologic time, geologic mapping, an introduction to soil mechanics, and an introduction to surface water and groundwater principles.

Laboratory exercises reinforce lecture material; and provide students with skills required by field engineers.

Prerequisites: MATH 121 (College Algebra), MATH 123 (Pre-Calculus), or MATH 135(Technical Math I), or permission of the instructor.

### **CIVL 480**

#### CO-OP IN CIVIL AND ENVIRONMENTAL ENGINEERING TECHNOLOGY Fall/Spring, 3 credit hour(s)

This course provides students with an opportunity to receive program credit for real world learning experience through internship placement with a private/public organization in a field related to the student's degree, academic objectives, and career goals. This course requires students to have an active position that requires them to apply knowledge already obtained in their degree program and/or expand their knowledge and skills in the civil and/ or environmental engineering technology industries.

Prerequisites: 45 earned credits, consent of academic advisor, and approval by the Dean of CSOET

#### CMGT 100 INTODUCTION TO

CONSTRUCTION MANAGEMENT

Fall, 3 credit hour(s)

This course is an introduction to concepts/ terminology in the construction industry, business aspects of running a construction project, communication methods in construction, career planning and options for a career in Construction Management, project management protocols, ethical issues in construction, job site conduct protocol and other attributes of working in the construction industry. In class exercises and assignments emphasize teamwork skills, time management, communication skills, development of properly formatted deliverables, and basic problem solving eg. unit conversions, area and volume calculations plus critical thinking skills.

Prerequisites: MATH 123 Pre- Calculus or higher, or permission of the instructor

# CMGT 200 BUILDING CODES & COMMERCIAL PRINT READING

Spring, 3 credit hour(s)

This course reviews the structure of building codes and the way that they are enforced. Students learn about the origin of codes and how they have changed over time, from early fire codes to today's green codes. It also provides more specific information on ICC's (International Code Council) family of codes and the consensus code development process used to create and update them. The construction related print reading portion of the course is designed to assist students in reading and understanding commercial prints. Students learn how to navigate efficiently through a complex set of commercial prints, interpret symbols, read schedules, learn abbreviations, and use plans to work on construction related projects for all of the various trades in a commercial building.

### CMGT 300

#### CONSTRUCTION MANAGEMENT Spring, 3 credit hour(s)

Construction management fundamentals and their applications to the conduct of a construction business will be studied in this course. Topics include: estimating for the construction manager, CPM (critical path method) scheduling methods and expediting field operations, material management and jobsite laydown. Case studies are employed to assist students with understanding complex problems that arise during the management and administration of complex projects.

Prerequisites: 45 credits or more, or permission of the instructor

#### CMGT 301 SCHEDULING AND PLANNING Fall, 4 credit hour(s)

Construction management fundamentals and their applications to the conduct of a construction business will be studied in this course. Topics include: estimating for the construction manager, CPM (critical path method) scheduling methods and expediting field operations, material management and jobsite laydown. Case studies are employed to assist students with understanding complex problems that arise during the management and administration of complex projects.

Prerequisites: CMGT 300 Construction Management or ENGS 101 Intro to Enginering; and CMGT 322 Commercial Estimating 1 or CONS 222 Construction Estimating; or permission of the instructor

#### CMGT 304 LIGHT CONSTRUCTION

*Fall, 3 credit hour(s)* 

This course introduces the materials,

construction and design considerations typically employed in residential and commercial buildings. Topics include: site considerations, foundations, wall systems, roof systems and finish systems. Materials include soils, concrete, masonry, wood and steel. The course is intended for students who did not take CONS 111 and CONS 112.

Prerequisites: ENGS 101 Intro to Engineering or CMGT 100 Intro to Construction Management or CMGT 300 Construction Management, or permission of the instructor

#### **CMGT 305**

HEAVY CONSTRUCTION

Spring, 3 credit hour(s)

This course introduces students to construction equipment operating characteristics, economics, and production rate estimation. Heavy construction methods and procedures associated with excavation, hauling equipment, aggregate production, and mass earthwork operations are reviewed.

Prerequisites: ENGS 101 Intro to Engineering or CMGT 100 Intro to Construction Management or CMGT 300 Construction Management, or permission of the instructor

#### **CMGT 308**

### RENEWABLE & SUSTAINABLE MATERIALS Spring, 3 credit hour(s)

This course examines renewable and sustainable materials being used today in the construction industry. Students learn about the history and evolution of materials used in construction; and about the new sustainable materials available in today's market (types of materials, material application and selection, material performance, installation, service life, and maintenance). Students learn how to conduct cost-benefit analysis on different renewable and sustainable materials when deciding whether to use these materials in a project. Sourcing and planning for these materials is reviewed. Additional topics are: sustainable building design using green materials and methods and technologies for construction of sustainable transportations systems, including roads, bridges, tunnels, and hardscapes, as well as water, storm, and wastewater systems.

Prerequisites: CMGT 371 Statics and Strength of Materials for Construction or CONS 272 Strength of Materials for Technicians or ENGS 203 Engineering Strength of Materials; or permission of the instructor

#### CMGT 314 SOILS IN CONSTRUCTION Spring, 3 credit hour(s)

Students learn about soil types, soil properties, soil classification, basic soil property tests, how to conduct site and subsurface investigations. Introductory concepts of hydrogeology are introduced, students learn to measure and calculate hydraulic conducitivity, and site dewatering techniques are discussed. Other site work related topics include: the compaction control process, slope stability and erosion control, excavation safety and support systems, and roadway subgrade materials and testing; types of shallow foundations, deep foundations, and retaining structures and aspects of their construction as related to soil work.

Prerequisites: MATH123 Pre-Calculus or higher; or permission of instructor - Corequisites: CMGT 315 Soils In Construction Laboratory

#### **CMGT 315**

SOILS IN CONSTRUCTION LAB Spring, 1 credit hour(s)

Students learn about soil types, soil properties, soil classification, and basic soil property tests in applied laboratory sessions, soil testing methods and solve analytical problems. Students learn and practice basic reporting styles used in industry. If a student has obtained their ACI (American Concrete Institute) certifications in aggregate testing (Aggregate Testing Technician - Level 1 certification) and aggregate/soils base testing (Aggregate/Soils Base Testing Technicial certification) and can provide formal certifications, they can receive content credit for this course.

Prerequisites: CMGT 314 Soils In Construction, or permission of instructor

#### CMGT 322

#### COMMERCIAL ESTIMATING I

Spring, 3 credit hour(s)

In this course students will be introduced to estimating the costs of construction with a focus primarily on quantity take-off from construction plans. Student are also introduced to unit pricing of labor and material, assemblies and square foot estimates, and computer-assisted estimating.

Prerequisites: Have earned 45 credits, or permission of instructor

#### CMGT 323

# COMMERCIAL ESTIMATING II

Fall, 3 credit hour(s)

The student who is already familiar with estimating is challenged to perform more sophisticated work. Electronic Takeoff and Pricing software is employed extensively in the estimate of costs for complex commercial projects. In addition to material, labor and equipment, estimation of indirect costs are included. A large scale estimating project is required as part of this course.

Prerequisites: CMGT 322 Commercial Estimating 1; or permission of instructor

#### **CMGT 380**

CONSTRUCTION MATERIALS Fall, 2 credit hour(s)

This course provides students with an opportunity to receive program credit for real world learning experience through internship placement with a private/public organization in a field related to the student's degree, academic objectives, and career goals. This course requires students to have an active position that requires them to apply knowledge already obtained in their degree program and/or expand their knowledge and skills in the construction industry.

Prerequisites: 15 credits earned and MATH123 Pre-Calculus or higher; or permission of instructor - Corequisites: CMGT 381 Construction Materials Laboratory

#### CMGT 381

# CONSTRUCTION MATERIALS LAB Fall, 1 credit hour(s)

This laboratory course develops awareness with and expertise in conducting standardized field and laboratory tests on common civil engineering materials. The materials studied include aggregates and Portland cement concrete. Several concrete mix designs will be prepared and tested for fresh and hardened concrete properties.

Students learn to analyze and interpret laboratory test data. If a student has obtained their ACI (American Concrete Institute) certifications in concrete field testing (Concrete Field Testing Technician - Grade I certification) and concrete laboratory testing (Concrete Lab Testing Technician -Level 1 certification and Concrete Strength Testing Technician certification), can provide formal certifications, and can receive content credit for this course.

Prerequisites: CMGT 380 Construction Materials; or permission of instructor

#### **CMGT 389**

### CONSTRUCTION CONTRACTS AND LAW Fall, 3 credit hour(s)

Legal aspects associated with the conduct of a construction project are investigated in this course. Topics include: risk and liability to the owner and general contractor under various delivery methods, typical provisions of a contract, public-owner laws, assignment of responsibility for change orders, bonding and insurance, and the effect of unethical practices on the contract award process. Case studies are employed to illustrate concepts.

Prerequisites: CONS 274 Construction Management or CMGT 300 Construction Management, and 45 credits or more; or permission of instructor

### **CMGT 403**

## **OPERATIONS MANAGEMENT** Spring, 3 credit hour(s)

This course provides an introduction to operations management (OM) specific to a construction organization. This course aims to familiarize students with the major operational issues that confront construction managers including efficient planning of the work, productivity, materials management and quality issues. Case studies provide examples of successful OM practices and pitfalls of poor OM.

Prerequisites: CMGT 300 Construction Ma,nageme,nt or CONS 274 Construction Management; and CMGT 301 Scheduling and Planning, or permission of the instructor

#### **CMGT 406**

# VALUE ENGINEERING

Fall, 3 credit hour(s)

This course introduces students to value engineering (VE). Students learn the VE methodology, its role in the decision- making process, and application on construction projects. Students use VE tools in project-based decision making. Students also learn how to analyze projects and lower costs

using the VE method.

Prerequisites: CMGT 300 Construction Management or ENGS 101 Intro to Engineering; and CMGT 322 Commercial Estimating I or CONS 222 Construction Estimating, or permission of the instructor

### **CMGT 410** CONSTRUCTION LAYOUT Spring, 3 credit hour(s)

Site layout is an integral part of all construction projects and can have a significant impact on time, money, and construction efficiency. Students learn how to apply their skills in surveying, print reading, and construction management to develop and manage a site layout for each phase of a construction project. Students learn how to lay out the location of structures and other features on the site, check dimensions of structures as they are built, document completed work, and verify that the project is progressing in accordance to the design plans and specifications.

Prerequisites: CONS 203 Advanced Surveying, CMGT 200 Building Codes and Commercial Print Reading, and CMGT 300 Construction Management; or permission of the instructor

### **CMGT 480** INTERNSHIP IN CONSTRUCTION MANAGEMENT

Fall/Spring, 1 credit hour(s)

This course provides students with an opportunity to receive program credit for real world learning experience through internship placement with a private/public organization in a field related to the student's degree, academic objectives, and career goals. This course requires students to have an active position that requires them to apply knowledge already obtained in their degree program and/or expand their knowledge and skills in the construction industry.

Prerequisites: 45 earned credits, consent of academic advisor, and approval by the Dean of CSOET

# **CONS 101** ELEMENTARY SURVEYING

Fall, 4 credit hour(s)

Course consists of both lecture and laboratory periods. Lectures include the developmental history of the surveying profession, along with the underlying principles of basic theory and practice. Realistic exercises involving linear and angular measurements, leveling, field-book recording, construction layout, and traversing are performed in the outside laboratory. Computation of errors, adjustments for instrument misalignment and weather are included in the laboratory exercises. Conversion of measurements and use of the Metric (S.I.) system is also included. Students have ample opportunity for hands-on training with the extensive variety of equipment utilized in the course. Field parties of limited size offer "one on one" instruction opportunity.

Prerequisites: Intermediate Algebra (MATH 106) or concurrent enrollment in College Algebra (MATH 121) plus a beginning physics course or permission of instructor.

#### **CONS 111**

#### COMMERCIAL STRUCTURES Spring, 3 credit hour(s)

The study of construction materials, practices, equipment and terminology used in commercial construction. Lectures and laboratory periods de-

velop theory and practice in excavation; foundation formwork; masonry walls; concrete; erection of steel frame buildings; commercial wall and roof systems; and interior and exterior wall finishes. Field trips to be arranged when practical.

## **CONS 112**

#### WOOD STRUCTURES Fall, 3 credit hour(s)

The study of construction materials, practices, equipment and terminology used in buildings requiring wood framing. Lectures and laboratory periods develop theory and practice in layout and assembly of wood framing of floors, walls, roofs and trusses, and siding materials. Construction of a 2-stall garage and/or small storage shed will serve as an application of wood framing and exterior finish fundamentals. Students will perform an individual research project with a written report. One or more field trips will be arranged.

#### **CONS 132**

## CONSTRUCTION DRAFTING Spring, 3 credit hour(s)

An introduction to the fundamental principles of engineering and architectural drafting and to the basic idea that all people involved in engineering/ Architecture and/or construction will communicate with CADD drawings of some nature. The student will demonstrate a basic understanding of orthographic projection, perspective and isometric views, descriptive geometry, good CAD practices. A variety of construction prints will be utilized to create the ability to deal with all varieties of drawings commonly emanating from architectural engineering firms and those found on construction job sites.

Throughout the course, CAD concepts are reinforced through the use of AutoCAD and software.

## **CONS 151**

#### **BUILDING TRADES - BLUEPRINT** READING AND DRAFTING Fall, 2 credit hour(s)

Instruction includes understanding the fundamental concepts in freehand sketching and instrument drawing needed for communication in the construction industry. Orthographic projection, pictorials and perspective drawing techniques will be introduced. A variety of drawings will be studied in order to become familiar with information contained on them and how they are interpreted.CER-TIFICATE/AAS ELECTIVE CREDIT ONLY. One hour lecture, two hours laboratory per week.

#### **CONS 172**

### TECHNICAL STATICS

*Fall/Spring, 3 credit hour(s)* 

The course provides application of Newton's First and Third Laws of motion in the force analysis of statically determinate structures such as pinned connections, trusses, beams, frames, and cables. The determination of centroids and moment of inertia is also covered. The course requires extensive application of geometry, trigonometry and algebra. The course provides fundamentals that are used in strength of materials and structural analysis.

Prerequisites: MATH 123 (Pre-Calculus) and PHYS 121 (College Physics I); More advanced MA TH or PHYS may be substituted.

#### CONS 203 ADVANCED SURVEYING Fall, 3 credit hour(s)

This course emphasizes fundamentals of field and office procedures used in the construction industry. Major topics covered are: mapping procedures, topographic survey methods, area determinations by coordinates, determination of volumes for earthworks, horizontal and vertical control necessary for mapping and building layout, horizontal (circular) curves, vertical (parabolic) curves, and principles of boundary surveying. The student uses modern surveying equipment in field sessions, including total stations, automatic levels and lasers, geographic positioning satellite receivers and integrated mapping and surveying software for data analysis and map compilation.

Prerequisites: CONS 101 Elementary Surveying and SOET 116 Introduction to Computer Aided Drafting and Design or SOET 115 Computer Aided Drafting and Design; or permission of instructor.

#### **CONS 216**

# SOILS IN CONSTRUCTION *Fall*, 4 credit hour(s)

Students learn about soil types, soil properties, soil classification, and basic soil property tests. Students learn how to conduct site and subsurface investigations. Introductory concepts of hydrogeology are introduced, students learn to measure and calculate hydraulic conductivity, and site dewatering techniques are discussed. Other site work related topics include: the compaction control process, slope stability and erosion control, excavation safety and support systems, and roadway subgrades materials and testing. Students learn about types of shallow foundations, deep foundations, and retaining structures and aspects of their construction as relate to soil work. The laboratory component of the course explores soil testing methods and analytical problems related to lecture topics. Students learn and practice basic reporting styles used in industry.

Prerequisites: MATH 121, MATH 123, or MATH 135, and sophomore status, or permission of the instructor.

#### CONS 222

# CONSTRUCTION ESTIMATING *Fall*, 2 credit hour(s)

An introduction to estimating the costs of construction. Includes quantity takeoff from construction plans, unit pricing of labor, material, and equipment, and extensions based on unit prices derived from industry accepted resources such as RS Means and Timberline. The CSI Master format is introduced as a method of approach and organization.

Prerequisites: Intermediate Algebra (MATH 106) or Technical Math (MATH 135) and SOET 101, or ENGS 101, or CITA 108; or permission of the instructor.

### CONS 226 BRIDGE BUILDING Spring, 1 credit hour(s)

Students are challenged to an inter- collegiate bridge building competition that includes design, fabrication, and construction. Participating students gain practical experience in structural design, fabrication processes, construction planning, organization, and teamwork.

Students will essentially design and construct a 21-foot long steel bridge that is both light and strong, and capable of supporting 2,500 pounds. The class will use their bridge design to represent SUNY Canton's entry in the Regional competition.

Prerequisites: Enrollment in a Canino School of Engineering Technology curriculum and permission of the instructor.

#### CONS 233 STRUCTURAL DRAFTING Fall, 3 credit hour(s)

An introduction to the preparation of drawings typically used in the structural design industry. The greatest emphasis is on the creation of structural steel details. Detailing of timber and reinforced concrete structures will also be presented and performed. The lab work engages the student with "AutoCad Revit" for structures. Building Information Modeling (BIM) is introduced. Some structural design is required.

Prerequisites: SOET 116 or equivalent introductory course in the use of CADD, and CONS 272, or permission of instructor.

# CONS 272 STRENGTH OF MATERIALS FOR TECHNICIANS

Fall, 3 credit hour(s)

The concepts of stress and strain are introduced and, in combination with statics principles, are used in the analysis of structural elements. Material properties such as ultimate strength, yield strength, elastic modulus, shear strength, torsional strength, and compressive strength are investigated using physical testing. The process of selecting structural elements such as pins, bolts, tension members, compression members, beams and shafts based on strength and factor of safety is presented and practiced.

Prerequisites: A grade of C or better in CONS 172 (Technical Statics) or ENGS 201 (Statics), MATH 161 (Calculus 1)

#### **CONS 274**

# CONSTRUCTION MANAGEMENT Spring, 3 credit hour(s)

Construction management fundamentals and their applications to the conduct of a construction business. Construction estimating, scheduling (using CPM), production rate calculations and construction contract issues are studied.

#### CONS 275 STRENGTH OF MATERIALS LAB Spring, 1 credit hour(s)

This course supplements the material presented in strength of materials, by providing laboratory tests, hands-on projects and practical applications. The course also introduces new and basic topics related to structural analysis. Engineering materials to be worked with include steel, aluminum, concrete, timber, and composite materials. Topics will include: tension test, compression test, bending test, deflection test, elastic plate test under uniformly distributed area load, dead load, live load, and snow load calculations.

Prerequisites: CONS 272 Strength of Materials OR ENGS 203 Engineering Strength of Materials -Corequisites: May be taken coincident with CONS 272 or ENGS 203

# CONS 280

#### CIVIL ENGINEERING MATERIALS Fall, 3 credit hour(s)

This course examines properties, common

applications and methods for properly selecting the materials typically used in the constructed environment. The laboratory develops awareness with and expertise in conducting standardized field and laboratory testing on common civil engineering materials. The materials studied include aggregates, Portland cement concrete, masonry and asphalt.

Prerequisites: College Algebra (MATH 121) or Pre-Calculus Algebra (MATH 123), or Technical Math I (MATH 135)

### **CONS 285**

#### ENGINEERING GEOLOGY Spring, 4 credit hour(s)

This course introduces engineers to earth processes and phenomena that impact the design, construction, and performance of engineered structures. Students learn to identify common earth materials, study the mechanical properties of rocks, and learn how earth materials respond to stress and strain resulting from natural forces and engineered structures. The impact of weather, erosion, landforms, structural deformation, earthquakes, and coastal processes on engineered structures are studied. The natural stability of slopes and mass movement hazards that impact the design and construction of structures are discussed. Additional topics include, but are not limited to: the development and composition of earth, geologic time, geologic mapping, an introduction to soil mechanics, and an introduction to surface water and groundwater principles. Laboratory exercises reinforce lecture material; and provide students with skills required by field engineers.

Prerequisites: College Algebra (MATH 121), Pre-Calculus (MATH 123) or permission of instructor.

#### **CONS 304**

### REINFORCED CONCRETE DESIGN Spring, 3 credit hour(s)

In this course, the fundamentals of cast-in-place reinforced concrete design by the strength design method are introduced.

Students design slabs, beams, girders, columns and footings in accordance with current version of American Concrete Institute Code 318. Computations are done by manual methods and spreadsheets. Students are introduced to design software. In the lab, students work through the complete design of a small multi-story commercial building.

Prerequisites: CONS 336, CIVL 339, and CONS 280 - Co-requisites: CIVL 339 could be taken concurrently with this class.

# **CONS 316**

#### FOUNDATION DESIGN

Spring, 3 credit hour(s)

Principles of soil mechanics are taught: stress distribution, consolidation and settlement, shear strength, and lateral earth pressure. Students apply concepts of soil mechanics to foundation design. Soil- supported foundations for buildings and structures are discussed, which include different foundation types, design methods, design considerations and criteria, and installation techniques. Students learn about shallow functions, deep pile and drilled shaft foundations, retaining structures, and slope stability.

Prerequisites: Soils in Construction (CONS 216), Calculus I (MATH 161), Strength of Materials (CONS 272), or permission of instructor

#### CONS 322 HYDRAULICS Spring, 4 credit hour(s)

The basics of fluid mechanics and their application to civil engineering technology are considered. The course focuses on water as the fluid. Major topic areas covered are: fluid properties, buoyancy, hydrostatic pressure, resultant force and center of pressure on submerged surfaces, application of the continuity equation to flow in a closed conduit, pressure measurement, flow measurement and flow control in open channels, use of the rational method in determination of peak discharge and storm sewer design.

Prerequisites: CONS 172 or ENGS 201 (Statics) or permission of instructor.

#### CONS 324

#### STRUCTURAL STEEL DESIGN Spring, 3 credit hour(s)

An introduction to the theory, analysis and design of the elements that comprise structural steel buildings. Instruction follows the specifications and selection techniques provided in the American Institute of Steel Construction (AISC) Manual of Steel Construction. Subject areas include determination of controlling load combinations, analysis and selection of tension members, analysis and selection of flexural members, analysis and selection of compression members, fastener strength and connection design and combined bending and axial stresses (beam-columns).

Prerequisites: CONS 336 and CIVL 339 - Corequisites: CIVL 339 could be taken concurrently with this class.

#### **CONS 336**

#### STRUCTURAL ANALYSIS Fall, 3 credit hour(s)

The course analyzes statically determinate and indeterminate structures. Additional topics of influence lines, moving loads, member forces and stresses, deflections, flexibility and stiffness analyses are explored using computer applications.

Prerequisites: C or better in CONS 272 (Strength of Materials for Technicians) or ENGS 203 (Engineering Strength of Materials; and MATH 162 (Calculus II)

### **CONS 338**

### ADVANCED MECHANICS OF MATERIALS Spring, 3 credit hour(s)

This course is an analysis of statically indeterminate structures and deflections using the principle of virtual work. Special topics in stress analysis such as internal loads due to temperature, torsion, unsymmetrical bending circumferential stresses, buckling and beams on an elastic foundation are included. The finite element method is introduced. Three lecture hours per week.

Prerequisites: Structural Analysis II (CONS 336) or permission of the instructor.

#### **CONS 350**

#### INTRODUCTION TO

GEOGRAPHIC INFORMATION SYSTEMS Spring, 3 credit hour(s)

The course introduces students to GIS terminology, the concept of relational databases, spatial data models, topology, raster data and vector data. Data entry methods, including quality control and metadata are discussed. The student is introduced to spatial analysis applications including terrain analysis, data manipulation and visualization. Students apply knowledge in the laboratory using GIS software.

Prerequisites: Intermediate Spreadsheets (CITA 109) junior status, or permission of the instructor.

#### **CONS 366**

# STRUCTURAL STEEL DETAILING *Fall*, *3 credit hour(s)*

An acquaintance with the properties, dimensions, and characteristics of present day shapes and forms is achieved by making detail and erection drawings reflecting present day fabrication and erection procedures for structural steel. Mill practices, tolerances, and billings are considered. Proper drafting techniques are observed. Selection and detailing of beams, girders, columns, and connections is carried out. Drawing prints of columns and connections is carried out. Drawing prints are made for checking purposes from the pencil drawings. The AISC handbook is used extensively as a reference.

Prerequisites: Structural Steel Design (CONS 324), Computer Drafting (SOET 116), or permission of instructor.

# CONS 368

BUILDING ELECTRICAL & MECHANICAL SYSTEMS

## Fall/Spring, 3 credit hour(s)

An introduction to the major components that comprise the electrical and mechanical (HVAC) systems in a commercial building. Students study and interpret construction plans associated with these systems. Water supply, waste, drain and vent calculations are performed. Students are required to perform heat and energy calculations. Issues that impact building environmental health and indoor air quality are presented. Alternative energy approaches to heating, cooling and providing power to buildings are introduced.

Prerequisites: College Algebra (MATH 121) or permission of instructor.

#### CONS 370

# TIMBER DESIGN

*Fall, 3 credit hour(s)* 

The dimensional features, structural properties and behavior under load of wooden structural members are presented. Students learn standard methods for the analysis and design of timber-framed structural elements including beams, joists, rafters, posts (columns), braces, gussets an,d fast,eners. Load and Resistance Factor Design and Allowable Strength Design are employed. Use and selection of engineered lumber products such as glu-lams and laminated veneer lumber is included.

Prerequisites: CONS 336 and CIVL 339 - Corequisites: CIVL 339 could be taken concurrently with this class.

## **CONS 372**

#### HIGHWAYS & TRANSPORTATION Spring, 3 credit hour(s)

This course covers the design of horizontal and vertical highway alignments in accordance with American Association of State Highway and Transportation Officials (AASHTO) requirements from survey data, topographic maps and traffic data. Analysis of alternate plans using benefit cost ratios based on road user costs and first costs are included. Setting of traffic light timing for optimum traffic flow and design of parking is introduced.

Prerequisites: Advanced Surveying (CONS

203), Soil Mechanics (CONS 314), Civil Engineering Materials (CONS 380), or permission of instructor.

#### **CONS 375**

#### STRUCTURAL ENGINEERING DESIGN Spring, 3 credit hour(s)

This course is an introduction to the design of structural steel, reinforced concrete, wood. This course is taught on the basis of statically determinate structures. Students are introduced to the Load and Resistance Factor (LRFD) and Allowable Stress Design (ASD). Analysis and selection of tension members, columns and beams is incorporated.

Prerequisites: Strength of Materials for Technicians (CONS 272) and Civil Engineering Materials (CONS 280)

#### CONS 385 HYDROLOGY AND HYDROGEOLOGY FALL, 4 CREDIT HOUR(S)

This course includes the study of surface

and groundwater systems, with an emphasis on civil and environmental engineering related topics. Surface water topics include: principles of hydrology, hydrologic cycle, surface water environments, surface water flow, mass transport, flood hazard analysis, and drainage basins. Specific groundwater topics include: principles of hydrogeology, aquifers, aquitards, groundwater flow regimes and modeling, well construction and testing, porosity and permeability of earth materials, and aquifer property and testing and analysis. Laboratory and field exercises are used to introduce students to technologies and analytical methods used by industry to understand surface and groundwater systems.

Prerequisites: CONS 285, CONS 280, CONS 216; and MATH 122 or MATH 161; or permission of the instructor

#### CONS 386 WATER QUALITY Fall, 4 credit hour(s)

Water is one of Earth's most valuable resources. The quality of water is essential to human health, the environment, and industrial/engineering use. This course provides students with the knowledge to determine the quality of water and how it is impacted by contaminants. Course content expands upon concepts of basic chemistry to study areas of aqueous chemistry that relate to water quality analysis. Specific topics include the physical, chemical, and biological characteristics of water and the significance and interpretations of water quality properties. The fate of contaminants in natural and engineered environments are studied. Environmental and engineered systems are modeled in order to study contaminant fate and reaction kinetics. Laboratory sessions use standard water quality testing practices that are currently used in industry.

Prerequisites: Calculus I (MATH 161), College Chemistry I (CHEM 150), or permission of the instructor.

#### **CONS 387**

# WATER & WASTEWATER TREATMENT TECHNOLOGIES

Spring, 3 credit hour(s)

The treatment of water is necessary to achieve the required quality necessary for a desired enduse. End-use may include, but is not limited to, drinking water, medical use, and industrial use. The treatment of wastewater streams is necessary to achieve an effluent stream suitable for disposal or possible additional processing for reuse. This course explores different chemical and physical methods of treatment for water and wastewater streams. Course content expands upon concepts learned in basic chemistry and water quality courses. Specific topics include the physical, chemical, and biological treatment processes of water and wastewater streams. Students learn design concepts for water and wastewater treatment plants.

There is also a discussion of water quality standards and regulations. Laboratory sessions demonstrate standard water and wastewater treatment practices that are currently used in industry.

Prerequisites: College Chemistry I (CHEM

150) and MATH 161 (Calculus I), or permission of the instructor

#### **CONS 432**

#### **CIVIL DRAFTING & DESIGN** Fall/Spring, 3 credit hour(s)

This course covers the design of infrastructure for land development and the preparation of plans and specifications to construct it. Students design and prepare drawings for water supply, storm sewers, sanitary sewers, roads and site grading and drainage using CAD software.

Prerequisites: CONS 122, CONS 385, CONS 216, CONS 372

#### **CONS 472**

#### ADVANCED HIGHWAY DESIGN Spring, 3 credit hour(s)

This course focuses on the design of pavements in consideration of subgrade conditions and anticipated traffic load and on drainage of roads to meet design storm conditions. Topics include thickness design of pavements, techniques for subgrade improvement, geotextiles, and design of culverts for design storm conditions.

Prerequisites: CONS 122, CONS 385, CONS 216, CONS 470

#### **CONS** 477

#### CAPSTONE PROJECT

Spring, 3 credit hour(s)

This course provides a learning experience that allows a student to propose, design, and implement a project. This could be a study of a problem and solution of specific equipment, new project design, improvement of an existing product, and many others. All projects must be approved by course faculty.

Prerequisites: Completion of seven semester coursework (senior level status) or permission of the program director.

#### **CONS 485**

### SOLID WASTE MANAGEMENT Spring, 3 credit hour(s)

This course will introduce students to the governing, management, science, and engineering that impacts solid waste. The role of the federal government in the management of municipal solid waste is discussed, in conjunction with state solid waste legislation. Different types of solid waste streams (e.g. household waste, construction and demolition waste) and their characteristics will be examined. Students learn how to plan municipal solid waste management programs. A significant portion of the course are be spent on solid waste landfill engineering and design (e.g. liner systems, covers, leachate collection and treatment systems, groundwater flow and monitoring, gas migration

and collection). Construction and operational principles of landfills are discussed. Opportunities for reduction, reuse, and recycling of solid waste are discussed as one solid waste management technique.

Prerequisites: Hydrology and Hydrogeology (CONS 385), Soils in Construction (CONS 216) or permission of instructor

#### **CONS 486**

#### SOIL & GROUNDWATER REMEDIATION Spring, 3 credit hour(s)

Students learn about the different types and characteristics of soil and groundwater contaminants. Remedial methods and technologies for soil and groundwater contamination are examined. There is review and discussion of federal and state guidance, regulations, and other pertinent legislation.

Prerequisites: CONS 385, CHEM 150, and CONS 285 or CONS 280 or CONS 216 or permission from the instructor

#### **CONS 487** WATER RESOURCES ANALYSIS, MANAGEMENT, AND DESIGN Spring, 3 credit hour(s)

This course includes advanced open channel hydraulics, advanced surface water hydrology and groundwater, and well hydraulics. Management of water resources including reuse and alternative supplies is discussed. Conveyance and distribution water, as well as wastewater and stormwater collection and engineering are discussed. Students perform calculations by hand or with spreadsheets and are introduced to public domain water resources software and the Arc-Hydro data model for Geographic Information Systems. Three lecture hours per week.

Prerequisites: Hydraulics (CONS 122), Hydrology and Hydrogeology (CONS 385), and Introduction to Geographic Information Systems (CONS 350) or permission of instructor.

#### **CONS 220**

#### ENGINEERING MATERIALS Spring, 3 credit hour(s)

A study of the wide spectrum of materials used in manufacturing of discrete parts and machines. Material structure, characteristics, mechanical properties and applications will be stressed for ferrous and non-ferrous metals, plastics, and composites.

Prerequisites: College Algebra (MATH 121) and College Physics I (PHYS 121) or permission of instructor.

# **CYBR 165**

# SURVEY OF CYBERSECURITY

Fall, 3 credit hour(s) This course is an introductory survey of Cybersecurity and its terminology.

Emphasis is on current and emerging technologies. Topics include: overview of computer system components, communications and networks including the Internet, and their security features; basic concepts in programming languages, information system development, and their security solutions; IT impact on society, security, privacy, and ethics.

#### **CYBR 354**

#### CYBER INCIDENT RESPONSE AND DISASTER RECOVERY Fall, 3 credit hour(s)

This course presents methods to identify vulnerabilities within computer networks and the counter-

measures that mitigate risks and damage. It covers market-leading content on contingency planning, effective techniques that minimize downtime in an emergency, and ways to curb losses after a breach in case of a network intrusion.

Prerequisites: CITA 250 Information Security

#### **CYBR 356**

#### CYBERSECURITY DEFENSE AND COUNTERMEASURES Fall, 3 credit hour(s)

This course provides a thorough guide to perimeter defense fundamentals, including intrusion detection and firewalls. It covers advanced topics such as security policies, network address translation (NAT), packet filtering and analysis, proxy servers, virtual private networks (VPN), and network traffic signatures. This course examines the latest technology, trends, and techniques including virtualization, IPv6, and ICMPv6 structure, making it easier to stay on the cutting edge and one step ahead of potential security threats.

Prerequisites: CITA 250 Information Security, or permission of the instructor

#### **CYBR 368**

#### CYBERCRIME LAW & POLICY Fall/Spring, 3 credit hour(s)

This course provides students with an understanding of cybercrime law and policy, both in the US and internationally while touching upon the broader

concepts of cyberspace and cybersecurity. The course provides a basic understanding of the US Constitution and an introduction to US law relating to cybercrimes, which target computers and networks, as well as those which use computers to commit more conventional crimes such as fraud and theft. The course also gives students an understanding of criminal law concepts such as intent, evidence, conspiracy, and privacy rights, and will review some important US Supreme Court cases related to cybercrime. Students also consider international law, cyber terrorism, national security and cyberwar.

Prerequisites: 45 completed credits or permission of instructor

#### **CYBR 416**

### CYBERSECURITY IN HEALTHCARE Fall/Spring, 3 credit hour(s)

This course provides a high-level overview of the current state of Cybersecurity in the HealthCare Industry. Students will examine current threats and trends, provide insight as to why Healthcare is such a target rich environment, and discuss ways to mitigate these risks while still allowing Healthcare staff the ability to do their jobs successfully.

Prerequisites: 45 completed credit hours or permission of instructor

#### CYBR 450

#### CYBERSECURITY BODY OF KNOWLEDGE Spring, 3 credit hour(s)

This course provides a comprehensive, trustworthy framework of practices for assuring cybersecurity. It helps future security professionals understand how the various roles and functions within cybersecurity practice can be combined and leveraged to secure an organization. The course content is derived from the Department of Homeland Security's Essential Body of Knowledge (EBK) for IT Security and the International Information System Security Certification Consortium's Common

## Body of Knowledge (CBK).

Prerequisites: CITA 250 Information Security, or permission of instructor.

#### **CYBR 455**

#### ACCESS CONTROL, AUTHENTICATION, PUBLIC KEY INFRASTRUCTURE Fall, 3 credit hour(s)

This course defines the components of access control, provides a business framework for implementation, and discusses legal requirements that impact access control programs. It looks at the risks, threats, and vulnerabilities prevalent in information systems and IT infrastructures and how to handle them with risk mitigation strategies and techniques. Access control systems and stringent authentication are presented as ways to mitigate risk. It also covers Public Key Infrastructure (PKI) components and how the various components support e-business and strong security services.

Prerequisites: CITA 360 Cryptology in Theory and Practice, or permission of instructor.

#### CYBR 485

## CYBERSECURITY PRACTICE Fall/Spring, 6 credit hour(s)

This course is an internship course which integrates classroom work and practical experience for senior level students in Cybersecurity B.S. program. It is a structured field experience in which an intern acquires and applies knowledge and skills while working in a responsible role. Working with a supervisor, the student will perform prescribed work within an administrative or operational setting. The internship will be tailored to the individual student's career interests and the needs of the supervising organization.

Prerequisites: Senior status in Cybersecurity B.S. program

# CYBR/JUST 365

DIGITAL FORENSIC ANALYSIS Spring, 0 credit hour(s)

This course is designed to prepare the student to complete forensic analysis of digital media and to understand the process and technical challenges of internet investigations. The course looks specifically at how to obtain evidence from digital media, how to process network messages and logs while preserving the evidentiary chain, and how to adhere to the legal requirements of the search and seizure of digital media and related equipment and information.

Prerequisites: CITA 171 Operating System Fundamentals or permission of the instructor.

#### **DATA 155**

## SURVEY OF DATA SCIENCE Fall/Spring, 3 credit hour(s)

Fundamentals of data science. It helps students understand and learn some concepts necessary to start and work as data scientists. It covers definitions and main concepts in data science.

#### DATA 230 APPLIED DATA SCIENCE - R PROGRAMMING

#### Fall/Spring, 3 credit hour(s)

Fundamentals of applied data science -R morning. It helps students understand and learn some concepts necessary to start and work as data scientists. It covers the definitions, and main concepts, of data science.

#### DATA 315

#### DATA MINING AND MACHINE LEARNING

Fall/Spring, 3 credit hour(s)

Concepts and techniques in processing gathered data or information, which will be used in various applications. Specifically, data mining and the tools used in discovering knowledge from the collected data. This course focuses on the feasibility, usefulness, effectiveness, and scalability of techniques of large data sets. After describing data mining, this course explains the methods of knowing, preprocessing, processing, and warehousing data. Then, the methods involved in mining frequent patterns, associations, and correlations for large data sets are described. The course details the methods for data classification and introduces the concepts and methods for data clustering. Finally, it discusses the outlier detection and the trends, applications, and research frontiers in data mining.

#### **DATA 320**

#### DATA SECURITY AND PRIVACY Fall/Spring, 3 credit hour(s)

The goal of the course is to familiarize the students with basic concepts of data security and privacy, their definitions, applications and current advances in research community and industry.

# DATA 321

# BIG DATA FUNDAMENTALS

Fall/Spring, 3 credit hour(s)

Review the Big Data concepts, methods, and approaches and provide some examples of Big Data applications in Data science.

#### DATA 415

### ETHICS IN DATA SCIENCE Fall/Spring, 3 credit hour(s)

Ethical considerations on the collection, storage, use and analysis of data. This course helps students to examine the ethical and privacy aspects of collecting and managing data. Discovering the effect of the data science in the 21st century. The students are presented with discussions on the complications of data collection in the modern society and the principles of transparency, accountability and fairness as they understand the crucial aspect of having a shared set of ethical values. Students learn about best practices for responsible data management, using basic methods to preserve anonymity of the users when dealing with personal identifiable information.

#### **DATA 421**

#### DEEP LEARNING FUNDAMENTALS Fall/Spring, 3 credit hour(s)

This course reviews the deep learning concepts, methods, and approaches and provides some examples of deep learning applications in prediction and classification.

Prerequisites: DATA/CYBR 315

#### EADM 201 FUNDAMENTALS OF EMERGENCY MANAGEMENT Fall, 3 credit hour(s)

This course presents the theories, principles, and approaches to emergency management. The whole community approach to emergency management will be a focus with the phases of mitigation, preparedness, response, and recovery serving as the foundation. Analyses of past incidents, emergencies, disasters, and catastrophes will be presented along with their impacts on policy formation in the development of current emergency management doctrine. The role, duties, and importance of the Emergency Manager will be discussed throughout the semester.

#### EADM 205

#### HAZARD ASSESSMENT AND MITIGATION Fall/Spring, 3 credit hour(s)

This course focuses on a generalized understanding and an awareness of various types of threats and hazards. Central to the course is the understanding the technical cooperation regarding hazard and vulnerability assessments, planning doctrine and methodology, inclusion of hazard mitigation strategies in the formulation of projects, and resource management.

#### **EADM 220**

# EMERGENCY MANAGEMENT & RESPONSE

Spring, 3 credit hour(s)

The course presents methods for communities and organizations to recognize and respond to disaster or emergency situations. It encompasses the strategies and tactics used by emergency managers and other responders and focuses on expanded proactive measures to safeguard lives and assets from natural or man-made emergencies and disasters. The course includes modules covering emergency operations planning, assessing effects and responding to high risk hazard,s, dec, reasing operational interruptions, emergency response and support functions, and maintaining community lifelines.

#### **EADM 222**

# EMERGENCY PLANNING *Spring, 3 credit hour(s)*

The course prepares students to help reduce the growing toll (deaths and injuries, property loss, environmental degradation, business and economic disruption associated with disasters. Students will understand process and technologies (hazards risk management process) that organize preparedness

and response in a comprehensive framework that may be applied at all levels of public and private sector organizations. The course presents processes for development of personal and community/organizational emergency plans. EADM 301

# INCIDENT COMMUNICATIONS AND INFORMATION MANAGEMENT

Spring, 3 credit hour(s)

This course provides the student with useable tools and techniques that are universally prescriptive and can be implemented in nearly every risk- associated situation, from pandemics to accidents to terrorist attacks, and even to challenges to organizational reputation management.

Students who complete this course are prepared to make the best possible decisions about the affected population's well-being during an incident. Additionally, students practice accepting and communicating those decisions, within evolving situations and severe time constraints.

Prerequisites: 45 credit hours completed or permission of instructor

## EADM 307

#### LEGAL ISSUES IN EMERGENCY AND DISASTER MANAGEMENT Spring, 3 credit hour(s)

This course provides a general overview of the major legal and liability issues in emergency management. The focus is on the legal environment within which emergency managers operate, including their roles in rule-making, policy administration, and their potential personal legal liability for discretionary actions.

Prerequisites: ENGL 101 and EADM 205 or permission of instructor.

#### **EADM 320**

# RECOVERY & RESILIENCE *Fall, 3 credit hour(s)*

This course defines how well emergency management and other stakeholders collaborate to meet the needs of individuals, households, communities, states, and the federal government in ongoing efforts to recover from catastrophic and other incidents. The content will cover pre- disaster planning for recovery, current doctrine and principles for recovery from past disasters, and provide an overview of assessing resilience for disasters.

Prerequisites: 45 credits or permission of instructor

#### EADM 330

# EMERGENCY MANAGEMENT IN PUBLIC HEALTH AND HEALTHCARE

Fall, 3 credit hour(s)

The emergency management function within the public health and healthcare sector is important as organizations continue to strategize to increase resilience for disasters. This course provides students an overview of the function and allows for discussion of specific emergency management competencies and strategies to prepare for, respond to, and recover from health and other emergencies.

Students learn from past incidents and demonstrate an understanding of standards and programs designed to enhance emergency preparedness.

Prerequisites: 45 Credits completed or permission of Instructor

#### **EADM 400**

### INCIDENT MANAGEMENT SYSTEMS Fall, 3 credit hour(s)

This course provides a detailed overview of the National Incident Management System (NIMS) and includes scenarios, examples, and opportunities for students to apply what they have learned. NIMS is a framework for organizational management of emergencies and disasters used by local jurisdictions, states, and federal agencies.

NIMS has been widely adopted as the standard for emergency management and unique and complementary organizational structures have been developed to provide command and coordination, resource management, and personnel competency assessment to all incidents.

Prerequisites: Hazard Assessment and Mitigation (EADM 205) or permission of the instructor.

#### EADM 405

# EQUITABLE EMERGENCY MANAGEMENT *Fall, 3 credit hour(s)*

Examine the issues encountered by emergency managers during disasters that may prevent the provision of emergency services and protection to all members within a community. Students will apply emergency management theory to attain protection, response, and recovery strategies that are inclusive of people with disabilities, traditionally marginalized groups, and community members who may speak different languages.

Prerequisites: Junior or senior status

#### EADM 430

# SIMULATED DISASTER TRAINING *Fall/Spring*, 3 credit hour(s)

This course is designed for students to acquire the knowledge and skills necessary to develop, conduct and evaluate activities and exercises. Students will assess and evaluate an exercise in actual emergency and/or disaster situations.

Prerequisites: 45 credits or permission of instructor.

### EADM 435 DISASTER SIMULATION Spring, 6 credit hour(s)

The course is a highly structured applied interactive educational and training simulation experience that requires the student to participate in sequential exercises that focus on the application of skills and abilities in emergency and disaster management. Students will create an operational scenario, assess its application, calculate applicable scenario coordination and conduct the evaluation of exercise(s) participant performance associated with an actual emergency and/or disaster situation. Participants are required to develop, conduct, and evaluate these activities through the use of phased proficiency exercise applications.

Prerequisites: Incident Command System (EADM 400) and Simulated Disaster Training (EADM 430) or permission of instructor.

#### EADM 480 INTERNSHIP IN EMERGENCY AND DISASTER MANAGEMENT Fall/Spring, 3-9 credit hour(s)

The EADM internship is an academic program integrating, classroom work and practical experience with cooperating agencies. The internship allows seniors the opportunity to apply classroom learning in emergency and disaster response associated agencies. It is a structured experience in which an intern acquires and applies knowledge and skills, while working in a responsible role.

Prerequisites: Incident Command: System Coordination & Assessment (EADM 400), senior level status in the Emergency Management program, or permission of instructor.

#### EADM 485 SENIOR PROJECT

*Fall/Spring*, 3-9 credit hour(s)

Students will complete a senior research project specifically addressing issues in the emergency and disaster management arena. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee.

Prerequisites: Incident Command: System Coordination & Assessment (EADM 400) or permission of instructor.

#### ECHD 101 INTRODUCTION TO EARLY CHILDHOOD Fall, 3 credit hour(s)

An overview of the history, theories, and philosophies that form the foundation of Early Care and Education. All aspects of development (physical, cognitive, social- emotional, and communication) are presented and studied within an ecological context (family, community, culture, society). Specific emphasis is placed on understanding the various roles/responsibilities early childhood educators have in fostering the well-being and development of young children birth-5 years.

#### ECHD 105 ORIENTATION TO THE FIELD EXPERIENCE IN EARLY CHILDHOOD *Fall, 1 credit hour(s)*

The Early Childhood Orientation will prepare students for field work experiences in various Early Childhood settings. Students will become familiar with field work requirements, policies, and procedures. Students will prepare for and complete mandatory health clearances, NYS Office for Children Forms, complete the Foundations in Health and Safety Training, and file all required documents and contracts based on placement sites.

Students will become acclimated to the SUNY Canton Early Childhood Field Experience guidelines and understand the role of the college supervisor, site mentor and the responsibilities and expectations of the student. By the end of the course all students will have confirmation of their Field Experience placement site. ECHD Majors only

Prerequisites: ECHD 101, Co-requisite(s): ECHD 125

#### ECHD 121

## WELLNESS IN YOUNG CHILDREN: PROMOTING HEALTH, SAFETY, NUTRITION

Fall, 3 credit hour(s)

In this course, students will develop the knowledge and skills necessary for ensuring the well-being of the young child. The course focuses on the role of the teacher in creating and incorporating health, safety, and nutrition programs and activities

in early childhood settings to support children's development, healthy lifestyle practices, and learning.

### ECHD 125

#### CURRICULUM DEVELOPMENT Fall, 3 credit hour(s)

In this course, students will examine curriculum methods in early care and education. Students will create and implement thematic lessons and activities to promote the skill development of the whole-child. Special emphasis will be given to the process of curriculum development, developmentally appropriate methods, child-centered planning, and active play-based learning experiences for young children.

Prerequisites: Introduction to Early Childhood (ECHD 101) or permission of instructor.

#### ECHD 131

#### INFANTS AND TODDLERS Spring, 3 credit hour(s)

In this course students, will gain an understanding of the developmental milestones and needs of the young child from infancy to age three. This course will explore the core competencies of the infant-toddler caregiver and the caregiver and family relationship. Students will identify and apply best practices for providing optimal high quality care for infants and toddlers.

### **ECHD 200** PLANNING PROGRAMS FOR YOUNG CHILDREN

Spring, 3 credit hour(s)

In this course, students will gain knowledge of key components that make up a high- quality early childhood setting. Students will examine the importance of a program philosophy, family involvement, home- school communication, learning centers, scheduling, and state child care licensing regulations. Principles of program planning related to high quality early care and education, administration, and leadership will be applied.

Prerequisites: Introduction to Early Childhood (ECHD 101) or permission of instructor.

#### **ECHD 201**

#### EARLY CHILDHOOD FIELD EXPERIENCE Spring, 4 credit hour(s)

This course is an off-campus early childhood field experience. Assignment options may include licensed group childcare programs, pre-k, or kindergarten classrooms, or industry specific [children's museum, library, play-based

enrichment] settings. Students will complete an 80-hour field experience with children ages birth -5 years. Under the direct supervision of an assigned mentor, students will apply knowledge and skills acquired through coursework with a focus on child observation, development, implementation of ageappropriate curriculum plans, and activities. Students will participate in a weekly 50-minute seminar led by the student teaching college supervisor.

Prerequisites: ECHD 101, ECHD 121, ECHD 125, ECHD 131, Minimum 2.0 overall GPA, and permission of the ECHD Program Coordinator.

#### **ECHD 204**

### EARLY CHILDHOOD OBSERVATION Spring, 3 credit hour(s)

This course examines the importance of observation, assessment, and documentation of young children's development from birth to age five.

Students will be introduced to and apply various forms of assessment methods and understand the value of such assessments as a tool for informing teaching practices and developing appropriate curriculum goals to ensure optimal growth and learning for young children.

Prerequisites: ECHD 101, ECHD 125, ECHD 131, ECĤD 250

#### **ECHD 250**

## CHILDREN WITH SPECIAL NEEDS Fall, 3 credit hour(s)

In this course, students will examine various special needs of young children. Students will gain knowledge of inclusive practices, teaching modifications, prevention and intervention strategies, and support services for children, families, and the community. Assessment, identification, and general knowledge of the special needs of all children will be examined, as well as social policies and initiatives to support teachers, families, and children.

# **ECHD 285**

#### **ISSUES AND POLICIES IN EARLY CARE & EDUCATION** Fall, 3 credit hour(s)

In this course, students will draw from academic, life, and coursework to explore current issues and policies in the field of early education and care. Social issues impacting the well-being of children, families, and the community will be explored. Students will research issues and investigate approaches to resolving some of these challenges.

Prerequisites: ENGL 101; ECHD 101 or SOCI 101 or PSYC 101 or permission of instructor

#### **ECHD 301**

# FOSTERING RELATIONSHIPS IN EARLY CHILDHOOD PROGRAMS

# Spring, 3 credit hour(s)

This course explores the importance and benefits of establishing a partnership between teacher, parent, and the early care and education program. Topics will include ways in which to create and build a sense of community, the importance of open communication, and understanding diverse families and parental needs. Forms of parent engagement and involvement, and the benefits of creating reciprocal and respectful relationships for all involved in the care and development of the young child will be studied. Students will examine their role in assisting families with understanding child development, play- based curriculum, appropriate expectations, and additional topics to ensure a collaborative, supportive, and enjoyable childcare experience for children, teachers, and families.

Prerequisites: ECHD 101

# ECHD 302

# MULTI-CULTURAL EARLY CHILDHOOD CURRICULUM

#### Fall/Spring, 3 credit hour(s)

This course examines the role and responsibility of the early childhood professional in creating a culturally responsive and inclusive classroom environment. Anti-bias curriculum methods, activities, multi-cultural literacy, and meaningful ways to create a welcoming and supportive environment that honors and celebrates families, children, and teachers will be studied. This course will examine inclusive polices, and emphasize the importance of supporting children's social learning regarding acceptance, tolerance, and respect for self and others.

Prerequisites: ECHD 101; ECHD 125 or permission of instructor.

#### **ECHD 303**

#### PHYSICAL ACTIVITY: INDOORS & OUT Fall/Spring, 3 credit hour(s)

This course examines the importance of physical activity for the developing child. Students will research the value of such active play experiences, and the effect physical engagement has on learning, and health. Students will explore ways to incorporate movement activities into classroom schedules and lessons to best meet the needs of the young child. The outdoor space, viewed as an extension of the classroom, will be studied. Students will create and engage in movement activities throughout the course.

Prerequisites: ENGL 101; ECHD 101; PSYC 101 or permission of instructor.

### **ECHD 304** STEM IN THE EARLY YEARS Fall/Spring, 3 credit hour(s)

This course focuses on integrating STEM (Science, Technology, Engineering, and Math) in early childhood settings and curriculum. Young children acquire STEM skills through exploration, inquiry, and active engagement. Topics will include methods for promoting scientific discovery and learning, integrating science and technology, developing mathematical concepts, and facilitating active experimentation and engagement in the early childhood classroom. Basic components of STEM and effective ways to incorporate STEM into curriculum and everyday activities with young children will be studied. Prerequisites: ENGL 101

#### ECHD 306

### PURPOSEFUL PLAY-BASED LEARNING Fall/Spring, 3 credit hour(s)

In this course, students will gain an understanding of the value of intentional and purposeful teaching strategies supported through meaningful play-based experiences for the young child. Students will develop learning plans, design primary classroom spaces that support playful engagement, and explore play-based curriculum to best support the developmental needs and milestones of children, birth – age 5.

Prerequisites: ECHD 101

#### ECHD 310

#### LITERACY ACTIVITIES ACROSS THE CURRICULUM

*Fall/Spring, 3 credit hour(s)* 

In this course students will develop an understanding of high-quality literacy experiences for the early childhood classroom. Beyond story reading, active engagement with books can provide a foundation for developing and integrating a curriculum and activities that support all aspects of child development and learning. Purposeful and intentional teaching methods will be shared, featuring a selection of popular children's literature.

Prerequisites: ECHD 101

#### **ECHD 312**

## ERIC CARLE AND EARLY CHILDHOOD Fall/Spring, 3 credit hour(s)

Study renowned children's author Eric Carle [1929-2021] and the 70+ books created throughout his career as a self-proclaimed "picture writer". Students will explore many of Carle's story books as well as his unique art form as an illustrator. Students will discover the inspiration and meaning behind several of Eric Carle's children's books and how each can provide a foundation for creating activities and engaging curriculum in the early childhood classroom.

Prerequisites: ECHD 101

#### ECHD 340

# POLICIES AND REGULATIONS IN EARLY CHILDHOOD SETTINGS

Fall, 3 credit hour(s)

This course examines childcare licensing regulations. Students will gain knowledge of state mandated policies and procedures pertaining to health and safety, children's programming, staffing, and the physical environment. Students will research and develop policies according to state childcare mandates, and apply methods of childcare program evaluation, assessment, and accreditation criteria throughout the course.

Prerequisites: ECHD 101, ECHD 121 or permission of instructor

#### ECHD 401

#### DEVELOPMENTALLY APPROPRIATE PRACTICE: LEARNING ENVIRONMENTS INFANTS - AGE 5 Spring, 3 credit hour(s)

This course focuses on creating quality early learning environments for infants, toddlers, and preschoolers. Students will research and apply concepts of developmentally appropriate practice related to purposeful and intentional curriculum activities and learning centers within the early care and education environment. Students will gain knowledge of the value of play-based learning centers that engage,

challenge, and promote the development of the young child. Prerequisites: ECHD 101, ECHD 125, ECHD 250; 45 credit hours or permission of instructor

#### ECHD 402

# EARLY LITERACY AND LANGUAGE DEVELOPMENT

#### Fall/Spring, 3 credit hour(s)

This course expands on students' knowledge of language and literacy development in young children. Students explore the four broad interrelated areas of early childhood language arts – speaking (oral), listening, writing, and reading. The course provides strategies for enhancing language/literacy experiences in a literacy – rich environment that engages children in developmentally appropriate language arts experiences.

Prerequisites: ENGL 101

#### **ECHD 403**

# FAMILY CHILD CARE DEVELOPMENT AND MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course examines the Family Child Care profession. Students are introduced to state polices and regulations for establishing a quality early care and education home- based center. Students will gain an understanding of the challenges and rewards of this unique small business. Topics include policy, procedures, and contract development, multi-age curriculum planning, and home-based child care space design, to best meet the needs of the child care provider, and families and children served.

Prerequisites: ECHD 101; ECHD 121 or permission of instructor.

#### **ECHD 404**

### POSITIVE CHILD GUIDANCE Fall, 3 credit hour(s)

This course provides students with an understanding of how to meet the needs of the developing young child, and the behavioral challenges typically associated with this unique stage of development.

Students will examine acceptable methods and approaches to assist young children with problem solving skills and self-control that are positive and developmentally appropriate. The course will focus on individual and classroom strategies and solutions for establishing, and maintaining, a positive and cooperative classroom.

Prerequisites: Infants and Toddlers (ECHD 131), Children with Special Needs (ECHD 250), Child Development (PSYC 220) or permission of instructor

#### ECHD 405 EARLY CHILD MENTOR: TEACHER AS TRAINER

Fall, 3 credit hour(s)

This course explores the Early Childhood Program Administrator's role as both mentor and facilitator of teacher development. Students will gain an understanding of quality professional training for early care and education providers that are meaningful and relevant in promoting the professional competencies of the individual and program quality. Various professional development models and training practices will be studied and applied.

Prerequisites: Completion of 45 credit hours or permission of instructor

# ECHD 409

## ORIENTATION TO CULMINATING EXPERIENCE - ECHD

Fall, 1 credit hour(s)

his course prepares students for their internship experience or senior capstone project in Early Childhood Care and Management. Students will become familiar with the process for selecting and securing an internship site, the necessary skills and behaviors to be successful, and internship requirements. Students will learn how to prepare an appropriate resume and cover letter, and receive guidance on interviewing techniques. If a student selects the senior capstone project, the course will provide information on requirements to satisfy the completion of the project. Students will begin the planning phase of the capstone assignment.

Prerequisites: ECHD BBA majors only. Senior level status, or permission of instructor

#### ECHD 410 INTERNSHIP: EARLY CHILDHOOD CARE AND MANAGEMENT Service 3, 12 are dit hour(s)

# Spring, 3-12 credit hour(s)

This internship course provides the student with practical experience in an early childhood care and management setting. Students will integrate principles of management and administration and concepts and skills learned throughout their BBA course of study in a childcare facility. The internship will be tailored to the individual career interests of the student and the needs of the supervising organization. Internship proposals must be presented and approved prior to course registration.

Prerequisites: ECHD 409, senior level status in Early Childhood Care and Management and an overall 2.50 GPA, or permission of the instructor

#### **ECHD 411**

# CAPSTONE PROJECT: EARLY

# CHILDHOOD CARE AND MANAGEMENT Spring, 3-15 credit hour(s)

Students will complete a senior research project based on their area of interest in Early Childhood Care and Management and career goal. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee.

Prerequisites: ECHD 409 and senior level status in Early Childhood Care and Management; 2.50 overall GPA, or permission of the instructor

### ECHD 420 EARLY CHILDHOOD PROGRAM DEVELOPMENT AND MANAGEMENT Fall, 3 credit hour(s)

This course focuses on the role and responsibilities of the child care program administrator. Students will gain an understanding of the complexities, demands, and rewards of such a position. Topics will include organizational and personnel management, human relations, quality programming and evaluation, and professional standards associated with leading an early care and education center.

Prerequisites: Completion of 45 credit hours or permission of instructor.

### ECMR 101

# ELECTRICITY FOR TRADES

Exploration of direct and alternating current circuits, resistance, inductance, capacitance, and magnetism through practical applications. Series and parallel circuits, metering, wire sizing, batteries, and motors connect the learner to industry needs.

Prerequisites: MATH 106

## ECMR 102

#### ELECTRICITY FOR TRADES II

Continuation of Electricity for Trades I. Includes additional instruction in basic AC system theory, three phase circuits, motors - motor control, transformer theory - connections. Laboratory projects include diagnosis of electrical equipment, motors motor starters, transformer connections and raceway installations for Commercial Electrical applications.

Prerequisites: ECMR 101, MECH 128 - Co-Requisites: MATH 101 or MATH 106

#### ECMR 103

#### ELECTRICITY FOR TRADES LAB

Exploration of direct and alternating current circuits, resistance, inductance, capacitance, and magnetism through practical applications. Series and parallel circuits, metering, wire sizing, batteries, and motors connect the learner to industry needs.

Prerequisites: Co-requisite: MATH 106

#### ECMR 104

# ELECTRICITY FOR TRADES II LAB

Continuation of Electricity for Trades I. Includes additional instruction in basic AC system theory, three phase circuits, motors - motor control, transformer theory - connections. Laboratory projects include diagnosis of electrical equipment, motors motor starters, transformer connections and raceway installations for Commercial Electrical applications. Prerequisites: ECMR 101, MECH 128 - Co-

requisites: ECMR 102, MATH 101 or MATH 106

#### **ECMR 173**

# INTRODUCTION TO THE

NATIONAL ELECTRICAL CODE

This course will cover the basics of understanding the National Electrical Code, with electrical drawing illustrations. Topics include circuit, overcurrent protection devices, box and wire sizing, with service entrance design. A final project will include a residential electrical design in accordance with the National Electric Code.. Certificate/ AAS Elective Credit.

ECMR 175

#### PHOTOVOLTAIC INSTALLER Fall, 3 credit hour(s)

Instruction on the installation and maintenance

of photovoltaic systems. The course includes installation of components and sub-systems based on the particular types of systems. As part of the course students will review permits requirements, alignment of arrays based on south orientation and building roof designs, mounting options, wind loading, aesthetic wiring that complies with NEC. Taught are the ways to verify the system is working, open circuit testing, short circuit testing, start-up and shutdown, and emergency response with proper labeling.

#### ECON 101

## PRINCIPLES OF MACROECONOMICS Fall/Spring, 3 credit hour(s)

This course is the study of the market economy, role of government, income determination, business cycle, inflation, unemployment, banking system, monetary and fiscal policy, population, economic growth, and international trade within a market economy.

#### ECON 103

#### PRINCIPLES OF MICROECONOMICS Fall/Spring, 3 credit hour(s)

This course provides a study of supply, demand, elasticity, theory of the firm, market structures, government regulation, marginal productivity theory, and selected contemporary economic issues.

Prerequisites: Macroeconomics (ECON 101) or GER Math or permission of instructor.

# ECON 105

# SURVEY OF AMERICAN ECONOMIC HISTORY

Spring, 3 credit hour(s)

Fundamental tools of economics will be used to explain important events and issues in the history of the United States. Topics to be surveyed include the United States' growth and transformation into an industrialized nation, development and transitions in American labor, consumers and culture, the rise of corporate America, changes in the role of government, economic regulations, monetary and fiscal policy, the origins of major institutions and their economic impact, and increased global awareness.

## ECON 120

# INTRODUCTION TO LABOR STUDIES *Fall/Spring, 3 credit hour(s)*

Within an historical context, this course examines the economic, social and technical forces that shape labor conditions in the USA. Among the topics covered are: the changing nature of work under capitalism, collective bargaining, theory and value of workplace skills, and the impact of economic globalization on labor.

#### **ECON 201**

# ECONOMICS & SOCIAL ISSUES

Fall/Spring, 3 credit hour(s)

This course applies basic economic concepts to contemporary social issues. The current real world public policies surrounding these issues will be examined, as well as the impact such policies have on society.

#### ECON 301

# REGIONAL ECONOMIC DEVELOPMENT IN AFRICA

#### Fall/Spring, 3 credit hour(s)

This course provides an analytical study of economic development of one specific African region. Topics to be covered include inequality, poverty, economic growth, demography, fertility, mortality, migration, employment, education, health, trade, globalization, food production, nutrition, environment, and sustainable development. Different African regions (Central Africa, East Africa, North Africa, Southern Africa, and West Africa) are studied on a cycle. Students may take one "Regional Economic Development in Africa" for Gen Ed. 6 credit. Students may take two "Regional Economic Development in Africa" for elective credit.

Prerequisites: Macroeconomics (ECON 101), or Microeconomics (ECON 103), or Introduction to Sociology (SOCI 101), or Statistics (MATH 141) or permission of the instructor.

### ECON 305 ECONOMICS OF CRIME Fall/Spring, 3 credit hour(s)

This course examines the behavior of criminals and use economic concepts to analyze crimes of violence, crimes against property, and the markets for illegal goods and services. Topics to be covered include costs of crime to society and its various stakeholders, prostitution and drug crimes, issue of decriminalization and legalization, allocation of resources to and within the criminal justice system, crime prevention strategies, and efficiency and effectiveness of the use of punishment as a form of crime deterrence. In addition, it uses an economic understanding of crime and crime behavior to develop public policy options.

Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103) and a minimum 45 credit hours, or permission of instructor.

#### **ECON 310**

# ECONOMICS OF HEALTH CARE Fall/Spring, 3 credit hour(s)

This course introduces students to the discipline of health economics and applies economic concepts to the health care sector. Topics to be covered include the demand for health care, health production and costs, health care markets models, health insurance markets, managed care, structure, conduct and performance of pharmaceutical, physician, and hospital services industries. In addition, the role of government in health care markets and various healthcare reforms proposed in the U.S. and overseas is discussed.

Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103) and a minimum 45 credit hours, or permission of instructor.

#### ECON 314 MANAGERIAL ECONOMICS Spring, 3 credit hour(s)

Global case studies from the private, public and nonprofit sectors are utilized to illustrate the application of economic theory and quantitative methods to managerial decision making. Students engage in problem solving exercises that integrate various principles of business, statistics and economics to determine market forecast, pricing strategy, resource usage, and production level.

Prerequisites: Accounting Principles I (ACCT 101) and student must have met the General Education Requirement in Math, or Microeconomics (ECON 103), or permission of instructor.

#### ECON 315 GLOBAL ECONOMY Fall, 3 credit hour(s)

Students examine the historical development of the global economy and the increasing interdependence of economies, governments, and public policy. Economic theories in international trade, finance and monetary policy are explored within the context of globalization.

Contemporary global economic issues such as the environment, income distribution, and development are analyzed using case studies from various nations.

Prerequisites: Principles of Microeconomics (ECON 103) or at least 30 college credits with a 2.0 GPA or permission of instructor.

#### **ECON 320**

# ENVIRONMENTAL ECONOMICS *Fall*, *3 credit hour(s)*

Issues and policies involving renewable and nonrenewable energy, natural resource management, pollution control, global climate change, and sustainable development are explored through traditional neoclassical economics as well as through the contemporary approach of ecological economics.

Prerequisites: Principles of Macroeconomics (ECON 101) or Principles Microeconomics (ECON 103), GER Math and a minimum of 45 college credits with a GPA of 2.0 or better, or permission of the instructor.

#### **ECON 370**

#### ENGINEERING ECONOMICS Spring, 3 credit hour(s)

This course will expose students to economic theory through the use of mathematical modeling with a focus on economic decision making for engineers. Microeconomics topics will include supply and demand market analysis, and profitability. Macroeconomics topics will include the aggregate market, economic indicators, fiscal policy and monetary policy. The course will include segments of the engineering economic analysis covered in the Professional Engineering exam such as the application of different economic analysis methods utilized in evaluating the viability of a project and its alternatives, concepts of replacement decisions, capital- budgeting decisions, and project risk and uncertainty. Students will be exposed to specific issues of economic analysis of the private sector versus the public sector.

Prerequisites: MATH 121

#### EDUC 210

# PRINCIPLES OF EDUCATION *Fall, 3 credit hours GER 3*

This course provides an overview of the historical, sociological, and philosophical foundations of education in the United States. The course examines pedagogy, and the importance of evaluation, assessment, and accountability in education. Policies and practices related to school governance, policies, and finances are explored.

Prerequisites: ENGL 101 Composition and the Spoken Word

#### EDUC 291-295, 391-395 OR 491-495 SPECIAL TOPICS: EDUCATION Fall/Spring, 1- 4 credit hours

An introductory or more advanced exploration of subjects not covered by other courses currently available. These courses are designed to expand on topics in specific areas of education or current issues in the professional field of education.

## ELEC 101 ELECTRIC CIRCUITS I Fall, 3 credit hour(s)

This course focuses on direct current (DC) circuit analysis with enough strength to prepare students for upper level courses in the electrical engineering technology program. Students will analyze resistive, capacitive and inductive circuits and laws/theorems including Kirchhoff's Superposition, Thevenin's, Nortons, and Maximum Power Transfer. Students will develop computational skills.

Prerequisites: Pre-Calculus (MATH123) or permission of instructor.

#### **ELEC 102**

# ELECTRIC CIRCUITS II

Spring, 3 credit hour(s)

A continuation of Electric Circuits (I), stressing the understanding of AC analysis that involve resistive, capacitive, and inductive circuits. Also, impedance, resonance, filters transformers are covered. Students will analyze circuits of various configurations and enhance computational skills.

Prerequisites: Electric Circuits 1 (ELEC 101) and Pre-Calculus (MATH123) or permission of instructor.

#### **ELEC 109**

# ELECTRIC CIRCUITS I LAB

Fall, 1 credit hour(s)

An introductory laboratory course stressing the understanding of basic concepts and principles of direct current/voltage by analyzing resistive, capacitive and inductive circuits through practical laboratory application. Students will also study circuits using circuit analysis software.

Prerequisites: Corequisite: Electric Circuits 1 (ELEC 101) and Pre-Calculus (MATH123) or permission of instructor.

#### **ELEC 129**

# ELECTRIC CIRCUITS II LAB

Spring, 1 credit hour(s)

A continuation of Electric Circuits (I) Laboratory, stressing the understanding of AC analysis that involves resistive, capacitive, and inductive circuits. Also, impedance, resonance, filters and transformers are covered. Students will perform ac circuit experiments using laboratory test equipment.

Prerequisites: Electric Circuits 1 Laboratory (ELEC 109) and Pre-Calculus (MATH123) or permission of instructor.

#### **ELEC 141**

#### INDUSTRIAL CONTROLS Spring, 2 credit hour(s)

A hands-on study of devices and systems used in the control of industrial machinery. The student is introduced to the theory and use of electromechanical control circuits by use of traditional "hardwire circuits." The programming of the Allen-Bradley Micrologix 1000 type of programmable logic controller (PLC) is practiced. An introduction to sequencer systems that enable complex control and monitoring of machines is given. Emphasis is on learning the ability to program the equipment for effective control.

Prerequisites: ELEC 101/109, ELEC 165 or a basic electricity course (i.e. ELEC 261) with an introduction to three phase systems, basic logic gates, binary and hexadecimal number systems, or permission of instructor.

#### ELEC 161 ELECTRONIC FABRICATIONS Fall, 2 credit hour(s)

Stresses practical fabrication techniques used in electronic and communication industries. Procedures focus on the basics of hand soldering, wiring, installing, testing and troubleshooting methods used in assembly and repair of electronic equipment. Topics include terminating voice, video, and data cables and also design and fabrication of a single sided printed circuit board.

#### ELEC/MKTX 215 DIGITAL FUNDAMENTALS AND SYSTEMS *Fall, 3 credit hour(s)*

The topics covered in this course are: number systems, logic operations and codes, logic gates, Boolean algebra and logic simplification, combinational logic analysis, functions of combinational logic, latches, flip-flops, counters and shift registers. Digital to Analog and Analog to Digital converters and Semiconductor memories are also covered.

Prerequisites: ENGS 263 and ENGS 264 or ELEC 101 and ELEC 109, or permission of instructor.

#### ELEC 203

# ENGINEERING TECHNOLOGY PROJECT *Fall*, *1 credit hour(s)*

Senior project (capstone) course that gives the student an opportunity to think, design, construct, and present a finished product based on knowledge/ experience from previous or current courses such as electronic circuits, telecommunications, microprocessors, and industrial controls.

Each team is expected to do a classroom presentation on the final project. Examples of design project: High Power Emergency Power Supply (Alternative Energy), Industrial Monitoring System (using sensing devices), and Electronics/Communication Systems. All project proposals must be approved by course instructor.

Prerequisites: Electrical Energy Conversion (ELEC 215), Industrial Controls (ELEC 141), Electronic Circuits (ELEC 231), or permission of instructor.

#### ELEC 213 MICROPROCESSORS

#### Spring, 3 credit hour(s)

The 8085 8-bit instruction set and the internal hardware register are studied. The basic operation of Fetch and Execute operations are examined. The PIC micro family microcontrollers will be introduced to provide the student with hardware and software experience in working with these devices. The student will use a cross- assembler to generate the software programs to be written for the micro-controllers. The RS-232C serial data transmission interface is also studied.

Prerequisites: Digital Systems and Laboratory (ELEC 212/219) or permission of instructor.

# ELEC 215

# ELECTRICAL ENERGY CONVERSION *Fall*, 4 credit hour(s)

Fundamentals of Electricity, Magnetism, and Circuits related to generation of electrical power are discussed. The study of construction and operation of direct current generators and motors. The principles of operation of three phase induction motors and alternating current generators are presented. Topics also include linear motor and single phase motor principles and operation. Single phase transformer theory, and three phase circuits are also covered. Laboratory experiments are performed to reinforce the theory for each of the covered topics.

Prerequisites: Electric Circuits 2 and Laboratory (ELEC 102/129) or permission of instructor

#### **ELEC 225**

# TELECOMMUNICATIONS *Fall, 3 credit hour(s)*

An intermediate course designed to give students theoretical and hands-on experience in telecommunications technology. Topics include how information is processed and transmitted, medium of transmission, Switching Hierarchy of North America (PSTN), Wave propagation, Line devices, Modulations, Multiplexing, Noise, Error detection, correction, and control, Transmission lines, ISDN/ DSL and Antennas.

Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

#### **ELEC 231**

#### ELECTRONIC CIRCUITS Fall, 4 credit hour(s)

Basic theory and circuit applications of silicon, germanium, zener, light emitting (LED) and Schottky diodes, bipolar and field effect transistors (FET) is presented. The student is introduced to half wave and full wave DC power supplies and associated ripple filters. Zener and Active Voltage Regulators circuits are studied. The basic operation of Metal Oxide; Semiconductor Field Effect Transistors (MOSFET) is also presented. Basic types of bi-polar transistor AC amplifiers (CE, CB, CC) and their FET counterparts are discussed.

Prerequisites: Électric Circuits 1 and Laboratory (ELEC 101/109), Electric Circuits 2 and Laboratory (ELEC 102/129) or permission of instructor.

#### **ELEC 232**

# INDUSTRIAL ELECTRONICS

Fall, 4 credit hour(s)

The student is introduced to various electronic components and systems used in modern industry. Operational amplifier principles and applications including comparators (zero and non-zero crossing detectors), voltage followers, inverting and noninverting amplifiers. Subtraction, summing (mixer), difference and compound amplifiers and active filters. Operational amplifiers circuits are configured to make up complex analog circuits. Examples of these include the temperature controller and the pulse width modulation technique of DC motor speed control. The importance of digital computers used in modern industrial processes is stressed. Thyristors, photosensitive devices, optically coupled devices, and timer control circuits and various transducers are introduced.

Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

# ELEC 243

# COMPUTER AUTOMATED CONTROL SYSTEMS

Spring, 2 credit hour(s)

An introduction to some of the control hardware/software systems in use in industry today. The student is introduced to the architecture of the Arduino platform using the A Tmega 328P micro-

controller to the extent that various control functions can be identified and modified. Programs are developed for computer interfaces for motor-control circuits to provide speed control using the Pulse Width Modulation technique. Programs for stepper motor control using the Pulse Width Modulation technique. Programs for stepper motor interfaces are also developed. Programs are written to implement a digital voltmeter with a PC screen display.

Prerequisites: Electronic Circuits (ELEC 231), Industrial Controls (ELEC 141), Microprocessors (ELEC 213) or permission of instructor.

#### **ELEC 261**

#### ELECTRICITY

# Fall/Spring, 4 credit hour(s)

Fundamentals of direct and alternating current circuits, resistance, inductance, capacitance, magnetism are presented. Also basic machine theory as it applies to both direct and alternating current types is covered. The theory and operation of transformers and the theory of control devices such as relays, contactors and switches is studied.

Prerequisites: College Algebra (MATH 121) or Pre-Calculus Algebra (MATH 123) permission of instructor.

#### **ELEC 332**

#### INDUSTRIAL POWER ELECTRONICS Fall, 3 credit hour(s)

This course is designed to prepare students with industrial power electronics skills necessary to function as technologist. Topics include: Solid States Devices, Photo-Electronics, Inverters, Operational Amplifier circuits including integrator and differentiator applications, Open/Closed Loop Feedback Systems, SCRs, TRIACs, Thyristors, Photosensitive devices, Optically Coupled Devices, Motor Direction Control Inverter circuits and techniques used to develop line voltages and frequencies for Variable Speed AC Inductions Motors. Note: Credit is given to a student who has taken ELEC232 with a (C) grade or better.

Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

#### **ELEC 343**

## ADVANCED CIRCUIT ANALYSIS Spring, 3 credit hour(s)

An advanced course designed to give students upper level circuit analysis experience. Topics include: Resistive Circuits, Nodal and Loop Analysis, Two- Port Networks, Application of Laplace Transform. Electric circuit theory is introduced with emphasis on mathematical definitions of circuit elements. Network analysis techniques are presented within the framework of direct and alternating current theory. Transient forced and complete responses of circuits involving resistance, inductance, and capacitance are analyzed via differential and integral calculus. Circuit Design using Operational Amplifiers.

Prerequisites: Electric Circuits II/Lab (ELEC 102/129), Calculus II (MATH 162) or permission of instructor.

## **ELEC 355** EMBEDDED ELECTRONICS

# Fall/Spring, 3 credit hour(s)

This course is designed to give students theoretical and hands-on experience in Field Programmable Gate Array (FPGA) and Very High-Speed Integrated Circuit Hardware Description Language (VHDL).

The course covers the concept and architecture of Programmable Logic Device. The graphic editor of Altera's Quartus Design software and VHDL text editor are used to define digital logic to FPGA.

Prerequisites: ELEC 165 (Digital Fundamentals & Systems), ELEC 166 (Digital Fundamentals & Systems Laboratory) and MATH 123 (Pre-Calculus Algebra) or permission of the instructor.

# **ELEC 375** FIBER OPTIC COMMUNICATIONS

# Spring/Fall, 3 credit hour(s)

This course focuses on the transmission of information using fiber optics technologies. Topics include: Optical Fiber, Amplifiers, Transmitters, Receivers, Transceivers, Detectors, Modulation, Multiplexing, Optical Networks, Optical Sources and De-modulation

Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

# **ELEC 379**

## DIGITAL SIGNAL PROCESSING APPLICATION

Spring/Fall, 3 credit hour(s)

This course introduces the basic concepts and techniques for processing discrete-time signal on a computer using software. Digital Signal Processing (DSP) is concerned with the representation, transformation and manipulation of signals on a computer. DSP has become an important field, and has penetrated a wide range of application systems, such as consumer electronics, digital communications, medical imaging and so on. By the end of this course, the students should be able to understand the most important principles in digital signal processing (DSP). The course emphasizes understanding and implementations of theoretical concepts, methods and algorithms.

Prerequisites: MATH 162, ENGS 102, ELEC 165, or permission of instructor.

#### **ELEC 380**

#### LAN/WAN TECHNOLOGY Spring, 3 credit hour(s)

This course will cover topics include: Network topologies and connectivity devices, TCP/IP protocol suite and internet protocol addressing, networks and sub-networks, network-layer protocols, internet control message protocol, transport layer protocol, internet protocol version 6, configuration and domain name protocols, and Integrated Services Data Networks (ISDN).

Prerequisites: Telecommunications (ELEC 225) or permission of instructor.

#### ELEC 383

# POWER TRANSMISSION AND DISTRIBUTIONS

Spring, 3 credit hour(s)

This course in electrical power generation and transmission will emphasis on those aspects that concern engineers and technologists in the performance of their tasks. Topics covered include: Hydropower, Thermal, Nuclear, and Wind Power Generating Stations, Transmission and Distribution of Electrical Energy, Direct Current Transmission, HVDC Light Transmission System, Power Stability, and Cost of Electricity.

Prerequisites: Electrical Energy Conversion (ELEC 215) or permission of instructor.

### **ELEC 385**

#### ELECTRONIC COMMUNICATIONS I Spring, 3 credit hour(s)

The first of a two series of courses to prepare students for modern telecommunications industry. Topics covered include: Noise, Transmission Lines, Wave Propagations, Error Checking, Communication Transmitters/Receivers, Coding Techniques, and Computer Communications.

Prerequisites: Telecommunications (ELEC 225) or permission of instructor.

#### ELEC 386

#### ELECTRONIC COMMUNICATIONS II Fall, 3 credit hour(s)

This course is the continuation of Electronic Communications (I), and is designed to prepare students for modern telecommunications industry. Topics include: Wireless digital communications, Optical communications, Cell phone communications, CDMA, OAS, Wireless technologies, Microwave and lasers, Antennas, and Waveguide and Radar

Prerequisites: Electronic Communications I (ELEC 385) or permission of instructor.

### **ELEC 405**

#### SATELLITE COMMUNICATIONS Fall/Spring, 3 credit hour(s)

This course will emphasize on hardware and the basic operating techniques of every major supporting subsystem, the reliability analysis that allow satellites to operate for years without maintenance. Topics include: Propulsion, Structure, Thermal control, Reliability, Spacecraft testing, Spacecraft attitude, System performance, Telemetry, Tracking, and Command.

Prerequisites: Electronic Communications I (ELEC 385) or permission of instructor.

# **ELEC 416**

## MICROELECTRONICS CIRCUIT DESGN Fall, 3 credit hour(s)

Analyzing and designing analog electronic circuits, digital electronic circuits, and the foundations of electronic circuit design. Topics covered include: Operational amplifier circuit design, Integrated circuit biasing and active loads. Analysis of differential and multistage amplifiers, Feedback and Stability, and Operational Amplifier Integrated Circuits.

Prerequisites: Industrial Power Electronics (ELEC 332), Electronic Circuits (ELEC 231), or permission of instructor.

# ELEC 436

# **BIOMEDICAL ELECTRONICS**

Spring, 3 credit hour(s)

This course is designed to give students theoretical and hands-on experience in biomedical instrumentation and measurement. Topics covered include: Medical Instrument Transducers, Biopotential Amplifiers, The pacemaker, Ultrasonic Equipment, Central Station Monitor, Electroencephalograph and Filtering, Electrosurgical Units and Laser Surgery, and Catheters and Blood Pressure Monitoring Devices.

Prerequisites: Microelectronics Circuit Design (ELEC 416), Calculus II (MATH 162), or permission of instructor.

### ELEC 477 CAPSTONE PROJECT Spring, 3 credit hour(s)

A learning experience by allowing students to propose, design and implement a project. This could be a study of a problem and solution of specific equipment, new product design, improvement of an existing product (re-engineering). All projects must be approved by course faculty or capstone committee. As part of this course, all students must take the exit examination before graduation.

Prerequisites: Completion of seven semesters coursework or permission of instructor.

#### **ELEC 488**

# ELECTRICAL POWER

Spring, 3 credit hour(s)

This course covers advanced topics in AC and DC transmission such as the per unit concept of transformer and generator analysis, transient stability of power systems etc. Students learn power-flow and economic power dispatch by using both analytical techniques and power system simulators. Basic knowledge of power system control is provided by covering the topics of supervisory control and data acquisition (SCADA), protective relaying etc. This course addresses the energy economics, efficiency and ethics of dynamic pricing and smart meters. This course also delivers topics on smart grid supply that integrate renewable and distributed generation (i.e. photovoltaic and wind).

Prerequisites: Electrical Energy Conversion (ELEC 215), Power Transmission and Distribution (ELEC 383) or permission of the instructor

### ELEC/MKTX 216 DIGITAL FUNDAMENTALS & SYSTEMS LABORATORY

Fall, 1 credit hour(s)

This laboratory course emphasizes on topics such as: Adder/Subtraction Circuits, Code Converters, Multiplexers and De- Multiplexers, JK Flip-Flop Circuits, Counters, Timers, Memory devices, Analog to Digital and Digital to Analog Converters, and Digital Circuit Troubleshooting.

Prerequisites: Corequisites: MKTX 215 or Digital Systems (ELEC 165), or permission of instructor.

#### **ENGL 097**

### INTRODUCTION TO ACADEMIC READING AND WRITING Fall/Spring, 4 equivalent credit hour(s)

This course is intended to provide the literacy skills required in an academic setting. Students read and respond to a variety of academic texts. The course includes fundamental rhetorical strategies for academic writing with an overview of basic writing mechanics and grammar.

Additional tutorials with class instructor, the Writing Center, EOP and/or Accommodative Service tutors may be required. A minimum grade of C is required for progression to ENGL 101.

#### ENGL 101 COMPOSITION AND THE SPOKEN WORD

#### Fall/Spring, 3 credit hour(s)

This course is designed to help students communicate effectively orally and in writing. Students develop critical thinking skills, rhetorical knowledge, basic research skills, knowledge of conventions, and communication ethics.

#### ENGL 109

## APPROACHES TO LITERATURE Fall/Spring, 3 credit hour(s)

This course is designed to acquaint students with different kinds of literature - plays, short stories, novel excerpts, and poems. Students are also acquainted with various methods of understanding literature. Students read a wide variety of literary works and are encouraged to employ proper literary terminology in writing about them. Emphasis rests on intelligent interpretation and argumentation, and on the relationships between literary thems and everyday life.

#### **ENGL 201**

## WRITING IN THE ARTS & SCIENCES Spring, 3 credit hour(s)

This course is for students who wish to continue improving their writing skills. They are given the opportunity to read and write about various topics in Humanities, Social Science, Business, Economics, and Science. Using a variety of materials including advertisements, films, television, imaginative and scientific literature, art, newspapers, and journal articles students analyze, investigate, interpret, and formulate ideas through their own writing.

Additionally, students further familiarize themselves with the library and research techniques.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of the instructor

# ENGL 202

CREATIVE NON-FICTION

Fall/Spring, 3 credit hour(s)

This course provides opportunities for students to continue developing and refining skills in writing from the basics of Expository Writing or Oral and Written Expression. Through their study of Creative Non-fiction forms and conventions— memoirs, nature writing, lyrical essays, magazine features, webpage content, digital or textual literacy narratives, etc.—students learn to write essays that are not only persuasive but enjoyable for both reader and writer. Each student designs writing situations according to interests and develops imaginative essays of creative non- fiction.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of the instructor

#### ENGL 203 WORLD LITERATURE: B.C. TO 16TH CENTURY

#### Fall, 3 credit hour(s)

This course examines global literature by tracing patterns of difference and points of contact between literatures developed in various regions throughout the world. Works read will be discussed in the context of their originating culture as well as in relation to Western modes of understanding literature. Three hours lecture per week.

#### ENGL 204 WORLD LITERATURE: 17TH TO 20TH CENTURIES Spring, 3 credit hour(s)

This ,course examines global literature by tracing patterns of difference and points of contact between literature developed in an era defined by colonial expansion and postcolonial nation building. Works read will be discussed in the context of their originating culture as well as in relation to Western modes of understanding literature.

#### **ENGL 205**

#### SURVEY OF ENGLISH LITERATURE I Fall, 3 credit hour(s)

This survey course begins with Old English literature from 450 AD and extends through 1800 AD. Students study the primary writers and their representative works. Relevant historical, social, and political background, cultural changes, and developments of each period are also examined.

#### **ENGL 206**

#### SURVEY OF ENGLISH LITERATURE II Spring, 3 credit hour(s)

This survey course begins with a study of English literature from the Romantic through the Post-Victorian period. Students study the important writers and their representative works. The historical, social, and political background for each period and the cultural changes and developments of the eras is also examined.

#### **ENGL 207**

# LITERATURE OF THE EARLY AMERICAN REPUBLIC: COLONIZATION AND REVOLUTION, 1640 - 1830

Fall, 3 credit hour(s)

Course is designed to acquaint students with the early emergence of a distinctively American literature. Students explore the roots of American literature and how that literature makes us the Americans we are today. Works by major American writers such as Bradford, Bradstreet, Franklin, Jefferson, Paine, Murray, Wheatley, Sedgwick, Irving, and others comprise the foundation of the course. The historical, social, and political background for each period is examined with a particular eye for the intersections between Native, European, and African voices.

## **ENGL 208**

# AMERICAN LITERATURE COMES OF AGE: 1830 - 1920

Fall/Spring, 3 credit hour(s)

This course is designed to acquaint students with significant American authors from the pre-Civil War era and continues to 1920. Students study important American writers such as Whitman, Dickinson, Poe, Melville, Hawthorne, Twain, Jacobs, Freeman, Chopin, Cather, Fitzgerald, and others. The historical, social, and political background for each period and the cultural changes and developments of the eras are also examined.

#### ENGL 211

#### THE AMERICAN NOVEL OF THE TWENTIETH CENTURY Fall/Spring, 3 credit hour(s)

This course explores the interaction between historical events, social change, and economic factors that affected the American way(s) of life as they are reflected in the novels of writers such as Edith Wharton, F. Scott Fitzgerald, Ernest Hemingway, John Steinbeck, William Faulkner, Richard Wright, Toni Morrison, Alice Walker, Leslie Marmon Silko, Sandra Cisneros, and others. The novels may be augmented by a variety of print and digital media.

#### ENGL 213

# WAR AND LITERATURE

Fall/Spring, 3 credit hour(s)

Focusing on American wars from World War II to the present, this course examines war and a range of human responses to the war experience as reflected through literature. Theories originating in the social sciences and historical information are included to enhance understanding of the literature.

Prerequisites: Composition and the Spoken Word (ENGL 101)

#### ENGL 214

# CONTEMPORARY AMERICAN FICTION *Fall/Spring, 3 credit hour(s)*

Through the writings of current authors, students examine literary trends and their relationship to social, political, cultural phenomena in America. Students are given an opportunity-through their own writing and class discussion to explore contemporary ideas, values, and attitudes expressed in the literature.

#### ENGL 215 MULTICULTURALISM IN AMERICAN LITERATURE

## Spring, 3 credit hour(s)

This course examines multiculturalism in the United States as reflected in its literature of the twentieth and twenty-first centuries. Works will be selected to highlight the diversity of American life including, but not limited to, race/ethnicity, gender, social class, sexual orientation, nationality/imigrant status, religion, and family structure. Students should increase their understanding of the multicultural nature of American society and the existence of cultural traditions and practices that exist independently of those of the dominant American "mainstream" or overculture.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of the instructor.

#### ENGL 216

CHILDREN'S LITERATURE

*Fall/Spring, 3 credit hour(s)* 

This is a survey course of traditional and modern literature written for young children. Emphasis is on critical appreciation and understanding of literary qualities appealing and valuable to children. Prerequisites: Composition and the Spoken

Word (ENGL 101)

# **ENGL 217**

# COMIC BOOKS AS LITERATURE

Fall/Spring, 3 credit hour(s)

Comic books as literature? Certainly, skeptics will scoff at the idea. However, in recent years, comic books have become accepted as a respected form of literature by scholars, critics, and faculty alike. Students in this course examine the academic value of comic books and graphic novels through study of their history, similarity to other forms of literature, their own specialized literary and artistic techniques, and development as compelling narratives.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one literature course or permission of instructor.

# ENGL 218

#### SCIENCE FICTION WORKSHOP Fall/Spring, 3 credit hour(s)

Students explore the form by reading a wide range of science fiction stories that represent the standard indications of literary quality (i.e. characterization, plot, setting, point of view, style, theme, etc.). After a survey of the form, students write science fiction stories of their own that incorporate the various literary qualities inherent in the genre and constructively respond to peers' writing in a workshop format. Prerequisites: Composition and the Spoken Word (ENGL 101)

#### ENGL 219 THE ADIRONDACKS: LIFE AND LITERATURE Fall/Spring, 3 credit hour(s)

This course provides the opportunity to explore various aspects of life and literature set in the Adirondack forest preserve. A wide variety of readings, films, slides and presentations present the opportunity to sharpen awareness of what the Adirondacks are and how they have shaped and influenced life and literature in America.

#### ENGL 220 AMERICAN LITERATURE IN THE MODERN ERA: 1920- PRESENT Fall/Spring, 3 credit bour(s)

This course is designed to acquaint students with significant American authors starting from 1920 and continuing to the present. Students study important American writers such as Baldwin, Steinbeck, Updike, Ginsberg, Roth, Larsen, Hurston, Porter, Millay, Hughes, Plath, and others. The historical, social, and political background for each period and the cultural changes and development of the eras are also examined.

Prerequisites: Composition and the Spoken Word (ENGL 101)

#### ENGL 221 CREATIVE WRITING

# Fall/Spring, 3 credit hour(s)

This course is an introduction to creative writing and its publication. Students hone their written communication skills through the discipline of creative writing, as well as develop a deeper understanding of the literary arts. Emphasis is placed upon the writing of poems and short stories, but other forms of creative work may be utilized and discussed. We cover basic technical problems and formal concepts of creative writing. Students also study works by accomplished writers to see how those writers define and master their craft. At the end of the semester, students seek publication of their work in various formats.

Prerequisites: Composition and the Spoken Word (ENGL 101) and one literature course Or permission of instructor.

#### ENGL 224 SURVEY OF NATIVE AMERICAN LITERATURES

#### Fall/Spring, 3 credit hour(s)

Introductory survey of expressive and essayist literature by selected Native American authors from the United States and Canada. Works are chosen to reflect the diversity of Native American thought and experience as revealed through literature. Emphasis is on contemporary short fiction and poetry, but readings include essays, drama and the novel. Discussion of cultural context encompasses the oral tradition(s) and relevant political and social history. Audio-visual media and Internet resources will supplement lectures and discussions.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of instructor.

# ENGL 225

# AFRICAN AMERICAN LITERATURE *Fall/Spring*, 3 credit hour(s)

This course focuses on African American authors

from the Colonial Era to the present. Topics to be covered include recurring themes and concerns, cultural pressures, historical contexts, intellectual currents and literary innovations. Students study major African American writers such as Zora Neale Hurston, Richard Wright, Langston Hughes, Rita Dove, Toni Morrison, Alice Walker, James Baldwin and others.

Prerequisites: Composition and the Spoken Word (ENGL 101)

#### ENGL 264 LIVING WRITERS SERIES Fall/Spring, 3 credit hour(s)

Students read and discuss works by a selected group of contemporary authors. After reading a given work, students meet and engage authors in a question and answer session followed by a public reading. This course includes an introduction to close reading skills, analysis of the elements of literary style in fiction, poetry, and creative non-fiction. Through intensive class discussion, writing workshops, and oral presentations, the students learn how to articulate ideas clearly and are introduced to the basic elements of creative writing in multiple genres.

Prerequisites: Composition and the Spoken Word (ENGL 101); or permission of instructor.

#### ENGL 265

#### WRITING IN THE HUMANITIES THEMATIC INQUIRY Fall/Spring, 3 credit hour(s)

Students explores questions about the humanities and will introduce students to several disciplines within the humanities. Through writing about a common theme, students will analyze, evaluate, and interpret texts, films, art and/or music that reflect this common theme. Citation and integration of external sources will be expected. This is a writing intensive course for students in General Studies or for students interested in transferring to a liberal arts program, especially in the humanities.

Prerequisites: Composition and the Spoken Word (ENGL 101); completion of 24 credits towards the major of General Studies; or permission of instructor.

#### **ENGL 266**

### THE MODERN ISLAMIC WORLD THROUGH FILM AND LITERATURE *Fall/Spring, 3 credit hour(s)*

This course introduces the student to the history, cultures, and politics of the modern Islamic world with a special emphasis on film and literature. Readings include poets such as Rumi and Hafiz as well as novelists such as Mahfouz and Farah. Films include those of such Persian and Arab directors as Majidi, Kiarostami, and Chahine.

Prerequisites: Composition and the Spoken Word (ENGL 101)

#### **ENGL 267**

#### MASCULINITY STUDIES IN AMERICAN LITERATURE AND CULTURE Spring, 3 credit hour(s)

This course explores the ways in which gender – and in particular – the broad concept of masculinity, arises from and impacts American literature and culture. Students will examine novels, short stories, creative nonfiction, theatrical productions, and films, as well as excerpts from prominent gender studies scholars. Students should increase their understanding of how masculinity functions and shapes American culture, as well as develop a critical and theoretical lens when it comes to reading and interpreting literary works. Through the study of masculinity and masculinities, students should leave the course with nuanced knowledge of the complex implications of gendered men and women.

Prerequisites: Composition and the Spoken Word (ENGL 101)

#### ENGL 270 MEDIA WRITING Fall, 3 credit hour(s)

This course introduces the creative practices and theories of writing/designing for various electronic and digital media platforms.

Through critical practice, students learn to integrate concepts and techniques in order to produce portfolio websites, illustrated proposals, presentations, and digital games for various public audiences. Class workshops and collaborative projects focus on writing and software skills; research, design and technical resources; and issues such as copyright/fair use. Students learn digital communication skills by utilizing industry design frames like CAT (Conceptual, Aesthetic, Technical), experience design useexperience, information design, and information architecture, which then serve as building blocks for subsequent technological communications courses.

Prerequisites: Composition and the Spoken Word (ENGL 101)

#### ENGL 301 PROFESSIONAL WRITING AND COMMUNICATION *Fall, 3 credit hour(s)*

In this course students will advance their communication skills for the global marketplace. Emphasis is on technical writing, business writing, and publishing. Students design and produce technical documents, including, but not limited to, job-search documents, memos, reports, and proposals, responding to specific audiences and purposes in the business world. Students should be familiar with desktop publishing and electronic presentations.

Prerequisites: Composition and the Spoken Word (ENGL 101) and junior status with a 2.0 GPA; or permission of instructor.

#### ENGL 302 GLOBAL ENGLISHES Fall, 3 credit hour(s)

This course provides opportunities for students to deepen their understanding of the English language: its history, its status and functions in different areas of the world, and its variations. Promoting an inclusive and pluralistic concept of Englishes rather than the inaccurate notion of a singular English, students develop explicit knowledge about how language works, and how people learn and use language not only as a tool for communication but as a component of social and cultural identity. Students emerge from this course better equipped to navigate situations requiring crosscultural communication at the university and beyond.

Prerequisites: Composition and the Spoken Word (ENGL 101) and 45 credit hours.

#### ENGL 304 LGBTQ LIVES AND LITERATURE Fall/Spring, 3 credit hour(s)

In this course, students examine social, cultural, and political themes in the histories of individual lives as well as communities that are categorized as "LGBTQ": lesbian, gay, bisexual, transgender, and queer (a term that is by nature flexible and which is used by many who feel that they in some way fall outside of "norms" of gender identity, gender expression, and/or sexual orientation). Focusing mainly on literature from the U.S. and the United Kingdom, works from the genres of short story, poetry, the novel, creative nonfiction, theatrical productions, and film are supplemented by information and insights offered by an anthology of critical essays as well as texts harvested from contemporary news sources.

Prerequisites: Composition and the Spoken Word (ENGL 101) and 30 credits earned.

#### ENGL 305

#### PERPETRATORS & VICTIMS: CRIME AND VIOLENCE IN LITERATURE Fall/Spring, 3 credit hour(s)

Students examine the impact of crime and violence in American culture as reflected in literature. Analysis focuses on both perpetrators and victims of crime and violence. Literary genres may include, but are not restricted to, True Crime, fiction, memoir, the graphic novel, and poetry.

Prerequisites: Composition and the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

#### **ENGL 306**

#### IRISH PRISON LITERATURE Fall/Spring, 3 credit hour(s)

This course uses works of literature to assist students' understanding of Ireland, the British Empire and the history of modern imprisonment. Along with the church, the university and the army, the prison is one of the central institutions in Irish History, and literature has traditionally been a means by which prisoners protest, resist, and critique their harrowing experiences. This course examines work written by men and women during and after their incarceration.

Prerequisites: Composition and the Spoken Word (ENGL 101); completion of 45 credit hours with a minimum 2.0 GPA.

#### ENGL 307 DISABILITY AND LITERATURE Spring, 3 credit hour(s)

In this course students will be introduced to Historical and contemporary poetry, short stories, novels, memoirs, and other fiction and non-fiction life writings are analyzed for portrayals of people who have physical, developmental, or mental health impairments and/or disabilities. Topics include historical changes in what is considered "normal," stereotypes as limiters of opportunity, comparison of literary portrayals of disability with reality as presented in autobiographical narratives, and others. An overview of the medical and social construction models of disability is included.

Prerequisites: Composition and the Spoken Word (ENGL 101) and one literature course AND 30 credit hours earned

#### ENGL 309 JOURNALISM Fall/Spring, 3 credit hour(s)

This course provides a general introduction to journalistic principles and practice in gathering and writing news. Students write a variety of news story types with the goal of developing an array of publishable writing samples to present at a job interview.

Fundamentals of English grammar and mechanics are reinforced through regular editing exercises. Ethical issues related to mass media are considered. Online journalism is explored, as well as alternative forms of media writing, including broadcast writing, advertising and public relations.

Prerequisites: Composition and the Spoken Word (ENGL 101) and junior status or permission of the instructor.

#### ENGL 310

## WRITING YOUR LIFE: FORM & FUNCTION IN MEMOIRS Fall/Spring, 3 credit hour(s)

Memoirs are an author's commentary on his or her life, experiences, and the times he or she lives in. Writers record important events based upon their own observations and knowledge of events and/or personalities that they feel have significantly influenced their lives. In this writing intensive course, students study a variety of literary forms within the memoir genre, and they create memoirs of different forms from their own life experiences. Students recognize that both concrete details and abstract ideas in memoirs represent universal truths and create poems and stories that reflect both.

Prerequisites: Composition and the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

#### TCOM/ENGL 310/311

# IDENTITY IN THE DIGITAL AGE *Fall, 3 credit hour(s)*

Students explore theories of identity and their evolution in the digital era, noting how self-presentation has changed through the use of multi-media communication, and how social interaction in digital spaces has changed. In the course, students read and interpret multi-media texts, noting how image, sound, and language affect self- presentation. The course closes with an applied learning unit in which students employ ethnographic methodologies t,o expl,ore identity in digital spaces.

Prerequisites: ENGL 101

#### **ENGL 315**

# SHORT FICTION: THE ART OF THE TALE Fall/Spring, 3 credit hour(s)

The short story genre is explored by reading selections from various writers around the world. Students also write their own short stories in order to gain perspective on the literary form of the short story, the range of ideas expressed within that form, and the creative process used to produce that form.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one lower-level literature course AND 30 credit hours earned.

#### ENGL 317

#### WORLD POETRY

#### Fall/Spring, 3 credit hour(s)

Students in this course explore the vast wealth of non-Western poetry. We draw from the historical canon of writings, but we have distinctly modern concerns in this class; our wide reading helps us understand divergent (and poetic) cultural issues, such as Japanese anime cartoons, Islamic worldviews, global hip hop and graffiti, and post-colonial literature. While all our readings will be in English, our consideration of the linguistic and political concerns of translation allows us to analyze the dynamic interchange between local cultures and globalization.

Prerequisites: Composition and the Spoken Word (ENGL 101) and one lower-level literature course, or permission of instructor.

#### ENGL 320

# NATIVE AMERICAN AUTOBIOGRAPHY Fall/Spring, 3 credit hour(s)

This course is a survey of the means by which Native American people have recorded their lives. Texts are selected from pre-contact pictorial and oral auto/biographical narratives through contemporary written texts, film, and electronic media. Historical context is provided in lecture materials. Emphasis is on works published since 1980.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one literature course AND one lower level literature course AND 30 credit hours earned with a cumulative GPA of 2.0 or permission of the instructor.

#### **ENGL 321**

#### GHOSTS AND THE UNDEAD: RACIAL HAUNTINGS IN AMERICAN LITERATURE Fall/Spring, 3 credit hour(s)

This course focuses on ghosts and the undead in contemporary American literary texts. The specters in these texts are not only individuals, but they are at once collective, historical, and socio-political representations of violence and racism in American culture. The haunting events we discuss in this course include slavery, the colonization of native people and lands, the Jim Crow south, and the memories of atrocities that travel with immigrants to North America. This course asks, how do the undead represent racial violence in these texts? Why are some places and landscapes more haunted than others? How might we escape the ghostly hauntings of the past? Students study major American writers and artists such as Ralph Ellison, Toni Morrison, Octavia Butler, Jesmyn Ward, Louise Erdrich, Christina Garcia, Edwidge Danticat, and filmmaker Jordan Peele.

Prerequisites: ENGL 101

# ENGL 325

# CONTEMPORARY YOUNG ADULT LITERATURE

*Fall/Spring, 3 credit hour(s)* 

This course is an exploration of contemporary young adult novels as a genre of literature. Of particular interest is the historical development, current trends, enduring characteristics of young adult literature and its influence on readers.

Various works are analyzed according to critical perspectives. Readings will include a number of subgenres, i.e. adventures, mysteries, humor, fantasy, science fiction, the people and places of history, and modern social issues.

Prerequisites: Composition and the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

# ENGL 340 AMERICAN WOMEN WRITERS

Fall/Spring, 3 credit hour(s)

Course is designed to acquaint students with significant American women writers, such as Wheatley, Bradstreet, Harper, Dickinson, Alcott, Gilman, Stowe, Yezierska, Wharton, Stein, Moore, Sexton, Plath, Cisneros, Morrison, Erdrich, and others. The historical, social, and political backgrounds for each author and their works are also examined, with an introduction to basic concepts of cultural criticism and gender studies. Works are selected to highlight the diversity of American women, including, but not limited to, race/ethnicity, gender, social class, sexual orientation, nationality/immigration status, religion, and family structure. Focus can be multigenre or on one specific genre, at the direction of the instructor. Three hours lecture per week.

Prerequisites: Composition and the Spoken Word (ENGL 101) and completion of at least 45 credit hours or permission of instructor.

#### **ENGL 349**

#### CLASSIC DETECTIVE FICTION Spring, 3 credit hour(s)

This course explores the genre of detective fiction from its origins in the nineteenth century to the present day. Course content and time periods may vary by semester.

Students learn literary elements of detective fiction, examine the development of the detective as a literary figure and detective fiction as a genre, and analyze depictions of the law and legal system. Course may include, but is not limited to, British and American detective fiction by Poe, Collins, Conan Doyle, Chesterton, Sayers, Hammett, Christie, Chandler, MacDonald, James, Rendell, Cross, Elizabeth Peters, Ellis Peters, Perry, George, and King.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one lower-level literature course AND 45 credit hours earned.

#### ENGL 350 F LASH FICTION Fall/Spring, 3 credit hour(s)

The Flash Fiction story (also called short- shorts; micro; sudden; or lightning fiction) lies somewhere between prose and poetry. Students taking this course explore the form by reading a wide range of Flash Fiction stories that represent the best in terms of literary quality (i.e. characterization, plot, setting, point of view, style, theme, etc.), and by creating stories of their own that incorporate the various literary qualities inherent in the genre.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one literature course AND 30 credit hours earned OR permission of the instructor.

#### ENGL 351 ADVANCED FICTION WORKSHOP Spring, 3 credit hour(s)

This course is a writing intensive fiction workshop where students hone the knowledge and skills they have developed in previous creative writing and literature courses. As an advanced workshop this course is intended for students already producing creating work and is meant to provide a disciplined, creative environment where students focus on the craft of writing fiction. Students read and discuss published stories while also providing constructive oral and written feedback on the writing of their peers in a workshop setting. Students produce multiple works of fiction over the course of the sememster which are revised and submitted in a final portfolio. At the end of the course, students seek publication of their work.

Prerequisites: ENGL 221 Creative Writing OR ENGL 315 Short Fiction: Art of the Tale OR ENGL 350 Flash Fiction, OR permission of the instructor.

#### ENGL 380

# INTERCULTURAL COMMUNICATION Fall/Spring, 3 credit hour(s)

This course is designed to advance students' intercultural communication skills necessary in a multicultural global marketplace. The focus is on oral, nonverbal, and written communication patterns across cultures, diverse cultural values, global etiquette, business and social customs, and intercultural negotiation models.

Prerequisites: Composition and the Spoken Word (ENGL 101) and completion of 45 credit hours, or permission of instructor.

#### ENGL/TCOM 200

## NARRATIVE FORM IN VIDEO GAMES Spring, 3 credit hour(s)

Students explore the evolution of narrative, from basic concepts to interactive fiction and interactive storytelling to early text- based adventures and recent open-world storytelling. Students review several philosophies on interactive narrative.

Students also experience and discuss interactive fiction and storytelling through game case studies, including required playthroughs and subsequent discussion. As a course capstone, students will develop interactive fiction or storytelling through ADRIFT or other available programs.

Prerequisites: ENGL 101 Composition and the Spoken Word

#### ENGL/TCOM 314

## DIGITAL GRAPHIC STORYTELLING Spring, 3 credit hour(s)

This course explores the graphic narrative through the digital medium. Students explore the literary, architectural, interactive, and design elements of graphic narratives by reading and engaging novels, memoirs, and narrative games written from the 1970s to the present. In order to create effective graphic narrative texts, students critique several germinal graphic works and then apply their knowledge of this visual medium to their own narratives. The class will design original graphic works in various software platforms (Google Earth, Comic Life, InDesign, Pixton, Comic Maker) using both literary and design frameworks. Units include: memoir, graphic medicine, digital/online comics, and interactive narrative games. Through close textual analysis, peer critique, and iterative thinking/ practice, students learn to create digital projects that use image/text to tell stories and analyze literature. Projects may include: digital theory comix, graphic essays, graphic narrative maps in Google Earth, and video essays. Course texts may include works by Alison Bechdel, Miriam Libicki, Scott McCloud, Nam Le, Chinese Room, The Fulbright Company, Simogo, and11 Bit Studio. Prerequisites: ENGL 101

#### ENGL/TCOM 322 MOBILE MEDIA STORIES AND GAMES Spring, 3 credit hour(s)

Students explore the emerging practices and transformative potential of mobile media storytelling and games. The site-specificity of mobile media through GPS capabilities allows us to connect media to location; stories become part of the spaces in which they unfold and are created. In this course students examine the ways that written and visual narratives, maps, and interactive digital experiences structure knowledge in physical and virtual space. The first half of the course is spent reading, inte,racting with, and assessing existing locationbased texts and games such as interactive webstories, electronic performance theater, and augmented reality games. Students examine these works through a literary framework as well as through two design frameworks: CAT (conceptual, aesthetic, technical) and UX (user experience, experience design, information architecture, and information design). In the second half of the course, students apply the conceptual and aesthetic principles learned in the first half of the course in order to build experimental GPS- based locative games and stories. The course consists of weekly discussion classes, workshops, and demo studios. Students design original mobile works in various software platforms such as Google Earth, ARIS, and Siftr. Through literary and locational analysis, peer critique, and iterative thinking/practice, students learn to create original mobile stories and games. Projects may include: critical hacktivist games, graphic narrative maps in Google Earth, and mobile stories in ARIS and Siftr.

Prerequisites: ENGL 101 Composition and the Spoken Word or permission of instructor.

#### ENGL/TCOM 345 ELECTRONIC LITERATURE: FROM CYBERTEXT TO VIDEO GAMES Spring, 3 credit hour(s)

In this course students explore the practices and theories of screen-based literature by tracing the transformation of electronic literature from hypertext fiction to augmented reality stories to massive online games (MMOGs). The first half of the course is spent reading, interacting with, and assessing existing hypertext fiction and early indie computer games such as Afternoon, A Story. The second half of the course allows students to experience more immersive stories such as augmented reality documentaries, interactive fiction, hacktivist narrative games, and cooperative MMOGs. Students apply conceptual and aesthetic principles to build experimental stories and games in various platforms such as Twine, ARIS, Unity, and Siftr. Prerequisites: ENGL 101

#### **ENGM 101**

#### INTRODUCTORY MATHEMATICS FOR ENGINEERING APPLICATIONS Fall/Spring, 3 credits

This course provides an overview of the salient math topics most heavily used in the core sophomore-level engineering and engineering technology course. These include algebraic manipulation of engineering equations, trigonometry, vectors and complex numbers, and system of equations. All topics are presented within the context of engineering application, and reinforced through extensive examples of their use in the core engineering or technology courses.

Prerequisite: Intermediate Algebra (MATH 106) or permission of instructor

#### **MATH 101**

#### INTRODUCTORY MATHEMATICS FOR ENGINEERING APPLICATIONS Fall/Spring, 3 credit hour(s)

This course provides an overview of the salient math topics most heavily used in the core sophomore-level engineering and engineering technology course. These include algebraic manipulation of engineering equations, trigonometry, vectors and comples numbers, and system of equations. All topics are presented within the context of engineering application, and reinforced through extensive examples of their use in the core engineering or technology courses. Prerequisites: Intermediate Algebra (MATH 106) or permission of instructor

#### **ENGS 101**

# INTRODUCTION TO ENGINEERING *Fall*, *2 credit hour(s)*

The course introduces students to the various engineering disciplines, professional organizations and ethical aspects of professional expectations. Engineering analysis introduces problem-solving, engineering computations, manual sketching, and work presentation. Hands- on challenges engage the student in the design process, team work and critical thinking. Local expectations regarding written communication and oral presentations are presented and reinforced through projects.

Prerequisites: Corequisites: Pre-Calculus Algebra (MATH 123) or College Algebra (MATH 121) or higher, or permission of instructor.

#### ENGS 102

#### PROGRAMMING FOR ENGINEERS Fall/Spring, 2 credit hour(s)

This course provides an introduction to computer programming using equation solving software. Students will learn the skills necessary to create predictive models and solve basic engineering problems as well as methods for graphically presenting results and data using said software. The skills taught in this course will assist in the analysis of engineering problems in more advanced course work. Two hour labs are held twice every week.

Prerequisites: MATH 123 w/ C or better or equivalent or higher course

# ENGS 201

STATICS

Fall, 3 credit hour(s)

A vector approach to particle equilibrium, equivalent force systems, rigid body equilibrium and analysis of structure. Additional topics include friction, centroids and centers of gravity and moments of inertia.

Prerequisites: PHYS 121, PHYS 131, and MATH 123

# ENGS 202

# DYNAMICS

Spring, 3 credit hour(s)

This course is a vector approach to the solution of dynamics problems involving rectilinear motion, curvilinear motion, kinetics of particles, kinematics of rigid bodies, and plane motion of rigid bodies. Newton's laws, work - energy principles and impulse and momentum principles are used in the solutions. Three hours lecture per week.

Prerequisites: Statics (ENGS 201) or permission of instructor.

#### **ENGS 203**

#### ENGINEERING STRENGTH OF MATERIALS Fall, 3 credit hour(s)

This course is designed to introduce elementary analysis of deformable bodies subjected to various loading including strength, deformation, and stability analyses. Students will also be introduced to more advanced concepts to use sound judgment regarding the design of structures and components.

Prerequisites: ENGS 201, or permission of instructor

The underlying atomic and crystalline structure of materials is studied and how these structures affect their engineering properties. The mechanical properties of metals, ceramics, polymers and composites are examined. The mechanism of Diffusion & strengthening are discussed. Gain knowledge about the types of imperfections that exist and the roles they play in affecting the behavior of materials. Phase Diagrams of some alloys are studied.

Prerequisites: College Chemistry I (CHEM 150), University Physics II (PHYS 132), and Calculus II (MATH 162), or permission of the instructor.

#### ENGS 263

## ELECTRIC CIRCUITS

# Spring, 3 credit hour(s)

Electric circuit theory is introduced with emphasis on mathematical definitions of circuit elements. Network analysis techniques are presented within the framework of direct and alternating current theory. Transient forced and complete responses of circuits involving resistance, inductance, and capacitance are analyzed via differential and integral calculus. Circuit Design using Operational Amplifiers.

Prerequisites: Calculus II (MATH 162), University Physics II (PHYS 132), or permission of instructor.

#### **ENGS 264**

### ELECTRICAL CIRCUIT LABORATORY Spring, 3 credit hour(s)

Basic concepts and principles of direct current and DC voltage are stressed in this introductory laboratory. Students will analyze resistive, capacitive and inductive circuits through practical laboratory application. Students will also study circuits using circuit analysis software.

Prerequisites: PHYS 132/136 University Physics II/Lab. Corequisites: ENGS 263 Electric Circuits

#### **ENGS 302**

# ENGINEERING DYNAMICS II

Fall, 3 credit hour(s)

In this second dynamics course, students learn about planar two-Dimensional rigid body kinematics, kinetics of rigid bodies- force and acceleration, work and energy, impulse, momentum, and threedimensional motion. An introduction to vibrations is also provided.

Prerequisites: ENGS 202 or MECH 301

# ENGS 314

# FLUID MECHANICS I

#### Fall, 3 credit hour(s)

This course develops knowledge of fluid mechanics. Topics include properties of fluids, pressure, hydrostatic forces, fluid statics, Bernoulli's, and the energy equation are explored in respect to applications in the mechanical and civil industry. Flow rate, pipe sizing, and minor losses in piping systems are addressed.

Prerequisites: MATH 123, PHYS 121 or PHYS 131

# ENGS 341

#### THEORETICAL FLUIDS *Fall, 3 credit hour(s)*

Students in this course develop knowledge of fluid mechanics under static and dynamic applications. Properties of fluids, pressure, fluid statics, Bernoulli's, fluid kinematics, differential representation of conservation of mass and momentum, dimensional analysis, flow rate, minor losses in piping systems, and an introduction to the Navier-Stokes equations are addressed.

Prerequisites: ENGS 201 and MATH 364

## ENGS 350

#### MECHANICS OF MACHINE ELEMENTS Fall, 4 credit hour(s)

Students in this course develop fundamentals of mechanics of machine design. Students apply their knowledge of statics, strengths, and materials to the designing of machine components.

Prerequisites: ENGS 203 Engineering Strength of Materials

#### **ESCI 101**

# INTRODUCTION TO ENVIRONMENTAL SCIENCE

#### Fall/Spring, 3 credit hour(s), GER 2

This course is divided into five major sections: Resources/Human Population, Matter/Energy, Ecology, Environmental Law/Economics and Risk, and Environmental Degradation. Resources/ Human Population will include resources types, alternative energy sources, and human population dynamics. Matter/Energy will include the basic principles of matter and energy from a physics and/or chemistry perspective in preparation for the Ecology and Environmental Degradation sections. Ecology will include ecosystem basics, land ecosystems, and aquatic ecosystems. Environmental Law/Economics and Risk will include major laws dealing with pollution discharge/cleanup, treat, ment o,f pollution and an economic commodity, risk, and toxicology principles. Environmental Degradation will include water resources, sewage treatment, air pollution, and hazardous/solid waste. Three hours lecture per week.

Prerequisites: Beginning Algebra (MATH 100); Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); or an 80 on the NYS ELA Examination; or permission of instructor.

#### **ESCI 102**

# INTRODUCTION TO ENVIRONMENTAL SCIENCE LAB

#### Fall/Spring, 1 credit hour(s), GER 2

This laboratory is designed to provide scientific laboratory experiences using environmental issues as a data source or focus. Each exercise involves the collection of data, manipulation of the collected data, and analysis of the data. The experiments include energy conservation, chemical toxicology, river/stream attributes, pond morphology, design of private sewage systems, evaluation of solar/wind

power potential, solid waste/composting, and the evaluation of the distribution of an environmental contaminant. Two hours per week.

Prerequisites: Beginning Ålgebra (MATH 100); Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); or permission of instructor. Corequisite: Introduction to Environmental Science (ESCI 101) or permission of instructor. Recommended Math Level;Intermediate Algebra (MATH 106).

#### ESCI 107 EARTH SCIENCE

#### *Fall/Spring*, *4 credit hour(s)*

This course introduces earth processes and phenomena. The birth of the universe, our solar system, and the earth are explored.

The internal composition and structure of the Earth is studied. Factors that affect the structure of the earth are examined: continental drift, plate tectonics, and crustal deformation. Students learn about common earth materials that make up the Earth. The impact of weathering, erosion, running water, and glaciers on the earth's surface and landforms is studied. Additional topics will include, but are not limited to: earthquakes, volcanoes, mass movement, geologic time, and geologic mapping.

Lecture related exercises/assignments, laboratory exercises, readings, and review questions help students learn and understand the course material. This course includes a laboratory section. Students cannot receive credit for both ESCI 107 and GEOL 101.

#### ESCI 110

#### INTRODUCTION TO METEOROLOGY Fall/Spring, 3 credit hour(s)

This is an introductory meteorology course with topics covering the structure of the atmosphere, meteorological measurements, air movement, air masses and fronts, violent storms and climate. No prerequisites.

#### ESCI 320 WEATHER, CLIMATE, AND CLIMATE CHANGE

#### Spring, 3 credit hour(s)

This course is an introduction to the science behind weather and climate. It will focus on the composition, structure, and disturbances of the atmosphere. The energy balance and role of water will necessarily include discussions of solar radiation and the water cycle. The difference between weather and climate will be illustrated with a discussion of global climate change. The most current reports from the UN Intergovernmental Panel on Climate Change (IPCC) and the US Global Change Research Program (USGCRP – National Climate Assessment) will be reviewed.

Prerequisites: One semester college level science

#### **ESOL 096**

# ACADEMIC COMMUNICATION *Fall/Spring*, 4 credit hour(s)

This course is designed to help first- semester international or English language learners to enhance communication skills required in American academic contexts. Students will develop critical reading skills and academic writing skills with an overview of grammar and mechanics.

Concurrent focus is on building oral fluency and expanding academic vocabulary. This course is an alternate to ENGL 097 or ENGL 098 for ESL students.

Prerequisites: Leveled by placement test score

# ESPT 100 INTRODUCTION TO ESPORTS MANAGEMENT

# Fall, 3 credit hour(s)

This course introduces students to eSports and the fundamentals of effective eSports management. Students identify best practices in eSports management by examining case studies of the emerging eSports industry and associated stakeholders. Students explore financial, legal & ethical, marketing, and operational issues surrounding the eSports industry.

Finally students explore career opportunities in eSports management

#### **ESPT 200**

#### FUNDAMENTALS OF ESPORTS TECHNOLOGY

Spring, 3 credit hour(s)

This course introduces students to esports technology and the fundamentals of effective esports technology usage. Students identify best practices in esports technology through hands-on experience with industry- leading software. Students explore streaming, editing, hardware, and more.

#### **ESPT 210**

# ESPORTS GOVERNANCE

Spring, 3 credit hour(s)

This course introduces students to governing bodies and regulatory structures of Esports organizations. Students explore the structure and function of eSports governing bodies, including but not limited to: BEA, ESL, IESF, NACE, and NEA. Students also explore player bill of rights, rule sets, and conference governance structures for leagues, including but not limited to CDL, OWL, and LCS.

#### ESPT 301

#### ESPORTS MARKETING

Spring, 3 credit hour(s)

Students explore contemporary marketing practice and marketing career opportunities in the eSports industry. Students use marketing concepts gained in BSAD 203 Marketing toexamine marketing initiatives and corresponding efficacy in eSports marketing practice. Students select an existing eSports entity, develop a marketing plan, and propose ways to improve the entity's marketing efficacy. The course culminates in the presentation and defense of the student's marketing plan.

#### **ESPT 305**

# ESPORTS MANAGEMENT PRACTICUM

Fall, 3 credit hour(s)

In this course, students gain hands-on experience working with an eSports entity in an eSports management capacity.

Students document their practicum activity and highlight characteristics of effective management eSports operations. Weekly class lectures allow students to share their practicum experience and debrief on the week's activities. Students build a professional portfolio and career plan based on their practicum experience.

Prerequisites: ESPT 200 Fundamentals of eSports Technology, ESPT 210 eSports Governance, and 45 credit hours earned

# **ESPT 308**

### ESPORTS EVENT MANAGEMENT Fall, 3 credit hour(s)

In this course students apply their knowledge of eSports management and relevant functional areas of business to plan and execute an eSports event. Using case studies and interaction with eSports practitioners, students identify and apply best practices for planning and executing an eSports event. Students are required to manage an eSports event prior to completion of the course.

#### **ESPT 404**

# ESPORTS CAPSTONE

Fall/Spring, 3 credit hour(s)

This multidisciplinary capstone course integrates materials from business, sports management, and esports management courses to allow students to gain practical skills and knowledge of the esports industry and the role esports managers have within the industry. Students analyze and evaluate advanced issues related to governance, innovation, marketing, and management of esports. Students also study contemporary challenges by incorporating knowledge gained through business, sports, and esports management courses and required readings.

#### ESPT 450 INTERNSHIP FOR ESPORTS Fall/Spring, 3 credit hour(s)

Working in conjunction with a field supervisor, the student performs delegated work within an administrative and management setting. This is a culminating experience in which the student is expected to integrate concepts gained in previous program course work. The internship will be individualized according to the career interests of the student and the needs of the supervising organization. Internship assignments may include information gathering, analysis, planning, implementation, evaluation, and other responsibilities.

Prerequisites: Senior level status. Completion of all required ESPT courses before participation in Internship, permission of curriculum coordinator or Dean required.

# FLHT 101

# INTRODUCTION TO DRONES: REGULATIONS & USE

Fall/Spring/Summer, 2 credit hour(s)

This course is designed to give students an introduction to drones and to prepare them for the remote drone pilot exam. The course covers the five knowledge areas on the exam, which are regulations, the national airspace system, weather, loading and performance, and operations.

#### **FREN 101**

# CONTEMPORARY FRENCH I

Fall, 4 credit hour(s), GER 9

This course will introduce the student to the sound system and grammatical structure of the French language. The focus will be on developing skills in the areas of aural comprehension, speaking, reading, and writing. By the end of the semester the student will have a basic understanding of grammar, including word formation, verb conjugations, idiomatic expressions, and cognates. This course will also discuss various cultural aspects of the French- speaking world. This course is only for the true beginner or for students who have had less than three years of high school French. Students who have taken more than three years of high school French within the last three years can enroll in this course only with the permission of the instructor. Four lecture hours per week.

#### FSAD 111 STUDY OF FUNERALS Fall. 3 credit hour(s)

This course discusses the role of funeral directors and other death-related professions in contemporary American Society. Terminology, dutites, and responsibilities of the funeral director during the removal of deceased, the wake, funeral, and committal service are extensively covered. Historical methods of preservation and memorializing the dead will ,be reviewed and discussed. Various religious and ceremonial responses to death and loss are reviewed. Students review historical and present day funeral customs in this and other countries. Each student reviews his or her own personal response to death and pre-arrange his or her own funeral and/or burial. Each student writes an obituary for themselves or someone they know. Three hours lecture per week.

#### FSAD 115 THANATOCHEMISTRY Fall, 2 credit hour(s)

This course provides a survey of the basic principles of chemistry as they relate to Funeral Service. The focus is on the chemical principles and interactions involved in sanitation, disinfection, public health, and embalming practice.

Prerequisites: Enrollment in the Funeral Services Administration program, or instructor approval.

### FSAD 121

# ANALYTICAL EMBALMING

Fall, 3 credit hour(s)

This is the first of three embalming courses required to graduate from the program. It outlines the definitions of death, the public health considerations, ethical performance, necessary instruments, preparation room design, and the chemical principles involved in decomposition and preservation. Three hours lecture, three hours laboratory per week. Final grade of "C" or better is required to continue in or graduate from Morturary Science. Course may only be repeated once. Three hours lecture and three hours lab per week.

Prerequisites: matriculation in the program

# FSAD 129

# CLINICAL PRACTICUM

Fall/Spring, 2 credit hour(s)

Students are required to work in an assigned funeral home for a minimum period of five weeks. During this period, the students are expected to relate the theoretical background they have acquired to the practical functions of a funeral director. The faculty will contact the student and the funeral director periodically during the practicum. This will be by personal visits and/or phone conversations. The students are expected to serve this practicum without pay.

Prerequisites: Successful completion of one semester of embalming or permission of instructor.

# FSAD 205

# MORTUARY HYGIENE *Fall, 3 credit hour(s)*

This course focuses on the diseases

which present serious challenges for embalmers. Awareness and recognition of potential infection based upon observed pathological signs is an important means of reducing the occupational hazards related to mortuary practice. Modes of disease transmission, resistance or susceptibility to infection, and exploitable weaknesses of microbes support the working knowledge of disease protection which the modern embalmer must possess.

#### **FSAD 211**

#### EMBALMING & ASEPTIC TECHNIQUES Spring, 4 credit hour(s)

Subsequent to Analytical Embalming Techniques (FSAD 121), this course focuses on unique and special problems encountered by the embalmer in professional practice. Microbiology of pathogens and techniques of infection control are a major aspect. Three hours lecture, three hours laboratory per week. Final grade of "C" or better is required to continue in the program.

## FSAD 214

## FUNERAL HOME MANAGEMENT I Spring, 3 credit hour(s)

Study of management techniques and procedures necessary for successful operation of a small business with the major emphasis on funeral home management. Three hours lecture per week.

#### FSAD 225

## PROFESSIONAL FUNERAL PRACTICE Spring, 3 credit hour(s)

Casket and vault construction and composition are extensively covered. Merchandising methods of funeral service goods such as caskets, vaults, and memorial tributes are explored and practiced. Professional Ethics with special attention given to the Federal Trade Commission's Funeral Rule, are learned and practiced. Funeral industry software is utilized in this course.

Prerequisites: Intro to Information Technology (CITA 110), and Study of Funerals (FSAD 111).

#### **FSAD 401**

#### FUNERAL SERVICE LAW Spring, 3 credit hour(s)

This course deals with the general business laws and specific laws that affect the funeral profession. The student will be concerned with the laws that pertain to solicitation of clients, rights of possession, cemeteries, interstate agreements, international shipping, funding vehicles, association rights, lobbying, local ordinances, and employer/employee relationships.

Prerequisites: Majors only or permission of instructor.

#### **FSAD 406**

# BEREAVEMENT COUNSELING

Spring, 3 credit hour(s)

Building upon the rudimentary counseling skills developed in FSAD 227, this course addresses deeper and more varied emotional problems stemming from loss. Utilization of theories of grief from several authorities and application of a range of counseling techniques to individual situations, makes this a useful approach to delivery of human services. Anticipatory grief, hospice care, disenfranchised loss, child death, suicide, homicide, absent grief, and extended grief are major topics. Application of the skills developed is limited to the funeral home setting. The student will observe and describe the progress of a person who has suffered a recent loss as an original research project.

Prerequisites: Human Response to Death (FSAD 307) or permission of instructor.

#### FSAD 420

# CURRENT ISSUES IN FUNERAL SERVICE *Fall*, *3 credit hour(s)*

As the field of funeral service continues to change in response to societal demands, this class provides the opportunity to keep abreast of these developments. Topic areas include: public health, government regulation, funeral home management, religious and secular rites and rituals. Major focus is on the effects that changes might have on the grief process, societal readjustment following death, and creative ways for funeral service practitioners to address the future. Historical perspective is utilized as a predictive tool in assessing society's new outlook on loss and recovery. Three major issues, determined by consensus of the class and instructor each semester, will be the primary focus of the course. Three hours lecture per week. Prerequisites: Minimum junior level status or permission of instructor. This is a writing intensive course.

## FSAD 440 INTERNSHIP IN FUNERAL SERVICES ADMINISTRATION

Fall/Spring/Summer, 7 credit hour(s)

Students will spend at least 40 hours per week for 7 weeks in this experiential course. They will perform the standard duties of funeral director trainees in the areas of funeral directing and embalming. Additionally they will participate in a project determined during the Introduction to Internship course held in a previous semester. Successful completion of the course is based on assessment of supervising faculty and funeral home preceptor according to the assessment plan detailed in FSAD 308.

Prerequisites: FSAD 308 Intro to Internship and be in the first semester of the student's Senior year. Must possess a Blue Card through the NYS Department of Health, Bureau of Funeral Directing or comply with specific state regulations governing Internship/Practicum experiences. Intern site must be approved and indemnified by SUNY Canton prior to beginning Internship experience.

# FSAD 445

MORTUARY COMPLIANCE Spring, 2 credit hour(s)

This course is taken during the last semester of the Funeral Services Administration Program, and covers compliance with all Health Department regulations and federal and state laws pertaining to funeral directing in a state where the student intends to practice. Regulations and laws pertaining to funeral directing are clarified through extensive specialized testing including the National Board Examination (NBE). Student must score an 85% or better in this course to pass.

Prerequisites: Senior status in FSAD program.

#### **FSMA 210**

INTRODUCTION TO FINANCE

Fall/Spring, 3 credit hour(s)

This introductory course covers fundamental elements of business finance. Discussions will include the concepts of financial analysis, time value of money, security evaluations, risk and return, capital budgeting, and other issues in corporate decision making. Three hours lecture per week.

Prerequisites: (CITA 108 or CITA 110) and (GER MATH or ACCT 101), or permission of instructor.

#### FSMA 220

## INTRODUCTION TO INVESTMENTS Spring, 3 credit hour(s)

This course offers an introduction to investments including investment analysis, portfolio management, and capital markets. The course examines the basic concepts and principles of investing, investment policies, types of securities, factors that influence pricing changes, timing purchases/sales, preparing investment programs to meet objectives, investment risk and return, and portfolio balancing.

Instruction also includes an overview of the securities markets and their behavior, including sources of information about the various instruments traded and procedure of trades.

Prerequisites: ACCT 101, ECON 101, and FSMA 210; or permission of the instructor.

### FSMA 301 PERSONAL FINANCE Fall/Spring, 3 credit hour(s)

This course provides broad coverage of personal financial decisions including basic financial planning, tax issues, managing savings and other liquid accounts, credit management, insurance, managing investments and retirement planning. This course also provides knowldege of financial products, analytical tools, and economic analysis in the context of setting personal financial goals and measuring progress.

Prerequisites: Junior level status in Financial Services or permission of ins,tructo,r.

# FSMA 312

# FINANCIAL MANAGEMENT

Spring, 3 credit hour(s)

This course is a continuation of Introduction to Finance (FSMA 210). Topics on portfolio theory, efficient market theories, and Capital Asset Pricing Model will be further elaborated and applied to make capital budgeting, capital structure, and dividend policy decisions within corporations. Special topics on agency conflicts, mergers and acquisitions, and corporate risk management will also be discussed.

Prerequisites: A minimum grade of C in Introduction to Finance (FSMA 210) is required or permission of instructor.

#### FSMA 315

#### GLOBAL INVESTMENT Fall, 3 credit hour(s)

The primary objectives of this course are to provide the students with a fundamental knowledge of domestic/international financial markets, financial securities and how they are valued and traded in order to achieve a desired investment objective, both in the theoretical perspective and in the perspective of the investment managers. Special attention is given to the application of the basic concepts to the three major capital markets: stock, bond and financial derivatives markets.

Prerequisites: ACCT 101, BSAD 201, and ECON 101, or permission of instructor.

#### FSMA 320

# INVESTMENT ANALYSIS & PORTFOLIO THEORY

Fall/Spring, 3 credit hour(s)

The course provides a foundation for

selecting financial assets and form sound investment decisions. Traditional and modern approaches to securities selection, investment analysis and portfolio management are included, with emphasis on investment strategy and investment performance evaluation. The major topics to be covered include portfolio analysis, company/industry analysis, optimal portfolio selection, efficient transactions, performance evaluation and investment ethics. Current topics, such as options, futures, swaps and other financial instruments are also explored.

Prerequisites: Financial calculator, Introduction to Finance (FSMA 210), or permission of the instructor.

# FSMA 325

#### FINANCIAL COMPLIANCE AND REGULATION Fall, 3 credit hour(s)

The role of regulatory and compliance professionals in the financial service industry is currently undergoing enormous change and development. This course will take an interdisciplinary approach incorporating economics, ethics, finance, law and public policy in surveying the specific goals and objectives of the financial regulatory and compliance function. The course is designed with the practitioner in mind with an emphasis on the anticipation and prevention of regulatory and compliance problems before they occur.

Prerequisites: Introduction to Finance (FSMA 210), Business Law I (BSAD 201), Principles of Macroeconomics (ECON 101), and Principles of Banking (BSAD 120), or permission of the instructor.

#### FSMA 415 GLOBAL FINANCE

Spring, 3 credit hour(s)

This course will cover issues related to both international financial markets and the financial operations of a firm within the international environment. Major topics include the international monetary systems, foreign exchange regime, management of foreign exchange exposure, international financial management, taxation of international income, and international merger and acquisitions

Prerequisites: Global Investments (FSMA 315) or permission of instructor.

#### **FSMA 420**

## FINANCIAL DERIVATIVES Spring, 3 credit hour(s)

This course will examine the dramatic growth of the derivatives markets in the last two decades. This growth, triggered by deregulation, globalization, increased uncertainty and volatility, has empowered enterprises to successfully manage their financial price risk. Topics to be covered include: the use of derivatives for risk protection, cash flow modification, arbitrage, and investment. Three hours lecture per week. Prerequisite: junior level status in Financial Services or permission of instructor.

Prerequisites: junior level status in Financial Services or permission of instructor.

#### **FSMA 422**

## RISK MANAGEMENT

Fall, 3 credit hour(s)

The goal of this course is to provide students with a good conceptual framework for analyzing risk and making risk management decisions in a corporate setting. It focuses on the ways in which individuals and corporations assess, control, and transfer risk. Issues such as what risk is, how it can be measured and transferred, why individuals and corporations care about risk, and how effective risk management programs can be designed and implemented.

Prerequisites: Financial Derivatives (FSMA 420) or permission of instructor.

#### FSMA 429

#### ORIENTATION TO

CULMINATING EXPERIENCE

Spring, 1 credit hour(s)

This course is intended as the precursor to the senior culminating experience in the Financial Services bachelor's program.

Seniors will meet with faculty on a weekly basis to discuss resume preparation, job interviewing techniques, identifying and securing internships, and internship requirements. This course is a prerequisite to FSMA 480 Internship in Financial

### Services.

Prerequisites: Senior level status in Financial Services program.

#### FSMA 460 SENIOR PROJECT

Fall/Spring, 3-15 credit hour(s)

This course is an alternative to FSMA 480. It is designed for students who are unable to complete a 15-credit internship. Students will complete a senior research project specifically addressing issues under the umbrella of financial services management. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee. This course may be repeated for credit up to a maximum of 15 credit hours.

Prerequisites: Introduction to Culminating Experience (FSMA 429) and senior level status in the Financial Services program or permission of instructor.

#### FSMA 480 FINANCE INTERNSHIP Fall/Spring, 6-15 credit hour(s)

Financial service internship is a culminating experience in which the student will be expected to integrate and apply concepts gained in previous course work to actual financial service area. In conjunction with a field supervisor at the host organization, the student performs prescribed work within an administrative setting. The internship is tailored to the individual student's career interests and the needs of the supervisor and supervising organization. Such internship assignments may include, but are not limited to, information gathering, analysis, planning, implementation, evaluation, and other tasks and responsibilities as required by the sponsor. This course can be taken multiple times up to a maximum of 15 credit hours.

Prerequisites: Orientation to Culminating Experience (FSMA 429) and senior level status in the Financial Services program, or permission of instructor.

#### FSMA 330 FINANCIAL MARKETS AND

#### INSTITUTIONS

Fall/Spring, 3 credit hour(s)

This course provides an understanding of financial markets and financial institutions that operate within the financial markets. It introduces the financial markets where flow of funds occur through financial markets instruments, such as bonds, money markets, mortgage markets, foreign exchanges, stocks and derivatives (futures, forward, options, and swaps). It focuses on financial institutions, such as the Fereal Reserve, commercial banks, thrifts, insurance companies investment banks, finance companies, mutual funds. In addition, it provides a comprehensive introduction to risk management within the framework of financial sercices industry.

Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103) and a minimum 45 credit hours, or permission of instructor.

#### FYEP 101

# FIRST YEAR EXPERIENCE *Fall/Spring, 1 credit hour(s)*

First Year Experience is designed to help facilitate the intellectual and social integration of firsttime college students into the academic community at SUNY Canton. The course is designed to engage students in critical thinking about their personal, academic, career, and social development as they make the transition to college life. Some sections are specialized for students' specific major or interests.

#### GAME 110 FUNDAMENTALS OF GAME DESIGN Fall, 3 credit hour(s)

This course is a comprehensive examination of design processes and addresses the social implications, interactions and usability of game design. The course focuses on the principles and design decisions game designers make. The course also discusses the societal and cultural impact of gaming. Students learn the processes of game design from concept to completion.

#### GAME 130

#### GAME DESIGN AND PROTOTYPING Spring, 3 credit hour(s)

This is a studio-based course investigating the tools, materials, and foundational aspects of game design and preparation for production. This course presents the process with industry-standard software used to design, develop and manufacture games.

Prerequisites: GAME 110 Fundamentals of Game Design, CITA 180 Introduction to Programming

# GAME 210 OBJECT-ORIENTED DESIGN FOR GAME DEVELOPMENT

Fall, 3 credit hour(s)

This course includes programming assignments and a game design project, which will give students and opportunity to practice different roles inside a game development team, and help them to gain practical knowledge of developing game projects through using object-oriented software design pipelines.

Prerequisites: GAME 130 Game Des,ign and Prototyping

#### GAME 230

#### 3D CHARACTER MODELING Spring, 3 credit hour(s)

GAME 230 is a character modeling class for the gaming industry. Presuming no experience with Maya, students will start with the basics of Maya and photoshop and will create a polygonal body bents will start with the basics of Maya and photoshop and will create a polygonal body builder character from reference images. Students will learn about simple Forward Kinematic Rigs and build one for the character. In the second half of the semester, they will design and build their own character.

Prerequisites: GAME 210 Object-Oriented Design for Game Development

## GAME 240

# **3D ENVIRONMENTS FOR GAMES**

# Spring, 3 credit hour(s)

GAME 240 is an environment modeling class for the gaming industry. Presuming no experience with Maya, Photoshop, or Unreal editor, students will start with the basics of each program and learn how to create environments with modular components that would be ready to be coded. Students will gain proficiency in modeling and UV mapping in Maya, and texturing in photoshop, and how to import meshes into Unreal to create detailed environments. Students will learn how to design different kinds of environments, model meshes and create textures and create materials and basic nodal networks.

#### GAME 250

#### GAME MECHANICS AND DYNAMICS Spring, 3 credit hour(s)

Students learn about the design process and project management including consumer expectations, marketing requirements and budget limitations.

Prerequisites: GAME 210 Object-Oriented Design for Game Development

#### **GAME 350**

# AESTHETICS AND IMMERSION *Fall*, *3 credit hour(s)*

This course explores designing visuals, adding sound and creating experiences that are more than just functional. It focuses on artistry and design of the experience of the game. Students examine how and why the user connects to the game and how to create that connection. Students study the aesthetics of games and how to create games that immerse players.

Prerequisites: GAME 230 3D Modeling and Texturing for Games

## **GAME 360**

# GAMES JOURNALISM

Fall, 3 credit hour(s)

This course explores both the history and practical application of games journalism. The focus of the class is to help students understand how and why games journalism serves the people who play, make, market and publish games. Students will be asked to develop an understanding of the industry's history and will have a chance to meet and interview members of the games press. Students will also practice a variety of journalistic tasks, including writing a feature, blogging news and live-streaming gameplay. Although the focus of the class is to introduce students to the perspective of a games journalist, they will also learn how to pitch stories and write self-promotional emails on behalf of their own games.

Prerequisites: GAME 110 Fundamentals of Game Design and 45 credit hours

#### **GAME 361**

# PROFESSIONAL PRACTICE IN GAME DEVELOPMENT

Fall/Spring, 3 credit hour(s)

In this course, students will dive deep into the contemporary state of the game industry, examining the complex relationship between developers, publishers and games marketing, look at the industry from the perspective of those who work within it, and examine case-studies of both successful and notsuccessful indie developers. Students will develop professional pitches and practice delivery in a realistic environment. Likewise, students will structure resumes to a format typical for the games industry, practice mock- interviewing skills and practice negotiation using carefully designed case-studies.

Students will also hone their craft of game design with a view to finding the elusive combination of challenge, competition, and interaction that players seek. Students will examine the fundamental elements of game design, then go to work prototyping, playtesting and iterating around their own ideas using exercises that teach essential design skills.

Prerequisites: GAME 210 Object-Oriented Design for Game Development

## GAME 370

# DIGITAL MEDIA AND INTERACTION Spring, 3 credit hour(s)

This course explores how digital media is created and utilized within computer games, virtual reality, and simulations. Students develop a video game, including storyboards, design documents, game development, and a playable demo.

Prerequisites: GAME 350 Aesthetics and Immersion

#### GAME 390 GAME CAPSTONE I

Fall, 3 credit hour(s)

This course is an orientation to the capstone experience course in the Game Design and Development program, allowing students to develop skills in group communication and teamwork as they plan a culminating research project.

Prerequisites: GAME 370 Digital Media and Interaction, senior level students in GAME Design, or permission of instructor.

# GAME 450 MOBILE GAME DEVELOPMENT

Fall, 3 credit hour(s)

This course is an introduction to mobile application frameworks, including user interface, sensors, event-handling, data- management and network communication.

Prerequisites: GAME 370 Digital Media and Interaction

#### GAME 470

## EMERGING GAMING APPLICATIONS Spring, 3 credit hour(s)

This course explores features of the future of gaming, such as immersive gaming, virtual reality, computer graphics, real-time visualization, secondary screens for gaming, smart-glasss, crossplay, open-source gaming, game development, augmented reality, as well as mobile gaming and cloud gaming. Through learning the course, the students will have a big picture of the features fo the future gaming and the trend of gaming industry development

Prerequisites: Junior/Senior level in GAME Design Program

## GAME 490 GAME CAPSTONE II Spring, 3 credit hour(s)

This course is a capstone experience course in the Game Design program, allowing students to develop skills in group communication and teamwork as they plan, design, develop, produce and defend a culminating research paper.

Prerequisites: GAME 390 Orientation to Capstone

#### GAME 333 SOUND DESIGN & COMPOSITION FOR MULTIMEDIA Fall, 3 credit hour(s)

This course covers composition and production techniques for creating music and sounds for multimedia applications such as games, videos, films, and more. Emphasis is placed on creating engaging sound environments that create emotion, mood, and/or settings across a variety of potential genres.

Prerequisites: GMMD 112 Introduction to Time Based Media

### GEOG 101 INTRO TO GEOGRAPHY Spring, 3 credit hour(s)

This course provides a survey of two major themes in geography, the physical landscape and the distribution and interrelationships of human activities over the globe. Special emphasis is given to developing a geographical perspective to address economic, population and social problems at local, regional and global levels. Three lecture hours per week. Social Science elective.

# GEOL 101

#### PHYSICAL GEOLOGY Fall/Spring, 3 credit hour(s)

This course will take a general look at the earth including its composition and structure on a large scale. The processes that cause changes in and on the earth will also be studied. Topics will include the study of minerals and rocks, the origin and types of rocks, the rock cycle and the identification of many of the common rocks and minerals. Other topics include geological time, weathering, erosion, glaciers, running water, volcanoes, earthquakes, plate tectonics and geological work.

# GMMD 101 INTRO TO MEDIA STUDIES

Fall/Spring, 3 credit hour(s), GER 7

This course will introduce students to the process of media analysis. Emphasis will be placed on key terms for adopting a critical eye towards mass media and the development of media literacy in both traditional (print, radio, film, television) and emerging (digital and web-based) forms.

### **GMMD 102**

#### INTRODUCTION TO DESIGN Fall/Spring, 3 credit hour(s), GER 8

Introduction to Design is a studio-based class investigating the tools, materials, and foundational concepts of design. Introduction to Design will present the methodology and critical awareness for problem solving inherent in all design fields. Through the discussion, examination and execution of a variety of design exercises, students will develop their understanding of visual composition and design theory. While the course exercises focus on 2-D graphic design, this broad introduction to design theory develops the creative problem solving skills integral to all fields of design.

#### **GMMD 112**

## INTRO TO TIME-BASED MEDIA Fall/Spring, 3 credit hour(s)

Intro to Time-Based Media provides a foundation for understanding the use of narrative and movement in design communication. Students create and distribute time-based digital content in multiple media. Students are introduced to the fundamental techniques of animation, film and sound editing, and interactivity.

## GMMD 200 DIGITAL PHOTOGRAPHY

Fall, 3 credit hour(s), GER 8

Hands-on activities and studio/lab will permit each student to investigate the applications of appied digital and hybrid photography. Students will develop competency in digital image capture, processing, and critical evaluation.

Through technical studio assignments, critiques, and presentations, students will increase their skills in image printing, manual camera operation and using cmputer imaging software. Students will also develop critical awareness of composition and the relationship of digital photography to other media. Students who take GMMD 200 will not receive credit for GMMD 201 Landscape Photography.

#### **GMMD 201**

### LANDSCAPE PHOTOGRAPHY Fall, 3 credit hour(s)

Hands-on activities and studio/lab will permit each student to investigate the applications of applied digital and hybrid photography. Students will develop competency in digital image capture, processing, and critical evaluation. Through technical studio assignments, critiques, and presentations, students will increase their skills in image printing, manual camera operation and using computer imaging software. Students will also develop critical awareness of composition and the relationship of digital photography to other media.

## GMMD 211

#### FILM ANALYSIS Fall/Spring, 3 credit hour(s)

As an introduction to the art of film, this course will present the concepts of film form, film aesthetics, and film style, while remaining attentive to the various ways in which cinema also involves an interaction with audiences and larger social structures. Throughout the course, we will closely examine the construction of a variety of film forms and styles-including the classical Hollywood style, new wave cinemas, experimental films, and contemporary independent and global cinemas. We will pay particular attention to the construction of film images, systems of film diting, film sound, and the various ways in which film systems can be organized (narrative, non- narrative, genres, etc.) There is a required weekly film screening.

Prerequisites: ENGL 101

#### **GMMD 240**

#### PROFESSIONAL PRACTICES Fall/Spring, 3 credit hour(s)

Professional Practice is an experiential survey of various design professionals and their working environments. Students attend several on and off campus activities and professional visits, experiencing first- hand the work flow, professional practices and client interaction of designers in their workplaces. Students complete several assignments based on their research and first-hand experiences with several design careers, including the preliminary work in arranging for their GMMD internship.

Prerequisites: GMMD Major and 45 completed credit hours or permission of the instructor

#### GMMD 301

### 3-D DESIGN

# Spring, 3 credit hour(s)

3-D design bridges the concepts of design with the basic methodologies and concepts of three dimensional fabrication and composition. The course will challenge students to further develop and employ problem solving methodology to a variety of basic conceptual and practical problems in 3-Dimensional space. The course emphasizes the basic sculptural methodologies, including subtractive and additive processes, assemblage, construction, carving, casting, molding, armature, and kinetics/mechanics. The ability to move between 2-dimensional and 3-dimensional conceptualization/ realization is the primary focus of this class.

Prerequisites: Introduction to Design (GMMD 102)

#### **GMMD 302**

### PROFESSIONAL PHOTOGRAPHY Fall/Spring, 3 credit hour(s)

Building upon the introductory skills of GMMD201, this course is designed for students who are interested in the professional applications of photography. Students experience a variety of advanced concepts, techniques, and approaches designed to help them enhance their abilities to create and use the digital photographic image in narrative, creative, documentary, commercial, and editorial form. The classroom lectures will emphasize versatile techniques and creative problem-solving strategies. Through practical assignments, students will develop their skills and awareness in on-location photography, constructing and presenting visual narratives, ethics and issues, the creative license in commercial applications, and the ability to meet the demands of providing photography as a service.

Particular emphasis will be placed on the exploration of advanced techniques, including advanced lighting, advanced post- processing, photography as a design tool, and product photography.

Prerequisites: Digital Photography (GMMD 201) and Introduction to Design (GMMD 102), or permission of instructor.

### GMMD 311

# VIDEO EFFECTS & POST- PRODUCTION Spring, 3 credit hour(s)

This course provides a project-based exploration of advanced editing techniques in digital video production. Topics include compositing, light matching, colorization, and motion graphics.

#### **GMMD 313**

STUDIES IN GENRE FILM

Fall/Spring, 3 credit hour(s)

This course will provide an opportunity to study one film genre in depth. Emphasis will be on thematic cultural analysis of the genre's role in contemporary society. Different topics will be offered on a cycle, including the following: Documentary Film, Horror in Film, The Film Western, History of the American Comic Film, and Science Fiction in Film. Three hours lecture per week.

Prerequisites: Junior status and at least on literature course. Students may take one genre for Gen ED. credit. Students may take two genres for elective credit.

#### GMMD 317

# CULTURE AND COMMUNICATION *Fall/Spring, 3 credit hour(s)*

This course provides students with tools to analyze communication resources. The course emphasizes the use of multimodal communication in contemporary popular culture, and considers resources ranging from photography, film, television, music, fashion and subcultures. Students develop detailed analysis of cultural resources through methods derived from semiotics and communication studies.

Prerequisites: ENGL 101 and GMMD 101 or PSYC 101 or SOCI 101 and at least 30 completed credit hours or permission of the instructor.

#### GMMD 330 WEB DESIGN & DEVELOPMENT Fall/Spring, 3 credit hour(s)

In this course students are introduced to basic code, web development strategies, and current industry standards. Students learn how to create and edit HTML and CSS with web authoring tools. Special emphasis is placed on file management and image design. The course culminates in a final project utilizing the design process.

Prerequisites: Introduction to Design (GMMD 102), Introduction to Programming (CITA 180) or equivalent, or permission of the instructor.

## GMMD 331 DIGITAL ILLUSTRATION & TYPOGRAPHY

## Fall/Spring, 3 credit hour(s)

This course emphasizes the acquisition of software skills in vector based graphics. Students explore digital workflow, visual communication, and the design process in relation to illustration, and logo and graphic identity.

Prerequisites: Introduction to Design (GMMD 102), Digital Photography (GMMD 201), or permission of the instructor.

### GMMD 332 3D PRINTING AND DESIGN Spring, 3 credit hour(s)

This is an immersive course in fused filament fabrication (3d printing) and design. Students will develop their applications of 3-dimensional design through CAD drawing and applications in additive manufacturing. Skills that will be developed include technical knowledge of FFF machines, experience in fabrication with a variety of materials (ABS, PTEG, PLA, NYLON) and digital mesh optimization/ repair. Throughout the course students will develop an analytical approach to iterative design and 3D problem solving, preparing for applications in rapid prototyping, on-demand manufacturing, virtual reality, and product customization.

## GMMD 337 DESIGN THINKING Spring, 3 credit hour(s)

This course develops innovative thinking skills related to "wicked" human-oriented problems. Students examine cases and propose resolutions following the five-stage design thinking process of Empathy, Define, Ideate, Prototype, and Test. Cases involve the development and implementation of new products, processes, and services.

Prerequisites: ENGL 101 and GER 1 Math

#### GMMD 346 SCREENWRITING & PRE- PRODUCTION Fall/Spring, 3 credit hour(s)

Students explore and develop the narrative of video projects ranging from videos ranging from 60 seconds or less to feature length movies and even longer, serial storylines. Students will be asked to produce their own narrative(s), read the narratives of other students and provide detailed feedback on the works shared in class. Class will consist of an open forum designed to hone students writing and editing skills by discuss the narratives to be shared that class in-depth. The goal is to expose students to multiple video formats, have them dissect the differences in narrative form ranging from dialogue and story to visual impact and audience, and have them create multiple forms of narrative of their own by the end of the semester that will be ready to go into production.

Prerequisites: ENGL 101

### GMMD 351 3D ANIMATION

#### Spring, 3 credit hour(s)

This course is an overview of the techniques and history of 3D animation, including character design, modeling, storyboarding, rigging and animating a scene. Students engage in hands-on projects involving the development of hand-drawn and computer-generated animation. Emphasis is placed on understanding the place of animation in the context of the film, television, internet, and gaming industries, project management, and the development of a personal animation style.

Prerequisites: Introduction to Design (GMMD 102), Digital Photography (GMMD 201), or permission of the instructor.

#### GMMD 365

#### ISSUES IN CONTEMPORARY ADVERTISING DESIGN Fall/Spring, 3 credit hour(s)

Students are introduced to advertising and explore the development of copy, from the basic elements of advertising to honing a message and developing brand narrative to overarching campaign concept development. Students review successful advertising campaigns to learn to break down messaging to its core elements.

Students also create and develop copy for campaigns in multiple media, including print, web, interactive, social media, radio, TV, video, point-ofsale and "guerilla" marketing. Using the Workshop methodology developed at the University of Iowa, students share their work with fellow students for discussion and analysis. As a course capstone, students develop their own advertising campaign and create the corresponding advertising and copy in multiple media forms.

Prerequisites: GMMD 101 and GMMD 240

#### **GMMD 401**

#### MULTIMEDIA PRODUCT DESIGN Fall, 3 credit hour(s)

This course provides an experimental and experiential approach to integrating content with new media techniques and processes. Students use computers as creative tools to explore narrative, immersion, virtuality, visuality, and networked public sphere, with an eye towards integrating theoretical understanding of these concepts with the needs of particular design projects. Students also develop planning and organizing skills for experimental interactivity and imaging projects. Prerequisites: Visual Programming and De-

Prerequisites: Visual Programming and Development Tools (CITA 342), and Digital Photojournalism (GMMD 302), and senior standing, or permission of instructor.

#### **GMMD 408**

# PORTFOLIO DEVELOPMENT & MEDIA STRATEGIES

#### *Fall/Spring, 3 credit hour(s)*

This course explores issues of marketing on social media platforms as well as personal branding and portfolio development.

Emphasis is placed on research, production and design of professional portfolios and interpretive materials in multiple contexts, and the maintenance of appropriate online presence. The ethics of digital media production and issues related to copyright and compensation are also addressed.

Prerequisites: Professional Communication (ENGL 301)

#### GMMD 411 DIGITAL DOCUMENTARY VIDEO Fall/Spring, 3 credit hour(s)

This course explores the practice of documentary filmmaking. Students will discuss basic tools and principles of film narration, montage and the technical and compositional aspects of using archival, found and produced footage. Students explore the creative process of interpreting, representing, and affecting the sociological and environmental relationships of this age by means of the moving image.

Prerequisites: Digital Photography (GMMD 201) and Introduction to Design (GMMD 102), or permission of instructor.

#### GMMD 420 ANIMATION TECHNIQUES Fall/Spring, 3 credit hour(s)

This course develops an overview of the techniques and history of 2D and 3D animation, including stop-motion and tweened animation. Students engage in hands-on projects involving the development of hand-drawn and computer-generated animation. Emphasis is placed on understanding the place of animation in the context of the film, television, internet, and gaming industries, project management, and the development of a personal animation style.

Prerequisites: Digital Illustration and Typography (GMMD 331), Experimental Digital Video (GMMD 412) or Experimental Digital Photography (GMMD 303) or permission of instructor.

### GMMD 421 SUSTAINABILITY DESIGN Fall/Spring, 3 credit hour(s)

Sustainability Design is a cross disciplinary study of the issues and efforts surrounding ecological crisis and the move towards sustainability in contemporary design. In this seminar course, students will investigate sustainability issues through lectures from several disciplinary angles, including the science, legal studies, economics, humanities and engineering. Following study and discourse around the problems and goals of sustainability, students will work with faculty to develop a semester long independent project pursuing some of these goals.

Prerequisites: 70 credit hours or permission of instructor required

#### GMMD 432 VIRTUAL WORLDS

Spring, 3 credit hour(s)

This course examines gaming concepts, nonlinear narrative, delivery systems and software for various markets such as the entertainment or educational software industries. Working with 2D and 3D visual concepts, virtual reality, interactivity and sound the student will develop media for the entertainment industry. Environments, characters, gaming strategies, role playing concepts, navigation and feedback will be part of the information presented within the course.

Prerequisites: Visual Programming and Development Tools (CITA 342), Classical Theater (ENGL 393) or Contemporary Theater (ENGL 394), Creative Writing (ENGL 221) or Short Fiction (ENGL 315) and senior level status, or permission of instructor.

#### GMMD 440 ORIENTATION TO CULMINATING EXPERIENCE IN GMMD *Fall, 1 credit hour(s)*

This course is the precursor to the culminating experience in the Graphic and Multimedia Design program. The culminating experience will consist of an internship, a group or individual project or a combination of both. Seniors will meet with faculty on a weekly basis to discuss resume preparation, job interviewing techniques, on-the-job training, identifying and securing internships, internship requirements and performance assessment/evaluation. Students prepare their portfolio for either an internship or group/individual project. Students, who chose the group/individual project for their culminating experience will meet with faculty to develop research proposals.

Prerequisites: Senior level status and successful completion of all previous New Media work, or permission of instructor.

#### **GMMD 443**

#### ARTS MANAGEMENT INTERNSHIP Fall/Spring, 3-4 credit hour(s)

Students focus on the challenges of negotiation, public relations, and management. Students explore a variety of management situations in broadcasting, galleries, museums, and theaters and design agencies. Students apply classroom skills in an organizational environment. Working with a faculty and on-site supervisor, the students perform and reflect on prescribed work. Students complete a supervised internship in an appropriate internship setting commensurate with the student's career interests and at the appropriate baccalaureate level.

Prerequisites: GMMD 440: Orientation to Culminating Experience in GMMD

#### **GMMD 444**

#### MULTIMEDIA PROJECT DESIGN II Spring, 4 credit hour(s)

This course is a capstone experience course in the Graphic and Multimedia Design program, allowing students to develop skills in group communication and teamwork as they plan, design, develop, produce, present, and defend a culminating research project. Through regular research, critiques, and planning sessions with GMMD faculty, the senior student capstone projects are developed and realized. This course builds on the skills, projects and working methodology developed in the GMMD 401; culminating in a public presentation of student works and an exit portfolio for graduation.

Prerequisites: GMMD 401: Multimedia Product Design, or permission of instructor.

#### **GRST 201**

## INTRODUCTION TO GENDER STUDIES Spring, 3 credit hour(s)

This course provides a broad introduction to the field of Gender Studies. From an interdisciplinary approach, this course explores past and present theories and issues about gender including, but not exclusive to, lass, race, social justice, emancipation, economics, and education. Students are introduced to feminist ideology and methodology, as well as the causes and effects of gender inequality. Three hours of lecture per week.

Prerequisites: Composition and the Spoken Word (ENGL 101) or 30 credit hours earned; or permission of the instructor.

#### HEFI 201 HEALTH & WELLNESS PROMOTION Fall, 3 credit hour(s)

This introductory course in Health and Wellness

promotion introduces students to concepts required for development of successful Health/Wellness promotion programs for a variety of patient/client populations. Concepts such as the impact of socioeconomic status on health/wellness, cultural diversity as related to health/wellness, methods of creating change, and teaching strategies and theory, including teaching the adult learner, are covered. Students discuss current literature related to these topics and develop a promotion/wellness intervention project based on an area of their choice.

Prerequisites: Sophomore level status or permission of instructor.

#### **HEFI 202**

# HEALTH AND WELLNESS ACROSS THE LIFESPAN

### Spring, 3 credit hour(s)

Students explore the application of health promotion principles for individuals at different stages of life, from birth to old age. Disease and health promotion issues common to each population are identified and discussed. Students formulate strategies to promote healthy lifestyles and advocate for positive changes in health policy for individuals and communities.

Prerequisites: Health and Wellness Promotion (HEFI 201) or permission of instructor.

#### **HEFI 203**

## MOTOR DEVELOPMENT Spring, 3 credit hour(s)

This course covers the concepts of motor learning and motor development, how they affect motor learning, and what normal motor skills are for the various age groups. Students explore how our motor responses progress and develop from the very young, to the very old, and how differing motor, cognitive, and social abilities will affect our motor skills. Students learn how an individual learns motor skills, what things affect their ability to learn, and how to structure a motor learning environment to positively influence the physical, instructional, and affective factors in motor learning. Students practice designing and structuring effective practice sessions, and how to demonstrate, verbalize and provide feedback.

Prerequisites: Health and Wellness Promotion (HEFI 201) or permission of instructor. - Corequisite: Health and Wellness Across the Lifespan (HEFI 202) or permission of instructor.

# HEFI 300

# BIOMECHANICS

Spring, 3 credit hour(s)

This course provides students the knowledge to analyze and evaluate anatomical and mechanical factors influencing motor skill activities. Musculoskeletal ailments are among the most prevalent disorders in the world, and knowledge and understanding of how to correctly move and exercise is of utmost importance when working with the general population. This course will allow students to acquire a working knowledge of biomechanical principles for use in the field of exercise prescription. This course applies and builds on musculoskeletal anatomy.

Prerequisites: BIOL 217 or permission of instructor

#### HEFI 303 EXERCISE PHYSIOLOGY

# Fall/Spring, 3 credit hour(s)

Students study immediate and long term physiological responses and adaptations to exercise. Specifically, the role of the musculoskeletal, neuromuscular, cardiovascular, and respiratory systems in regulating exercise is covered in detail and adaptations of these systems to exercise are discussed. Environmental and hormonal influences are also included. Students explore specific aspects of training for sports performance.

Prerequisites: Human Anatomy & Physiology I & II (BIOL 217/218) or permission of instructor.

#### HEFI 310

# ADVANCED CARE AND PREVENTION OF ATHLETIC INJURIES

*Fall/Spring*, 3 credit hour(s)

This course is designed to further reinforce the knowledge and skills necessary for recognition and assessment of sport related injuries. The management and prevention of sport related injuries is discussed, as well as specific taping techniques.

Prerequisites: Introductory Course Prevention and Treatment of Athletic Injuries (HLTH 106) or Human Anatomy & Physiology I & II (BIOL 217/218) and Junior level status, or permission of instructor.

#### HEFI 320

### PSYCHOLOGY OF HEALTH & FITNESS Fall/Spring, 3 credit hour(s)

This course examines human behavior and how it relates to healthy behavior and fitness. The effects of psychological factors on health, fitness and wellness, and the effects of physical activity and sports on psychological well-being is discussed. The concept of Positive Psychology, a strength-based, preventive approach to personal and community research and interventions is an integral part of the course.

Prerequisites: Human Development (PSYC 225), junior level status, or permission of instructor.

#### **HEFI 375**

# FITNESS AND SPORTS NUTRITION *Fall/Spring, 3 credit hour(s)*

This course provides students with an understanding of the link between nutrition and exercise. Specifically, students examine the unique demands of exercise training for athletes at all levels and the impact of nutrition on performance. Students integrate their knowledge of exercise physiology and sports nutrition to create a dietary plan that enhances athletic performance.

Prerequisites: Exercise Physiology (HEFI 303) or permission of instructor.

#### **HEFI 401**

# FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION

Fall/Spring, 4 credit hour(s)

Students acquire the knowledge and skills to assess the physical fitness of apparently healthy individuals. Focus of the course is on the four components of physical fitness: cardiorespiratory fitness, muscular fitness, body composition, and flexibility. Hands- on training in assessment and exercise prescription for these four components is included during laboratory sessions.

Prerequisites: Health and Wellness Across the Lifespan (HEFI 202), Exercise Physiology (HEFI 303), or permission of instructor.

#### **HEFI 402**

# STRENGTH & CONDITIONING *Fall*, 3 credit hour(s)

This course serves to provide students with

advanced knowledge and skills to design and implement safe and effective strength and conditioning programs specifically for an athletic population. An in-depth study of resistance training is included, along with specialized topics such as bioenergetics, endocrine response to resistance exercise, and use of performance-enhancing substances. Aerobic and anaerobic exercise prescription for the athlete is discussed in detail. This course provides specific preparation for the student who wants to pursue certification as a Strength and Conditioning Specialist (CSCS) through the NSCA.

Prerequisites: Exercise Physiology (HEFI 303)

#### HEFI 403

# COMMUNITY WELLNESS Spring, 3 credit hour(s)

This course introduces students to the benefits of establishing health promotion programs in community settings. Students are provided with the knowledge and tools required to assess community needs, plan and implement wellness and fitness programs, and assess program outcomes. Theories of behavioral change guide the assessment and planning process.

Prerequisites: HEFI 201 and HEFI 202

#### **HEFI 404**

#### LEGAL ASPECTS AND DOCUMENTATION IN HEALTH AND FITNESS PROFESSIONS *Fall, 3 credit hour(s)*

Students learn and discuss the current standards and guidelines that help health and fitness establishments provide high- quality service and program offerings in a safe environment. Students learn the high standards of care to satisfy fitness facility certification. They also learn standards and guidelines for pre-activity screening, orientation, education, and supervision; risk management and emergency procedures; facility design and construction; facility equipment; operating practices; signage; other client contact fundamental skills; as well as history taking and effective documentation of client information. Prerequisites: HEFI 201, HEFI 202, HEFI 203

#### HEFI 405

#### CURRENT ISSUES IN HEALTH & FITNESS Spring, 3 credit hour(s)

This writing intensive course focuses on current issues related to health promotion and prevention of disease, with an emphasis on the role of physical activity. Healthy People 2020 provides a framework from which to generate topics and discussion. Students are required to research current events and is sues that present themselves on a local, national, and worldwide level and formulate their own thoughts and conclusions regarding these topics.

Prerequisites: Senior level status in HEFI program

#### HEFI 406

#### ORIENTATION TO INTERNSHIP Fall/Spring, 1 credit hour(s)

This course is a pre-requisite course that prepares students for HEFI 407. Best practices in searching for internship opportunities as well as the fundamentals for developing an internship contract that meets SUNY Canton guidelines are discussed. Students are expected to submit an internship proposal which includes anticipated goals and objectives for the internship, as well as a timeline for completion. Students are provided guidance in documenting daily reflections and activities in a journal and for building a professional portfolio.

Prerequisites: Senior level status in HEFI program or permission of instructor.

#### **HEFI 407**

#### HEALTH/FITNESS INTERNSHIP Fall/Spring, 1 credit hour(s)

This internship course provides the student with practical experience in a health/fitness setting. This experience enables students to integrate concepts and skills gained in the classroom/lab setting. The internship is individualized based on the career interests of the student and the specific needs of the organization. Internship proposals must be presented and approved prior to registration for the course.

Prerequisites: HEFI 406 and Senior level status in HEFI program

#### **HEFI 408**

# EXERCISE PRESCRIPTION FOR SPECIAL POPULATIONS

Spring, 3 credit hour(s)

Students acquire the knowledge and skills to assess the physical fitness of individuals with special needs. Focus of the course is on how to assess the four components of physical fitness: cardiorespiratory fitness, muscular fitness, body composition, and flexibility in patients/clients who have special needs. Hands-on training in assessment and exercise prescription for these four components is included during laboratory sessions. Special needs populations include: pregnancy, heart disease, cancer, diabetes, obesity, poor psychological health, osteoporosis, arthritis, the older adult, children and adolescents, neurological conditions, metabolic disorders, etc.

Prerequisites: HEFI 401 and HEFI 402

#### **HEFI 409**

#### APPLIED EXERCISE PRESCRIPTION Spring, 3 credit hour(s)

Students directly apply the knowledge and skills learned in HEFI 401: Fitness Assessment and Exercise Prescription to assess the physical fitness of apparently healthy individuals. The focus of the course is on improving the four components of physical fitness (cardiorespiratory fitness, muscular fitness, body composition, and flexibility) of assigned clients, and/or helping clients achieve their objective health and fitness goals. Students are assigned 1-2 apparently healthy clients to prescribe exercise for over the course of the semester.

Prerequisites: HEFI 401; must be of senior status in HEFI program

### HEFI 410

#### APPLIED STRENGTH & CONDITIONING Spring, 4 cr,edit hour(s)

Students directly apply the knowledge and skills learned in HEFI 402: Strength and Conditioning to design and implement safe and effective strength and conditioning programs specifically for an athletic team. The focus of the course is on designing an off-season foundational program for fall and winter terms, and/or an in-season maintenance program for spring teams. Programs are geared towards sport specificity in regards to bioenergetics, aerobic needs, and muscular strength/power requirements of the sport. Students are assigned 1-2 athletic teams to design a program for, and will directly work with the athletes and coaching staff of those teams.

Prerequisites: HEFI 402; must be of senior status in HEFI program

### **HIST 101** HISTORY OF EUROPE TO 1815 Fall/Spring, 3 credit hour(s)

This is a basic survey course in European history from the Late Middle Ages to 1815. The course focuses on the political institutions, social structures, economic structures, and cultural developments that shaped European civilization. Among the topics to be studied are: the Late Middle Ages, the Renaissance, the Reformation, contact between Europe and the Americas, absolutism, the Scientific Revolution, the Enlightenment, and the French Revolution.

## **HIST 102**

### HISTORY OF EUROPE SINCE 1815 Fall/Spring, 3 credit hour(s)

A study of European history from 1815 to the present. The focus is on the social, cultural, economic, and political changes which transformed Europe in the Modern period. Among the topics to be studies are: Napoleon, industrialization, urbanization, liberalism, nationalism, mass culture, imperialism, socialism, fascism, World War I, World War II, the Cold War, fall of the Soviet Union, and European integration.

# **HIST 103**

**US HISTORY TO 1877** Fall/Spring, 3 credit hour(s)

Explore the leading aspects of American history from discovery through the end of the Civil War. Attention is given to political issues, institutions, political parties, leadership, and diplomatic and constitutional questions, as well as economic, social and intellectual trends. This course also focuses on what is unique in the American historical experience, and relates American history to the broader global setting.

#### **HIST 105**

**US HISTORY SINCE 1877** 

#### Fall/Spring, 3 credit hour(s)

In this course students will explore the leading aspects of American history from the Civil War to the present. Attention is given to political institutions, diplomatic initiatives and constitutional questions, as well as broader economic, social, cultural, religious, and intellectual trends. This course also focuses on what is unique in the American historical experience and relates American history to the global context.

### **HIST 106** WORLD HISTORY TO 1500 Fall, 3 credit hour(s)

This course offers a general survey of world history to 1500. Using a global perspective, this course examines the emergence and development of world civilizations and their cross-cultural interactions. Some of the themes examined include: ancient civilizations and empires of the Near East, ancient China, India, Classical Greece and Rome, the development of world religions, the Arab world, Medieval Europe, and Africa and the Americas prior to European contact.

#### **HIST 107**

## WORLD HISTORY SINCE 1500 Fall/Spring, 3 credit hour(s)

This course offers a general survey of modern world history since 1500. Using a global perspective, this course examines the intellectual, economic, political, social, and cultural forces that have linked and shaped the major world societies since 1500.

Topics to be covered include: the development of global trade and new economic models; European expansionism; social and political revolutions in Europe, the Americas, and Asia; the development of modern political institutions; global conflict; decolonization; and the social and cultural interactions of people across national boundaries.

#### **HIST 303**

#### COLONIAL AMERICAN SOCIETY Spring, 3 credit hour(s)

In this course students will explore the important themes in the history of the British American colonies in the seventeenth and eighteenth centuries. Particular attention is devoted to social and cultural developments, and to the bringing together of peoples from three different continents in the colonies. Other avenues of inquiry relating to such matters as imperial politics and economic growth will also be pursued.

Prerequisites: HIST 103 and ENGL 101 or permission of instructor.

# **HIST 304**

# US WOMENS HISTORY

Fall/Spring, 3 credit hour(s)

This course explores the social, economic, and political themes in United States Women's History from pre-European contact through the twenty-first century. The diversity of women is emphasized and issues of class, race, national origin, activism, work, and the role of motherhood will be explored. Citizenship and the status of women in relationship to government will be discussed and analyzed.

Prerequisites: 30 credit hours, ENGL 101 and a 2.50 cumulative GPA, or permission of instructor.

#### **HIST 305**

# HISTORY OF THE VIETNAM WAR

Fall/Spring, 3 credit hour(s)

In this course students will examine the 20th century conflict in Vietnam through the lens of American involvement and interaction. Political, social, economic and cultural contexts will be explored from both American and Vietnamese perspectives.

The impact of the Vietnam War on American society, politics, and its Cold War foreign policy and conduct will be examined as will the impact of the war on Vietnamese society and its subsequent development.

Prerequisites: ENGL 101 and HIST 105 or HIST 217; or permission of the instructor.

#### **HIST 306** US IMMIGRATION HISTORY Fall/Spring, 3 credit hour(s)

This course examines the history of immigration to the United States through the current time period. The main themes of the course will include issues of race, class, ethnicity and gender and how they factor into the immigration process and subsequent settlement period. A plethora of immigrant groups will be studied not exclusive to the following: Eastern and Southern Europeans, Asian and Pacific Islanders, Latin Americans, and Africans.

Prerequisites: ENGL 101 and HIST 103 OR HIST 105 OR GRST 201 OR permission of Instructor

#### **HIST 307**

#### AMERICAN THOUGHT SINCE 1865 Fall/Spring, 3 credit hour(s)

In this course students will explore American ideas from the end of the Civil War to the present. The topics covered in this course include debates over Darwinism, religious belief, scientific truth and aesthetic judgment, as well as the intellectual underpinnings for the major movements and institutions of the post-Civil War era including democracy, feminism, civil rights, anticommunism and capitalism.

Prerequisites: HIST 105 or permission of instructor

#### **HIST 309**

#### AFRICAN AMERICAN HISTORY Fall/Spring, 3 credit hour(s)

This course focuses on the unique experience of African Americans and how this experience relates and interacts with American society as a whole. The course examines major events throughout the history of African Americans in the United States. Attention is given to political, economic, social, cultural and intellectual aspects, as well as constitutional questions and the meaning of citizenship.

Prerequisites: HIST 103 or HIST 105 or permission of instructor

#### **HIST 310**

### THE EUROPEAN CITY IN THE INDUSTRIAL AGE Fall, 3 credit hour(s)

This course examines the relationship between industrialization, technology, and the development of the modern city in nineteenth and twentiethcentury Europe and the ways in which societies addressed modern urban problems, such as crime and public health, and how cities became centers of mass popular culture and national pride.

Prerequisites: ENGL 101, or permission of the instructor

#### **HIST 315**

#### CHILDREN, YOUTH, AND REVOLUTION IN TWENTIETH- CENTURY EUROPE Fall/Spring, 3 credit hour(s)

This course examines the ways in which children and youth experienced the major conflicts, and the political, cultural, and social revolutions of twentieth-century Europe; the place of children and youth within the political ideologies of the century; the development of generational conflict and youth culture; and shifting definitions of children and childhood in the face of conflict and revolutionary change.

Prerequisites: 30 credit hours, ENGL 101, or permission of instructor

# HIST 320

# TWENTIETH-CENTURY EUROPE

Fall/Spring, 3 credit hour(s)

This course provides a close examination of the major social, economic, cultural, and political developments in European history from the eve of the First World War through the end of the twentieth century. Emphasis is placed on conflicts such as World War I, the Spanish Civil War, World War II, the Holocaust, the Cold War, and decolonization and the ways in which conflict shaped Europe and the experiences of individuals throughout the twentieth century. While the primary focus is on Western Europe, developments in the Eastern Bloc will also be discussed.

Prerequisites: ENGL 101, or permission of the instructor

### HIST 321 EUROPEAN IMPERIALISM AND DECOLONIZATION Fall/Spring, 3 credit hour(s)

Examines the development of New Im, perial, ism in Europe in the late nineteenth century; European expansion in Africa, Asia, and the Middle East in the late nineteenth and early twentieth centuries; and the process of decolonization that followed in Africa, Asia, and the Middle East in the twentieth century and their impact on contemporary global developments.

Prerequisites: 45 credit hours or permission of instructor

#### **HIST 325**

# HISTORY OF LGBQ+ AND T/GNC Fall/Spring, 3 credit hour(s)

In this course students will explore the social, economic, and political themes in the history of American LGBQ+ and T/GNC people from colonialism through the twenty-first century. The diversity of queer people is emphasized and issues of social and economic class, race/ethnicity, national origin, socialization, activism, and work are explored. Citizenship and the status of queer people in relationship to government and organized religion are discussed and analyzed.

Prerequisites: HIST 103 and/or HIST 105 or permission of instructor

#### **HIST 375**

#### HISTORY OF CHILDHOOD AND YOUTH IN THE UNITED STATES Fall/Spring, 3 credit hour(s)

In this course students will explore the social, economic, and political themes in the history of American childhood and youth from colonialism through the twentieth century. The diversity of children is emphasized and issues of social and economic class, race/ethnicity, national origin, gender and sexuality, activism, and work are explored. Citizenship and the status of children in relationship to government are discussed and analyzed.

Prerequisites: ENGL 101, HIST 103 or HIST 105, or permission of the instructor

#### HLTH 103

#### HEALTH: CURRENT PERSPECTIVES AND PRACTICAL APPLICATIONS *Fall, 3 credit hour(s)*

This general elective course is designed as an introductory health education course. The course will provide an opportunity for students to explore healthy life styles as well as learn about major health problems in the United States. Members of the teaching team will collaborate to help students become more informed about their rights and responsibilities related to remaining healthy or for accessing health services.

Three hours lecture per week.

#### HLTH 104

#### INTRODUCTION TO GERONTOLOGY Fall, 3 credit hour(s), GER 3

This interdisciplinary course is designed to introduce the student to the field of gerontology (the study of aging). The aging person is viewed in a holistic manner.

Topics to be included are demography of aging, social and economic characteristics of aging, biological, psychological and social theories of aging, biomedical aspects of aging and selected issues in health and aging.

#### HLTH 105 PATHOLOGY *Fall, 3 credit hour(s)*

This course considers the natural response of the human body to disease, the process and progress of disease, and the implications for community health. Particular emphasis is placed on causes of deaths of interest to the embalmer. Three hours lecture per week. Open to all students.

# HLTH 110

# SURVEY OF COMPLEMENTARY MEDICINE

# Fall, 3 credit hour(s)

This is a introductory course, which will survey eight major areas of complementary medicine. The eight major areas include Chinese medicine, Ayurveda, Naturopathic medicine, Homeopathy, Mind/Body medicine, Osteopathic medicine, Chiropractic medicine, and Massage Therapy/Body works. Three hours lecture per week.

# HLTH 115

# COMMUNICABLE DISEASES Fall/Spring, 3 credit hour(s)

The course is designed for students interested in health. The major emphasis is reportable communicable diseases. Students learn the how to identify the disease agent, the reservoir, the mode of transmission, and the control of the spread. Diseases will be grouped as gastrointestinal, respiratory, blood-borne, and sexually transmitted.

## HLTH 175 BASIC NUTRITION Spring, 3 credit hour(s)

This basic nutrition course is designed to create an awareness of everyday healthy eating and physical activity necessary for a healthy lifestyle. This course discusses personal profiles, Body Mass Index, calorie needs, dietary guidelines, and chronic disease risk factors.

Prerequisites: ENGL 101

#### HLTH 200

#### MEDICAL TERMINOLOGY OF DISEASE Fall/Spring, 3 credit hour(s)

Medical terminology will be presented from a disease viewpoint. Diseases will include a crosssection of several different areas such as skin, respiratory, blood, and neonatal.

Three hours lecture per week.

#### HLTH 212

# HAPPINESS, HEALTH, & WELLBEING *Fall/Spring, 3 credit hour(s)*

Our world has become increasingly technological, complex and fast paced. As we work to achieve a life of happiness and contentment, many ignore the quality of our lives and the health of our body and mind. This course is a contemporary exploration of happiness in everyday life and its relationship to the well being and the health of our body and mind.

#### HLTH 242

# BOTANICAL MEDICINE

Summer/Winter, 3 credit hour(s)

This course is an overview of botanical medicine that will cover topics including: the history of botanical medicine, taxonomy and identification of herbs, herb actions, the 35 most common medicinal herbs, traditional/historical uses of each herb, and preparation/storage techniques for herbal medicine types (including infusions, decoctions, tinctures, hydrosols, ointments, salves, lotions, syrups, baths, poultices, and more). Bioactive components, current research trends, and toxicity/proper use will be discussed for several common herbal preparations.

### HLTH 303

#### OCCUPATIONAL HEALTH AND SAFETY Spring, 3 credit hour(s)

This course explores health and safety issues related to the workplace. Environmental controls that reduce transmission of communicable diseases, exposure to toxic substances, hazardous working conditions, and accidents are included. Public policy decisions and health control program compliance issues are addressed. The effects of human-environmental interactions on physical, mental, and social well-being are explored.

Prerequisites: Junior status or permission of instructor.

#### **HLTH 330**

# GRANT WRITING STRATEGIES *Fall, 2 credit hour(s)*

This course provides a general overview of the grant seeking process. The facilitator will discuss the types of projects that generally get funded, sources that can be used to identify prospective funders, as well as the essential components of a well written grant. Participants will create a needs statement, develop a project that will address that need, write clear goals and objectives for that project, develop a budget and identify an evaluation tool that could be used to measure outcomes for the project.

Prerequisites: Junior level status or permission of instructor.

#### **HSMB 101**

# INTRO TO HEALTH SERVICES MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course introduces the student to the health care system in the United States and to the role of the health services manager. The course offers an overview of health care system components, management concepts, goal setting, budgeting, organizing, team building and leadership concepts. The importance of communication in health care management area will be stressed. Incorporated into the weekly class sessions, the instructor will have the opportunity to discuss observational experiences to acquaint the student with the management and physical makeup of health care organizations.

#### **HSMB 200**

# MEDICAL TERMINOLOGY & CODING CLASSIFICATION

# *Fall/Spring, 3 credit hour(s)*

This course provides the student with an opportunity to learn the language of medical terminology and how it correlates with United States coding classification systems. Medical terminology will be presented by body system, integrating diseases affecting each body system type. The students learn the basics of the IDC-9 and ICD-10 medical coding classification systems to better understand the impact on the financial status of the department and/or healthcare organization.

Prerequisites: HSMB 101

#### HSMB 301 PUBLIC HEALTH ISSUES Fall, 3 credit hour(s)

The course presents an overview of the history and development of public health. The student is provided with the opportunity to examine the current public health care system and its relevance to their practice. The fundamentals of epidemiology are covered. Applications to the students practice setting are explored. Health planning, health promotion, and global health issues are included.

Prerequisites: HSMB 101 or BIOL 209, or permission of instructor.

#### HSMB 302

# LEGAL AND ETHICAL ISSUES IN HEALTH CARE

Spring, 3 credit hour(s)

This writing intensive course prepares the students to examine legal and ethical issues in healthcare as they impact the health services manager and others involved in healthcare decision making. A variety of commonly experienced legal situations and ethical dilemmas will be discussed, including the basics of civil and criminal healthcare law, professional liability, antitrust, managed care, organizational restructuring, patient rights, scientific research, rationing, healthcare practices, and other issues. The course also will educate students in legal research methods applied to the health services management field. ,

Prerequisites: HSMB 301/NURS 301 Public Health Issues

#### **HSMB 304**

U.S. HEALTH CARE SYSTEM *Fall*, *3 credit hour(s)* 

The United States health care system is a large and vital segment of the United States economy. This course identifies and examines the various components of the U.S. healthcare system and the interrelationship of those components. Topics covered include healthcare in a free enterprise system, government regulations, health services access and utilization, health delivery settings, healthcare personnel, the pharmaceutical industry, public health, health insurance, managed care, quality of care, health policy, and other topics.

Prerequisites: HSMB 101 or permission or instructor.

#### HSMB 305 MANAGED CARE Spring, 3 credit hour(s)

This course provides the student with the basic information needed to learn critical concepts of managed care. The course will include types of managed care organizations, elements of management control and governance structure, and quality management in managed care. Regulating, legal and ethical issues related to managed care will be discussed.

Prerequisites: U.S. Health Care System (HSMB 304) and junior level status, or permission of instructor.

#### HSMB 306 HEALTH CARE FINANCING Fall, 3 credit hour(s)

This course provides the student with an opportunity to understand the fundamentals of the financial management of health care organizations. The course includes such topics as accounting, financial statement analysis, time value money, cost analysis and budgeting, and agency costs and their effects on financial decision making. Prerequisites: HSMB 304 and FSMA 210 or junior level status or permission of instructor.

### HSMB 307 HEALTH CARE FACILITY ADMINISTRATION Spring, 3 credit hour(s)

The course explores the overall responsibilities of an administrator in contemporary health care facilities. These responsibilities involve planning, implementation, and other management skills. To contribute to the achievement of these skills, along with a greater knowledge of health operations, the course examines health care organizational structures, operational aspects of clinical and nonclinical departments, delivery and finance system issues, quality improvement, strategic planning, decision-making, evaluation, and other administrative related topics.

Prerequisites: HSMB 304 or permission of instructor.

#### **HSMB 308**

# HSMB INTERNSHIP ORIENTATION *Fall*, 1 credit hour(s)

An internship is required to complete degree requirements in Health Services Management. The course prepares students for the internship by: securing an appropriate site and establishing learning objectives, describing journal contents and a portfolio, establishing contracts for SUNY approval and appropriate liability insurance documentation. Prerequisites: Senior level status or permission

of instructor

#### **HSMB 309**

# NURSING HOME ADMINISTRATION *Fall, 3 credit hour(s)*

This course is designed to help students apply the knowledge and skills acquired in earlier courses to the specific field of nursing home administration. It covers such topics as operational management, finance, human resources, residential care, and environmental management, dealing with those subjects in the context of nursing home administration.

Prerequisites: HSMB 101

# HSMB 310 HEALTHCARE QUALITY AND PATIENT SAFETY

Fall, 3 credit hour(s)

This course discusses the state of current healthcare and the role of patient safety as a professional responsibility. Students will achieve a familiarity with the definition and measurement of quality of healthcare in a variety of healthcare setting along with the drivers of quality improvement, the history of healthcare quality, the principles of quality improvement, and the integrated patient safety risk management programs that promote the national patient safety goals.

Prerequisites: HSMB 101 or permission of instructor

#### HSMB 311 HEALTH CARE INFORMATION TECHNOLOGY Fall, 3 credit hour(s)

The course provides a comprehensive overview of uses and impact of health information systems and technology in healthcare delivery and public health. It explores the ways in which health information technology can assist healthcare managers in setting strategic goals, budgeting, personnel management, and data collection. The course also provides students with the strategic tools for planning, selecting, building, and implementing the health information systems' platforms necessary for the direct patient care and the management of hospital and public health sectors.

Prerequisites: HSMB 304 U.S. Health Care System and HSMB 200 Medical Terminology course, or permission of instructor.

#### **HSMB 312**

#### MEDICAL PRACTICE MANAGEMENT Spring, 3 credit hour(s)

This course identifies and examines the various components of the medical practice management and the interrelationship of those components. It prepares students to examine principles and applications of medical practice management. The course covers the history of medical practice, and defines various models of medical practice and the regulatory issues related to each model. It educates students on medical practice's financial, human resource, emergency, and quality management.

Prerequisites: HSMB 101 - Introduction to Health Services Management and FSMA 210 Intro to Finance, or Permission of Instructor

### **HSMB 314**

# HEALTH POLICY ANALYSIS

Fall, credit hour(s)

This course explores the processes of policy making and law that address many of the key health concerns that face the U.S. Students will learn to think critically about potential causative factors associated with these health issues and the policy alternatives that are needed to address them effectively. The impacts of individual rights, federal and state regulations as well as health economics are considered. Students apply their course learning in the development of a final policy analysis brief that addresses a health policy issue of their choice. Resulting policy analysis competence skills can be applied in any health practice setting.

Prerequisites: HSMB 101 or permission of instructor.

#### **HSMB 315**

#### MEDICAL CODING Fall/Spring, 3 credit hour(s)

A comprehensive overview of the medical coding profession and the tools a coder uses to report inpatient and outpatient diagnoses and procedure services to health plans. An emphasis is placed on learning coding concepts, guidelines, conventions and selection of compliant ICD-10-CM, ICD- 10-PCS, CPT and HCPCS codes based on medical record documentation.

Healthcare revenue cycle insurance and reimbursement concepts are also covered.

Prerequisites: HSMB 200 and BIOL 217 or permission of instructor

#### HSMB 316

#### EQUITY, DIVERSITY, AND CULTURAL COMPETENCE IN HEALTHCARE Spring/Fall, 3 credit hour(s)

Provide students with an understanding of socioeconomic factors, which are contributing to health disparities, healthcare access, and lack of sufficient diversity in health care. The students will analyze key social justice issues relevant to health disparities with an eye to cultivating greater health

#### equity.

Prerequisites: HSMB 101 or permission of instructor

# HSMB 317

# CURRENT CHALLENGES IN HEALTH CARE

## Fall/Spring, 1 credit hour(s)

The course is designed to provide students with an understanding of the current challenges in health care that impact health care access, cost, quality and patient experiences. The students will analyze factors that are prevelant in managing and reshaping the health care delivery system.

Prerequisites: HSMB 101 or permission of instructor

#### HSMB 408 INTERNSHIP FOR HEALTH CARE MANAGEMENT

*Fall/Spring, 3 credit hour(s)* 

Working in conjunction with a Field supervisor, the student performs delegated work within an administrative setting. This is a culminating experience in which the student is expected to integrate concepts gained in previous program course work. The internship will be individualized according to the career interests of the student and the needs of the supervising organization. Internship assignments may include information gathering, analysis, planning, implementation, evaluation, and other responsibilities.

Prerequisites: HSMB 308 and 2.5 GPA. Senior level status.

#### **HSMB 410**

SENIOR SEMINAR

Fall/Spring, 3 credit hour(s)

This multidisciplinary capstone course integrates materials from Business and Healthcare Management courses to allow students to gain practical skills and knowledge of the health care system and the role healthcare managers have within the healthcare system. Students analyze and evaluate advanced health care issues, i.e. impact of Affordable Care Act on healthcare facilities, providers, and consumers. Students also study contemporary challenges by incorporating knowledge gained through health care courses and required readings.

Prerequisites: Completion of a minimum of 90 credits in the Bachelor of Healthcare Management degree or permission of instructor.

# HUMA 111 INTRODUCTION TO MORAL PHILOSOPHY

*Fall/Spring, 3 credit hour(s)* 

In this course students learn terminology, history, and formal theories of philosophic ethics. The course analyzes multiple perspectives on a global scale. Students engage and critique the works of various practitioners in the discipline. Emphasis is on understanding of theory, appreciation of historical context, and methodology for modern application.

#### HUMA 189 ACTING AND IMPROVISATION

Fall/Spring, 3 credit hour(s)

This course will examine various strategies for creating and performing characters from written and unwritten texts. Students will practice improvisation and perform various roles for both self and peer evaluation. Various acting techniques and methods for creating characters will be utilized.

#### **HUSV 100**

#### HUMAN SERVICES FORUM Fall, 1 credit hour(s)

In this course students will be introduced to the Applied Psychology curriculum as well as aspects of the SUNY Canton First Year Educational Program. The course emphasizes features of Applied Psychology values, philosophy, ethics, and potential careers in the Human Services profession in addition to self-awareness, critical thinking, problem solving, and related skills needed to be successful in academic pursuits. Students may not receive credit for both HUSV 100 and FYEP 101.

#### **HUSV 101**

# INTRODUCTION TO CAREER DEVELOPMENT IN HUMAN SERVICES PROFESSIONS

Fall/Spring, 3 credit hour(s)

This course will focus on aspects of professional and career development for individuals currently employed in non- degree entry positions seeking higher level positions or individuals interested in gaining knowledge regarding entry level career development in human services settings.

Topics include an introduction to personal and professional development, community networking, crisis intervention, documentation skills, and participant supports.

#### **HUSV 201**

# INTRODUCTION TO HUMAN SERVICES *Fall/Spring, 3 credit hour(s)*

An introduction to the field of Human Services work. This course provides a sense of the scope of practice, the various fields of work and the type of clients encountered. Students will receive an overview of models of development and intervention along with an introduction to ethical conduct.

#### HUSV 281 FOUNDATIONS OF CHEMICAL DEPENDENCY AND TREATMENT Spring, 3 credit hour(s)

In this course students will focus on an advanced study of the nature of addiction, including an overview of the addictions field, treatment approaches, assessment and diagnostic tools, treatment settings, and health concerns with substance-use disorders. Additional topics explored include pharmacology, toxicology and screening, family issues, and support groups.

Prerequisites: PSYC 101 and HUSV 201and SSCI 181 or permission of the instructor.

## HUSV 305 PROFESSIONAL AND ETHICAL RESPONSIBILITIES IN HUMAN SERVICE PROFESSIONS

## Spring, 3 credit hour(s)

In this course students will examine ethical and legal issues confronting professionals in human services careers. The course focuses on processes to address dilemmas and maintaining professional boundaries and wellness. Different profession codes of ethics are compared and contrasted.

Prerequisites: HUSV 201: Introduction to Human Services and/or Permission of Instructor.

# HUSV 310 WORKING IN HUMAN SERVICE AGENCIES

Fall/Spring, 3 credit hour(s)

In this course students will be introduced to the basic skills and knowledge required of entry-level personnel in human service agencies. The course examines the conditions creating human needs and how agencies respond to these needs. Emphasis will be on working with others in a human service agency, how these agencies provide services to people in need, and how professionals help clients to function more effectively.

Prerequisites: HUSV 201: Introduction to Human Services and/or Permission of Instructor.

#### **HUSV 315**

# MENTAL HEALTH PRACTICE *Fall, 3 credit hour(s)*

In this course, students will be introduced to mental health care, services, and practice. The course provides an overview of the historical roots of mental health care, the state of modern mental health care, and potential future trends in the field. A thorough examination of therapeutic and clinical skills will be partnered with classroom practice and presentation of these skills. Mental health over the lifecycle will be reviewed. Finally, common mental health disorders will be studied and paired with evidence-based treatment and interventions.

Prerequisites: PSYC 101 and PSYC 275 or permission of the instructor.

#### **HUSV 325**

#### GROUP THERAPY

Spring, 3 credit hour(s)

In this course students will be introduced to the crucial skills that are necessary for competence in the area of understanding systems and conducting groups. Topics to be addressed include working with different types of groups, the counseling process, and responding to cultural differences that may affect group process. Special populations and issues such as children, adolescents, elderly, mental health and addiction, survivors of sexual abuse, and divorced couples are explored.

Prerequisites: HUSV 315 Mental Health Practice or permission of the instructor. - Corequisite: PSYC 410 Counseling Skills

#### **HUSV 350**

#### CARE COORDINATION, DOCUMENTATION, AND REFERRAL SKILLS

#### Fall, 3 credit hour(s)

This course offers specialized, applied knowledge in the development of skills for the care coordination process, from intake to termination. Actual agency documentation forms give students the opportunity to prepare and manage files using electronic means. Referral skills are also being emphasized.

Prerequisites: SSCI 181 and HUSV 281 or permission of the instructor

#### **HUSV 375**

#### ASSESSMENT, DIAGNOSING, AND TREATMENT PLANNING Spring, 3 credit hour(s)

In this course, students are instructed in the process and skills needed for assessment, diagnosing, and treatment planning for substance abuse/ dependence and co- occurring disorders. The course explores motivational techniques and introduces students to current best practices used in the field of addiction treatment and behavioral health.

Prerequisites: SSCI 181 and HUSV 281 and PSYC 225 and PSYC 275 or permission of the instructor

## HUSV 415

# ADDICTION TREATMENT COLLOQUIUM *Fall*, 3 credit hour(s)

This course introduces students to specialized knowledge of topics in the field of addiction treatment. Students use this information to supplement the treatment process and to broaden their scope of practice.

Prerequisites: SSCI 181 and HUSV 281 or permission of the instructor

#### **HUSV 420**

# ORIENTATION TO HUMAN SERVICES *Fall/Spring, 3 credit hour(s)*

In this course, students will focus on issues related to public policy, professional behavior, interpersonal dynamics, and work-related skills related to human service settings in preparation for HUSV 421: Human Services Practicum. Students will explore and secure practicum placements for HUSV421 while enrolled in the HUSV 420 Orientation.

Prerequisites: HUSV 201 Intro to Human Services and HUSV 315 Mental Health Practice and/ or permission of the faculty practicum coordinator.

#### HUSV 421

#### PRACTICUM IN HUMAN SERVICES I Spring, 3 credit hour(s)

In this course, under direct supervision of direct care staff and supervisors, students will be provided with the opportunity to put the knowledge and skills they have learned in the classroom into practice in a human services organization. Students accepted into this practicum are required to complete 80 hours of field experience (practicum) and attend one 50-minute class per week. Per the laws of the New York State Office of the Professions, students will not be directly involved in decisions regarding client evaluations, diagnosis, and treatment planning.

Prerequisites: Applied Psychology majors only. Senior Status, HUSV 420 Orientation to Practicum in Human Services, minimum overall 2.5 GPA, and permission of the instructor

#### HVAC 101 REFRIGERATION I Fall, 2 credit hour(s)

The fundamentals of refrigerating and air conditioning equipment are the emphasis of this course. Students study the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device.

#### HVAC 102 REFRIGERATION LAB I Fall, 2 credit hour(s)

Students apply knowledge of the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device in laboratory experiments. Use of hand and power tools is stressed in laboratory work. Students cut, bend, solder, braze, flare, and swage cooper tubing. Flowing nitrogen is stressed during brazing operations.

# HVAC 103 HYDRONICS

Fall, 3 credit hour(s)

The fundamentals of hydronic distribution systems will be covered in this course. Students study basic heat transfer and the use of hydronics in residential and commercial settings.

# HVAC 104 HYDRONICS LAB

Fall, 2 credit hour(s)

The fundamental construction methods for hydronic distribution systems will be covered in this course. Students will understand how to install and evalute hydronic system performance in residential and commercial settings. Safe use of hand and power tools is stressed in laboratory work.

Prerequisites: Corequisite: HVAC 103

# HVAC 105 FORCED AIR SYSTEMS Spring, 3 credit hour(s)

This course covers the procedures and materials required to install residential and light commercial forced air heating systems. Furnace installation, ductwork sizing, and duct fabrication is studied. Material takeoffs are performed utilizing building plans, and from field measurements.

Prerequisites: HVAC 103 and HVAC 104

# HVAC 106

## FORCED AIR SYSTEMS LAB Spring, 2 credit hour(s)

This course covers the procedures and materials required to install residential and light commercial forced air heating equipment. Furnace installation, ductwork sizing, and duct fabrication are applied. Material takeoffs are performed utilizing building plans, and from field measurements. Thermostats and control equipment are also covered.

Prerequisites: Corequisite: HVAC 105

# HVAC 110

PLUMBING

Spring, 3 credit hour(s)

The fundamentals of residential and commercial plumbing are explained in

lecture and applied in laboratory projects. Plumbing code id reviewed to ensure compliance and explain how systems operate properly thus ensuring adequate supply of water and removal of waste from buildings.

#### HVAC 201

# HVAC ELECTRICITY, MOTORS, & CONTROLS

Fall, 2 credit hour(s)

This course introduces students to AC and DC circuits, interpretation of electrical schematics, troubleshooting using test equipment, motors types and uses, installation of electrical equipment in compliance with local, state, and national codes. The sequence of controls in HVAC are explored in details allowing students to correct electrical faults or diagnose hardware problems.

Prerequisites: HVAC 105 Heating Systems II

#### HVAC 202

# HVAC ELECTRICITY, MOTORS, & CONTROLS LAB

Fall, 2 credit hour(s)

This course develops hands-on skills at troubleshooting electrical faults, motors, and control sequences.

#### HVAC 203

#### COMMERCIAL REFRIGERATION Spring, 2 credit hour(s)

Commercial applications of refrigeration appliances used in retail food, cold storage warehouses, along with commercial buildings used by humans will develop into topics needed to function as a trained technician. Retail food appliances include walking cooler/freezers used by supermarkets, convenience stores, restaurants, and food services kitchens. Cold Storage explores the equipment necessary to store meat, produce, and dairy products while ensuring perishable goods maintain quality. By their very nature, commercial buildings are an increasing application of refrigeration demand to ensure the cooling and human comfort.

Exploring air handlers and heat pumps in the built environment is necessary for the modern technician.

Prerequisites: HVAC 101 & HVAC 102

### HVAC 204

#### COMMERCIAL REFRIGERATION LAB Spring, 3 credit hour(s)

The commercial refrigeration laboratory will focus on evaporator defrost cycles in freezer applications. Our student technicians will focus on applying all their course work on controlling and functioning defrost cycles. Student technicians will discover the complexity of the air handler cooling systems along with the electronic controls of heat pumps. Additionally, our student technicians will study and take the EPA 608 exam to handle refrigerants in compliance with the Clean Air Act properly.

Prerequisites: Corequisite: HVAC 203

#### HVAC 205

# HVAC SERVICE, TROUBLESHOOTING & REPAIR

Fall, 3 credit hour(s)

This course covers the analysis and repair of HVAC systems. Students utilize electrical meters, pressure measuring equipment, and airflow testers to determine the performance of HVAC systems. Identification and repair of defective components is the focus of this course. Analysis of misapplication is also studied.

Prerequisites: CONS 151 Building Trades-Blueprint Reading & Drafting, HVAC 105 Heating Systems II - Corequisite: HVAC 201 HVAC Electrical and Motor Control I

#### INTL 400

#### STUDY ABROAD

This course is designed to offer a student an opportunity to enroll in the study abroad programs and courses through other SUNY campuses and gain cultural experience. The students take courses overseas and complete all the requirements outlined by the campus administering the study abroad experience. They also have an opportunity to interact with students from other campuses.

Prerequisites: Based on the specific requirements outlined by the administering campus. Most programs require at least sophomore level standing with the GPA of at least 2.5. Freshman must be in good standing and check with the International Programs Office to ensure eligibility.

### **JUST 101**

#### INTRODUCTION TO CRIMINAL JUSTICE Fall/Spring, 3 credit hour(s)

This course is a comprehensive study of the development of criminal justice systems and operations in the United States. This course includes detailed examination, analysis, and evaluations of the major components of the criminal justice system.

#### **IUST 105**

CORRECTIONAL PHILOSOPHY

Fall/Spring, 3 credit hour(s)

This course provides a survey of the

philosophy, theory, and practice involved in the treatment of convicted law violators of all ages within the institutional environment. This course covers an overview of the correctional field; its origins, development, current status, and future prospects. The role of corrections and its importance in the reduction of crime and recidivism are also evaluated.

#### **JUST 110**

# CRIMINAL LAW

# Fall/Spring, 3 credit hour(s)

This course is a study of the fundamentals of criminal law: i.e., actus reus, mens rea, distinctions between grades of offenses; criminal responsibility; and substantive law.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### **JUST 111**

# CRIMINAL PROCEDURE

Fall/Spring, 3 credit hour(s)

In this course students study principles that regulate the balance between the power of our government and the rights of individual citizens. Topics include specific constitutional amendments, searches and seizures, stops and arrests, the use of force in effecting arrests, the use of search and/or arrest warrants, self-incrimination, and stages of criminal proceedings in the US.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### **JUST 112**

#### **CRIMINAL LAW & PROCEDURE**

Fall/Spring, 3 credit hour(s)

This course comprises a study of the fundamentals of criminal law and procedure. Topics covered include: specific constitutional amendments; actus reus and mens rea; searches and seizures; the use of search and arrest warrants, self- incrimination: criminal responsibility; constitutional principles that regulate the balance of power between government and the rights of individual citizens; critical stages of criminal proceedings in the United States; and major US Supreme Court precedents concerning substantive and procedural criminal law.

#### **JUST 201**

## CRITICAL ISSUES IN CRIMINAL JUSTICE Fall/Spring, 3 credit hour(s)

This course provides a study of the economic, political, ethical and emotional issues in policing, courts and corrections. Issues covered may include use of force by law enforcement, juvenile justice, drugs, gender-related violence, racial

issues, the media, forensics, mental health and disability, immigration, the death penalty, or other current and emerging topics in criminal justice.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

## **JUST 202** INTRODUCTION TO FORENSIC CRIMINOLOGY

Fall, 3 credit hour(s)

This course introduces students to the various aspects and applications of the field of forensic criminology. Students explore types of criminological research, evidence, and forensic examination, as well as the role of forensic criminology in criminal investigations; prosecutions and the legal process; and corrections/offender supervision. Special attention is paid to evidence-based practice in the criminal justice and legal systems, with a focus on applying evidence to current and emerging justicesystem problems or investigative casework.

### **JUST 203**

#### CRIMINAL INVESTIGATIONS Fall/Spring, 3 credit hour(s)

This course is designed to provide the skills and knowledge necessary to conduct a thorough preliminary investigation of crimes. Techniques used to investigate common categories of crimes will be discussed. A major emphasis in this course will be the preparation and execution of investigative plans as they relate to a team approach. Other skills will include interviewing, crime scene processing, and basic forensic examination of evidence.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### **IUST 205**

#### CRIMINAL JUSTICE SEMINAR Fall/Spring, 3 credit hour(s)

This course is designed to offer the student an opportunity to have a practical field experience with a criminal justice agency of his/her choice. The student observes and participates in the daily functioning of an agency, shares information with other students, and provides the participating agency with a valuable commodity - their time as volunteers. This course may take one of two forms, either a practicum or library research, as agreed upon by both the student and the instructor. The library research option allows the student to conduct research on a criminal justice agency to gain a more in-depth understanding of the function of said agency.

Prerequisites: 30 credit hours in the Criminal Justice, Criminal Investigations, or Law Enforcement Leadership program or permission of instructor

## **JUST 207** POLICE SERVICES Spring, 3 credit hour(s)

This course provides students with an overview of the services that police agencies provide to the community. Programs, practices and techniques are presented with an emphasis on lawful behavior, efficiency and effectiveness. Topics include, but are not limited to: the importance of effective communication, arrest procedures, patrol strategy, enforcement of vehicle and traffic laws, dealing with violent behavior, terrorism, juvenile crime, disaster preparedness, and ethical behavior.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### **JUST 209** LAW ENFORCEMENT **COMMUNICATIONS** Fall/Spring, 3 credit hour(s)

This course prepares students to write clear, accurate and grammatically correct police reports, evidence and laboratory documents, arrest and search warrants, depositions, statements, and other associated law enforcement documents. Methods of communication such as note taking and interviewing mechanics will be addressed. Spelling and court testimony will be addressed.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### **IUST 210**

# INTRODUCTION TO FORENSIC INVESTIGATION

# Fall/Spring, 3 credit hour(s)

This course familiarizes students with various forms of forensic evidence. The laboratory component of the course provides students an opportunity to process and analyze various forms of forensic evidence.

# JUST 211 INTRODUCTION TO PROBATION AND PAROLE

Fall, 3 credit hour(s)

This course introduces students to offender supervision in the community, with specific focus on the institutions of probation and parole. Students explore the history and foundation of probation and parole in America, as well as their role and function within the larger system of corrections and punishment. The practical daily activities of probation and parole officers are examined, including surveillance, report- writing, offender evaluation, pre-sentence investigations, and court testimony.

#### **JUST 230**

#### FUNDAMENTALS OF HOMELAND SECURITY

Fall/Spring, 3 credit hour(s)

This course surveys the policies, practices, concepts and challenges confronting practitioners in Homeland Security with a focus on local entities. It provides an overview of threats to domestic security from terrorism, weapons of mass destruction, and other related risks and vulnerabilities. It examines the strategies and systems involved in protecting against and responding to threats. Discussion includes the managerial, political, legal and organizational issues related to crisis planning and response, the National Incident Management System impact on local practices, risk assessment and mitigation, communications and technology systems, medical and public health emergencies, and infrastructure protection.

# **JUST 231 INTRODUCTION TO** TERRORISM, INTELLIGENCE AND HOMELAND SECURITY

Fall, 3 credit hour(s)

This course surveys the policies, practices, concepts and challenges confronting practitioners in Homeland Security with a focus on local entities. It provides an overview of threats to domestic security from terrorism, weapons of mass destruction, and other related risks and vulnerabilities. It examines the strategies and systems involved in protecting against and responding to threats. Discussion includes the managerial, political, legal and organizational issues related to crisis planning and response, the National Incident Management System impact on local practices, risk assessment and mitigation, communications and technology systems, medical and public health emergencies,

#### and infrastructure protection.

Prerequisites: Homeland Security major (2335), Criminal Investigation major (1359), CJ: Law Enforcement Leadership major (1911), or Criminal Justice major (640) or permission of instructor

#### JUST 232

# **INTELLIGENCE ANALYSIS**

Spring, 3 credit hour(s)

This course provides an introduction and overview of the concepts and theory of Intelligence, the Intelligence process and cycle, collection disciplines, and the US Intelligence Community (USIC) at large. This course examines the role of Intelligence in the policy process, oversight and accountability, policies, strategies and public laws that govern and regulate the USIC. Students will examine aspects of counter intelligence, counterespionage, and covert actions and their place within the Intelligence Enterprise.

Prerequisites: Homeland Security major (2335), Criminal Investigation major (1359), CJ: Law Enforcement Leadership major (1911), or Criminal Justice major (640) or permission of instructor

#### **JUST 233**

CRIME ANALYSIS

Spring, 3 credit hour(s)

This course provides a comprehensive overview of crime analysis through both theory and practical examples. This course explores the basics of crime analysis to sophisticated analytical concepts that provides a foundation for career analysts, homeland security practitioners, and public policy makers.

Prerequisites: Homeland Security major (2335), Criminal Investigation major (1359), CJ: Law Enforcement Leadership major (1911), or Criminal Justice major (640) or permission of instructor

### JUST 300 FORENSIC PHOTOGRAPHY

Fall/Spring, 3 credit hour(s)

This course provides an introduction to basic techniques, equipment, material and other aspects of crime scene photographs including theory and practice of photographic image formation and recordings. The course utilizes "hands-on" instruction with an emphasis on crime scene photography, evidence photography, and surveillance photography.

Prerequisites: Forty-five (45) credit hours in the Criminal Investigation, Criminal Justice: Law Enforcement Leadership, or Homeland Security, program, or permission of instructor.

#### JUST 301

#### LATENT PRINTS & IMPRESSIONS Fall/Spring, 3 credit hour(s)

This course is an introduction to the biological development of fingerprints and the identification of the various fingerprint patterns. Course activities include physical and chemical development of fingerprints, crime scene processing techniques, the Henry System of fingerprint classification, and the comparison and identification of suspect fingerprints through manual and automated means.

Prerequisites: Completion of 45 credit hours or permission of instructor.

#### **IUST 302**

#### INFORMATION MANAGEMENT IN CRIMINAL JUSTICE Fall/Spring, 3 credit bour(s)

This course introduces students to the organi-

zation, use, and retrieval of information resources in the fields of criminology and criminal justice, and related disciplines. Open-web data sources are compared against peer-reviewed sources for credibility, authority, relevancy, accuracy, and purpose.

Prerequisites: 45 credit hours or permission of instructor; CJ, CI, LEL, HS or FC majors only.

#### **JUST 303**

## INVESTIGATIVE INTERVIEWS Fall/Spring, 3 credit hour(s)

This course provides students with proven techniques which apply to conducting accusatory and non-accusatory interviews. Students develop skills related to preparing for an investigative interview with an emphasis on a proactive role. These skills include developing an interview strategy, interpreting physical and verbal cues, conducting a cognitive interview, developing admissions and confessions and recognizing a false confession. Course includes the most recent court rulings related to investigative interviews and admissibility of statements into court.

Prerequisites: Completion of 45 credit hours in a CJ major or permission of instructor.

#### JUST 307 PENOLOGY Fall/Spring, 3 credit hour(s)

This course provides an overview of the study of punishment in contemporary society. Students investigate the underlying sentiments, philosophies, theories, and practices associated with the societies' attempts to repress and control criminal activities. Current controversies are addressed, including the prison environment as criminogenic, recidivism rates, comprehensive prison reform/comparative penology, harm reduction, reentry, solitary confinement, restorative justice/alternatives to incarcera-

tion, and the ethics of punishment. Prerequisites: Completion of 45 credit hours or

permission of instructor.

#### **JUST 310**

#### CAUSES OF CRIME

Fall/Spring, 3 credit hour(s)

This course introduces various criminological theories to explain the cause of criminal behavior. Specific attention is placed on the primary theorists and the evolution of their corresponding theories and how they relate to current theories associated with biological, psychological, personality, intelligence and gender, and social disorder. Students learn to identify and apply criminological theories to the commission of specific criminal acts. The history of crime and punishment is reviewed, leading to the present day criminal justice system and competing criminological theories.

Prerequisites: Forty-five (45) credit hours or permission of instructor.

#### **JUST 314**

#### ETHICS IN CRIMINAL JUSTICE Fall/Spring, 3 credit hour(s)

This course provides the student with theories and practices of ethics and professionalism in criminal justice. Areas of concentration are law enforcement, courts, and corrections. This course requires the student to exercise critical thinking skills to solve issues that test the morals and ethics of criminal justice professionals on a daily basis. Students may not earn credit for both BSAD319/Professional Ethics and JUST314/Ethics in Criminal Justice. This course is considered writing intensive.

Prerequisites: Completion of 45 credit hours or permission of instructor.

# JUST 316 SEX OFFENDERS

*Fall/Spring, 3 credit hour(s)* This course explores the implications of sexual deviance and sexual offending on the criminal justice system and its practitioners. Students consider the nature and etiology of sexually deviant behavior, as well as the societal and legal responses to such behaviors. A case-study approach is taken to examine the applied and practical aspects of sex-offender identification in the investigative process. Students assess the impact of current issues and controversies in sex offender legislation, policy and practice for

criminal justice agencies and practitioners. Prerequisites: 45 semester hours or permission of Instructor.

#### **JUST 317**

#### POLICE TACTICAL SEMINAR Spring, 3 credit hour(s)

This course acquaints students with the methods and techniques that are recognized by law enforcement professionals as necessary for success in a law enforcement career. Students learn mental as well as physical techniques that are needed to tactically handle situations. Issues of officer safety are identified and discussed. The focus is on an analytical understanding of the tactical challenges faced by U.S. law enforcement officers.

Prerequisites: Introduction to Criminal Justice (JUST 101) and completion of 60 semester credits or permission of the instructor

#### **JUST 320**

#### MEDICOLEGAL INVESTIGATIONS OF DEATH

Fall/Spring, 3 credit hour(s)

This course provides an in-depth look into the medico-legal aspects of death investigation, including the manners, mechanisms, and causes of death, as well as the post mortem changes. The course also instructs the student on wound interpretation and the method to apply post mortem conditions to criminal investigations to confirm or refute evidence of wrongful deaths.

Prerequisites: 45 credit hours or permission of the instructor.

#### JUST 321

#### MANAGING LAW ENFORCEMENT TRAINING

Spring, 3 credit hour(s)

In this course, students examine issues relating to law enforcement training to include pre-service training, basic law enforcement training, field training, in- service training and specialized training. The course presents a detailed template for training management concentrating on the impact training has on the agency. The course familiarizes students with adult learning concepts as well as cognitive, affective and psychomotor skills training. Central to the course is the understanding and appreciation of the variables associated with assessing the training needs and evaluation of training.

Prerequisites: 45 credit hours in Criminal Investigation, Criminal Justice: Law Enforcement Leadership or Homeland Security or permission of the instructor.

#### **JUST 322**

## GENDER AND THE JUSTICE SYSTEM Fall/Spring, 3 credit hour(s)

This course examines the role of gender in a variety of criminal justice contexts, from offending, to policing, to the courts, and corrections. Specific attention is paid to connections between masculinity and violence, how gender shapes patterns of offending as well as victimization, and the extent to which ender offending, violence and victimization are cultural products.

Prerequisites: 45 credit hours, or permission of instructor.

#### **JUST 323**

#### DIVERSITY IN CRIMINAL JUSTICE Fall/Spring, 3 credit hour(s)

This course provides an examination of the intersections between diverse groups and the variable agencies, practices, policies, and individual actors in the criminal justice system with whom they come into contact. Students examine contacts that criminal justice practitioners have with citizens, victims, suspects, and coworkers, and conceptualize diversity through such intersections. Specific attention is paid to gender, sexuality, race, class, status, culture, age, disability, religion, and politics.

Prerequisites: 45 credit hours or permission of the instructor.

#### JUST 324 SERIAL MURDERERS AND THEIR VICTIMS

#### *Fall/Spring, 3 credit hour(s)*

This course covers topics relating to serial murder and the various categories associated with the designation, including healthcare killers, sexual predators, male versus female murderers, team killers, and their respective victims. The student analyzes the issue of serial murder from a global perspective and ways law enforcement officials are attempting to profile and apprehend suspects.

Prerequisites: 45 credit hours or permission of the instructor.

#### **JUST 326**

## THREATS TO HOMELAND SECURITY *Fall/Spring, 3 credit hour(s)*

In this course students study the post cold war threats to the United States of America and the corresponding security policies.

This course takes an "all-hazard" approach to homeland security and the current threats facing our nation. Topics addressed include natural hazards, man-made hazards, domestic and international terrorism, weapons of mass destruction, cyber terrorism and the emergency management planning model. This course explains the roles of various first responder agencies and the responsibility of the government to coordinate their response.

Prerequisites: Junior level status in the Criminal Investigation or Criminal Justice: Law Enforcement Leadership program or permission of instructor.

#### **JUST 327**

## INTERNATIONAL CRIME AND JUSTICE Spring, 3 credit hour(s)

This course is an examination of international crime, punishments and international justice perspectives. It includes an analysis of international research efforts and resources developed to address specific transnational criminal activity and crimes against humanity. The role of international courts in delivering justice is also examined. Prerequisites: JUST 101

#### JUST 330 QUESTIONED DOCUMENTS Fall/Spring, 3 credit hour(s)

This course includes an examination of techniques used to determine the authenticity of documents through the analysis of handwriting, ink and paper sources, methods of mechanical printing, and recover erasures, obliterations and alterations.

Prerequisites: Junior level status in the Criminal Investigation program or Criminal Justice: Law Enforcement Leadership program, or permission of instructor.

#### **JUST 331**

#### PROFILING AND BEHAVIORAL CRIMINOLOGY

#### Spring, 3 credit hour(s)

This course provides an introduction to contemporary criminal investigative analysis with a special focus on behavioral criminology. Students explore the nature, history and methods of criminal profiling, as well as its investigative relevance to law enforcement. Case studies are analyzed to apply the principles and methods of profiling to personality and behavioral data about offenders.

Prerequisites: 45 semester hours or permission of Instructor

#### **JUST 333**

#### MANAGING PATROL FUNCTIONS Fall/Spring, 3 credit hour(s)

This course provides a study of many aspects of police patrol, including goals and objectives of patrol, staffing and deployment, management styles of supervisors, and supervisory functions including scheduling and budgeting.

Through group discussions, role playing activities and situational scenarios, students learn styles and various elements of the patrol function.

Prerequisites: 45 credit hours in Criminal Investigation, Criminal Justice: Law Enforcement Leadership or Homeland Security or permission of the instructor.

#### **JUST 334**

## COMMUNITY ORIENTED POLICING *Fall, 3 credit hour(s)*

This course provides students with insight into the meaning of community policing and presents many dimensions necessary to consider when developing and designing a community policing strategy. Students understand the practical side of community policing, recognize the community considerations that need to exist and develop methods applicable to their unique environments. Students discuss community policing as it relates to problem solving, community engagement and organizational transformation. Students also discuss strategies associated, in developing positive working relationships with local community leaders and establishing meaningful communications where there is a partnership and commonality of interests.

Prerequisites: None - Corequisite: Introduction to Criminal Justice (JUST 101) and junior level status or instructor's approval.

#### JUST 335 CRIMINAL JUSTICE AGENCY MANAGEMENT *Fall, 3 credit bour(s)*

Description, analysis, solution, and synthesis of contemporary management problems in a criminal justice organization; presentation and exemplary implementation of management concepts significant to criminal justice organizations; review of case studies for management problem recognition; the study of operational systems; analysis of the role of supervisors and managers.

Prerequisites: Junior level status in the Criminal Investigation or Criminal Justice: Law Enforcement Leadership program, or permission of instructor.

#### **JUST 339**

## TRUE CRIME INVESTIGATION *Fall/Spring, 3 credit hour(s)*

This course provides an in-depth examination of a real-world crime and its treatment throughout the stages of the justice process. Students examine the case from a variety of perspectives, analyzing the facts and behaviors of the key actors responsible for the commission or disposition of the crime. Special attention is given to the victim and perpetrator's characteristics and behaviors, the crime scene, investigative procedures, the courtroom process and the eventual case outcome.

Prerequisites: 45 credit hours, or permission of the instructor

#### **JUST 340**

#### LEGAL ISSUES OF THE PENAL SYSTEMS Fall/Spring, 3 credit hour(s)

Students examine problems and issues faced by incarcerated persons within the American penal system. Course topics include: history of confinement as punishment, issues of visitation, religion, legal assistance, prison discipline, rehabilitation, and the civil and criminal liabilities of corrections officials.

Prerequisites: Introduction to Criminal Justice (JUST 101) and Correctional Philosophy (JUST 105) or permission of instructor.

#### **JUST 341**

## CORRECTIONS MANAGEMENT AND ADMINISTRATION

#### Fall/Spring, 3 credit hour(s)

This course examines the concepts, practices and theoretical bases of the management and administration of correctional facilities. Students will examine the issues of facility management, inmate management, leadership and governance of correctional facilities, personnel management and policy formation, and the challenges facing the future of American correctional systems.

Prerequisites: 45 credit hours or permission of instructor

#### **JUST 344**

#### CIVIL LIABILITY FOR CRIMINAL JUSTICE ADMINISTRATORS

#### Fall/Spring, 3 credit hour(s)

In this course students examine civil liability issues at the local, state, and federal law levels. Students develop better awareness of the liability risks relative to criminal justice service by learning proactive protocols that may minimize personal and organizational liability risks.

Prerequisites: Introduction to Criminal Justice (JUST 101) or Permission of the instructor.

#### **JUST 345**

#### COMPARATIVE JUSTICE SYSTEMS Fall/Spring, 3 credit hour(s)

This course is an examination of crime as a

world problem and the response of nations to this problem. It includes an analysis of substantive and procedural law in different legal traditions and the multi-national efforts developed to address specific trans- border criminal activity. Similarities and dissimilarities between urban and rural criminal justice are examined in the context of cultural and social structures.

Prerequisites: 45 credit hours in Criminal Investigation, Criminal Justice: Law Enforcement Leadership or Homeland Security or permission of the instructor.

#### **JUST 346**

#### FORENSIC VICTIMOLOGY

*Fall/Spring, 3 credit hour(s)* 

This course examines the field of forensic victimology as a subfield within forensic criminology. Students explore the scientific study of victims for the purpose of addressing forensic and investigative issues. The course is applied in nature, and specific attention is given to the situational, psychological, and lifestyle aspects of victimology in pursuit of the construction of a victim profile.

Prerequisites: 45 credit hours or permission of instructor

#### **JUST 347**

#### RESEARCH METHODS IN CRIMINOLOGY AND CJ

Fall/Spring, 3 credit hour(s)

This course introduces students to the practices of consuming and producing research of publishable quality in the disciplines of criminal justice and criminology. Students explore the elements of the research process and the scientific method, paying special attention to ethical considerations in conducting research. Analyzing the processes and principles of the quantitative, qualitative, and mixed- methods approaches to research, students critically evaluate published literature in the field, analyze and interpret data and findings, and consider the usefulness of criminal justice/criminological research to the conceptual understanding of, and field based practice within, the disciplines.

Prerequisites: 45 credit hours or permission of instructor; CI, LEL, HS, FC, CA, CYBR, EADM majors only

#### **JUST 349**

#### VULNERABLE POPULATIONS IN CRIMINAL JUSTICE Fall/Spring, 3 credit hour(s)

This course examines a variety of vulnerable populations whose particular characteristics make them especially susceptible to justice- system involvement, and the substantial and enduring harms resulting therefrom. Special attention is paid to the mentally ill, substance-use disordered, and veterans, as well as those whose age, race, gender, ethnicity, or socioeconomic status increase their vulnerability. Current and emerging justice-system policies and practices are evaluated.

#### **JUST 350**

#### VICTIMIZATION

Fall/Spring, 3 credit hour(s)

This course includes a study of the various issues involved in victimization, including theories, intimate versus stranger violence, family victimization, child abuse and neglect, workplace violence, school violence, elder abuse, and the criminal justice response to victimization. Prerequisites: 45 credit hours or permission of the instructor.

#### JUST 351 ORGANIZED CRIME Fall/Spring, 3 credit hour(s)

This course provides students with a viable definition of organized crime, its historical overview from the 18th century to present, and the theories behind why people become involved in crime. Topics include the development of organized crime in the northeast and its westward migration; nontraditional organized crime, the business enterprises of organized crime; the effect of organized crime in labor and business, the affects of the media and international organized crime.

Prerequisites: 45 Credit Hours or permission of instructor.

#### **JUST 353**

#### CRIMINAL JUSTICE TECHNOLOGY Fall/Spring, 3 credit hour(s)

This course provides students with a survey of criminal justice technologies and their uses within the criminal justice system. In addition to providing significant technical information about technology (such as computer operations, wireless communications and geographic information systems), this course emphasizes the challenges involved in the use of technology such as implementation and interoperability. Moreover, through this course, the study of technology is integrated into wider criminal justice themes including: ethical and legal implications of technology; technology's place in the community based policing model; and, how technology impacts traditional criminal justice policy- making.

Prerequisites: Completion of 45 credit hours in a CJ major or permission of instructor.

## JUST 355

#### PUBLIC SAFETY CRITICAL INCIDENT RESPONSE

Fall/Spring, 3 credit hour(s)

In this course students study the many facets of critical incident response. The course addresses specific obstacles public safety professionals face while responding to a critical incident or a disaster. The material contrasts the characteristics of a routine response to that of a large scale critical incident and requires the students to consider challenges that may not be common to a typical response situation.

From the initial response to recovery, students examine the actions a responder may take and the likely consequences of those actions. Students in this class also study the National Interagency Incident Management System and how it is applied in a critical incident.

Prerequisites: Junior level status in Criminal Justice: Law Enforcement Leadership and/or Criminal Investigations, or permission of the instructor.

#### JUST 370 FORENSIC TAPHONOMY Spring, 3 credit hour(s)

This course is an introduction to forensic taphonomy, including an overview of forensic anthropology and archaeology. The course provides a history of forensic anthropology, archaeology, and taphonomy, as well as current challenges and future directions. Specific topics to be covered include the depositional environment, postmortem modifications affecting human remains, and estimating the postmortem interval.

#### **JUST 375**

#### GLOBAL TERRORISM: 20TH CENTURY TO PRESENT

#### Fall/Spring, 3 credit hour(s)

The historical roots of modern terrorism, how the goals, justifications, and methods of terrorist acts in the successive eras are similar,, and the strategies to bring terrorist and their organizations into the political process.

Prerequisites: Completion of 45 credit hours or permission of instructor.

#### JUST 380

#### CIVIL LIBERTIES AND HOMELAND SECURITY

#### *Fall/Spring, 3 credit hour(s)*

This course examines the Constitutional and legal framework of the Homeland Security enterprise, discusses specific Constitutional issues and court opinions as they apply to Homeland Security, and considers the relationship between Homeland Security policies and the preservation of civil liberties. The course looks at the balance of the goals, objectives and activities of effective Homeland Security against the compelling need to preserve and extend fundamental American civil liberties. It examines the USA PATRIOT Act and its effectiveness in preventing and responding to the threat of terrorism as well as their role in shaping the development of Homeland Security agencies, policies, strategies, and infrastructure.

Prerequisites: Introduction to Criminal Justice (JUST 101) & completion of 45 credits hours in a CJ major or permission of instructor.

#### **JUST 402**

### GIS: CRIME MAPPING

Fall/Spring, 3 credit hour(s)

This course provides an introduction to geographic information systems and their use in public safety and crime mapping. This course introduces students in how to use maps to analyze crime, how to analyze spatial data, and how maps can help researchers evaluate programs and policies. Additionally, students are introduced to various software applications that are standard in the industry.

Prerequisites: Completion of 45 credit hours or permission of instructor.

#### **JUST 404**

#### CRITICAL CRIMINOLOGY Fall/Spring, 3 credit hour(s)

This course introduces students to the theoretical foundations of contemporary critical criminology, focusing on some of the major sub-theories and theorists to come out of this growing field of criminological study. Students explore critical race theory, feminist theories, green criminology, convict criminology, abolitionist criminology, realism/ ultra- realism, rural criminology, and postmodern criminology. Select topics in critical criminology, advanced through review of disciplinary studies as well as current events, include police and prison abolition, state violence, antifeminism, media and crime, current issues in immigration, and the militarization of law enforcement.

Prerequisites: 45 credit hours or permission of instructor

#### **JUST 406**

## CRIME SCENE INVESTIGATION *Fall, 3 credit hour(s)*

This course emphasizes crime scene processing and investigation including crime scene search principles, photography, descriptive writing, recognition of physical evidence, methods for collection and preservation of evidence, sketching techniques and methods of transportation or submission of evidence for laboratory analysis.

Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), or permission of instructor.

#### JUST 408

## INVESTIGATION OF DEATH *Fall*, 4 credit hour(s)

This course is a comprehensive study of death investigations including the first responding officer's duties, the investigation

at the scene, detectives' duties, case management, manners and modes of death, and identifying suspects. The Course also presents recent statistics and trends related to murder. NOTE" as this course includes a death investigation that typically extends over a four/five day period, students must have the ability to attend extended hours during the life of the investigation. This will include both daytime hours and late evening hours on each day of the investigation.

Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303) and a Criminal Investigation major or permission of instructor. - Corequisites: Crime Scene Investigations (JUST406)

#### JUST 410 CLANDESTINE GRAVES Fall/Spring, 3 credit hour(s)

This course presents students with the theories and practices of locating clandestine graves. Lectures address grave assessments, the use of experts, evidence recognition and preservation, and case studies. Labs include grave location, excavation, and recovery techniques.

Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), or permission of instructor.

#### JUST 411 FORENSIC DRUG ANALYSIS AND INVESTIGATION Fall, 3 credit hour(s)

This course explores the tools and methods used in, and the issues involved with, drug investigations and forensic analyses. Topics include physiological impacts of various illicit drugs, legal categories of various substances, legal issues relating to drug crimes, methods of investigation, field examination, and lab analyses.

Prerequisites: Completion of 45 credit hours or permission of instructor.

#### JUST 412 FIREARM AND TOOLMARK Fall, 3 credit hour(s)

This course is an in-depth look at the forensic analysis of Firearms Identification. Areas of concentration include the history and development of firearms and ammunition components, serial number restorations, toolmark examinations and distance determinations Other areas discussed include evidence packaging, reporting results and utilizing the national ballistic database (NIBIN).

Prerequisites: Completion of 45 credit hours or permission of instructor.

#### JUST 413 METHODS OF HUMAN SKELETAL IDENTIFICATION

### Spring, 3 credit hour(s)

This course provides an overview of human skeletal identification methods, such as biological profile, radiographic comparison, craniofacial superimposition, stable isotopes, and DNA. The applicability of these methods in forensic, human rights, and mass disaster contexts is explored.

Prerequisites: Completion of 45 credit hours or permission of instructor

#### **JUST 415**

## EMERGING ISSUES IN HOMELAND SECURITY

Fall/Spring, 3 credit hour(s)

This course explores the evolving nature of the Homeland Security industry. It examines a number of contemporary issues and their immediate and long-term impact on Homeland Security policies and practices. The roles of the media, law, the Constitution, governmental and corporate entities, and politics at the federal, state and local levels in determining and shaping Homeland Security policy and practice are considered.

Prerequisites: JUST 101 Introduction to Criminal Justice

#### **JUST 420**

### CORPORATE ROLE IN HOMELAND SECURITY

*Fall/Spring, 3 credit hour(s)* 

This course explores the role of private sector entities in Homeland Security and relationships with governmental Homeland Security agencies. It examines the specific roles, responsibilities, and vulnerabilities of corporate entities in protecting the infrastructure as well as in preventing, deterring, and responding to events.

Institutions such as utility providers, the private security industry, mental health systems, hospitals and biomedical facilities, companies, airlines and airports, the financial services industry, and information technology and telecommunications companies are considered.

Prerequisites: Fundamentals of Homeland Security (JUST 230) and completion of 45 credit hours in a CJ major, or permission of instructor.

#### JUST 421

#### CYBER CRIMINOLOGY

Spring, 3 credit hour(s)

This course examines cybercrimes using theories of criminology and assesses from the perspective of the perpetrator and victim. The issue of jurisdiction, policy and legal aspects of the crime are examined since cybercrimes can be committed anywhere on the globe.

Prerequisites: 45 credit hours or permission of instructor

### JUST 422

#### VIOLENT CRIME ANALYSIS Spring, 3 credit hour(s)

This course discusses the features and character-

istics of criminal classification definitions, including homicide, arson, sexual assault, and computer crimes. the Students will analyze data used within the criminal justice field to understand the types of crimes and the practical application of the research to assist in an investigation.

Prerequisites: 45 completed credit hours or permission of instructor

#### **JUST 423**

#### INTELLIGENCE-LED POLICING Spring, 3 credit hour(s)

This course introduces students to the concepts of intelligence-led policing, and what distinguishes it from other policing models. This course provides a focus for increased emphasis on analysis and intelligence as a driver for objective decision making, prioritizing crime hot spots, repeat victims, recidivists, and criminal groups. Key aspects of instruction include crime and harm reduction, disruption and prevention through management, deployment, and enforcement.

Prerequisites: Completion of 45 credit hours, or permission of the instructor

#### JUST 424

#### COLD CASE INVESTIGATIONS

Spring, 3 credit hour(s)

This course discusses the techniques used to analyze and investigate a cold case. This course highlights the evaluation of the cold case file through the use of available resources, including electronic databases, interview techniques, autopsy findings, media inquiries, and forensic science disciplines.

Prerequisites: 45 completed credit hours or permission of instructor

#### **JUST 425**

#### LAW ENFORCEMENT INTELLIGENCE SYSTEMS HOMELAND SECURITY Fall/Spring, 3 credit hour(s)

This course examines the concepts and practices involved in the process of research and analysis of intelligence for law enforcement and national security matters. It examines the intelligence research and analysis methods used by intelligence analysts in the U.S. Intelligence Community and Crime Analysts in State and Local Fusion Centers. Students in this course will develop an understanding of intelligence tradecraft and the analytic and research skills used in intelligence work, as well as an appreciation for the ethical, Constitutional, and civil liberties issues involved. Specific topics will include analytic tradecraft in conducting analysis and the use of structured analytic techniques.

Prerequisites: JUST 230 Fundamentals of Homeland Security and completion of 45 semester credit hours in Criminal Investigation, Criminal Justice: Law Enforcement Leadership or Homeland Security, or permission of instructor.

#### **JUST 426**

#### ETHICS IN FORENSIC SCIENCE Fall/Spring, 3 credit hour(s)

This course discusses ethics within the context of forensic science from the standpoint of the forensic scientist, attorney, Sexual Assault Nurse Examiner, child abuse investigator, judge and media. The students will examine case studies in order to understand ethical dilemmas from several different perspectives within the forensic science field.

Prerequisites: 45 completed credit hours or permission of instructor

#### JUST 429 INTRODUCTION TO *CULMINATING EXPERIENCE SEMINAR*

Fall/Spring, 1 credit hour(s)

This course is the precursor to the senior culminating experience for seniors in either the Criminal Investigation or Criminal Justice: Law Enforcement Leadership Bachelor's program. Students meet on a weekly basis with faculty to discuss resume preparation, job interviewing, locating and establishing internships, and internship requirements.

Prerequisites: Senior level status in either the Criminal Investigations or Criminal Justice: Law Enforcement Leadership program or permission of instructor.

#### **JUST 430**

#### CULMINATING EXPERIENCE IN CRIMINAL JUSTICE

Fall/Spring, 3-15 credit hour(s)

This internship is an academic program which integrates classroom work and practical experience with cooperating law enforcement or law enforcement related agencies. It is a structured field experience in which an intern acquires and applies knowledge and skills while working in a responsible role. Working with a supervisor, the student will perform prescribed work within an administrative or operational setting. The internship will be tailored to the individual student's career interests and the needs of the supervising organization.

Prerequisites: All required Criminal Investigation or Criminal Justice: Law Enforcement Leadership curriculum courses or the permission of the department chair.

### JUST 431

### CULMINATING EXPERIENCE IN CORRECTIONS

#### Fall/Spring, 3-15 credit hour(s)

This internship is an academic program which integrates classroom work and practical experience during a correctional academy. It is a structured field experience in which an intern acquires and applies knowledge and skills while working in a responsible role during a corrections academy. Working with a supervisor, the student will adhere to the guidelines of the pre-certification training within the academy and perform the necessary tasks for graduation. This course designed for the NYS DCJS approved county corrections academy and can only be used for the SUNY Canton Corrections Academy precertification.

Prerequisites: Students must be eligible for and accepted into the SUNY Canton Corrections Academy

#### **JUST 432**

SENIOR SEMINAR

Spring, 3 credit hour(s)

This capstone course integrates students' foundational coursework in criminology with an applied focus toward meaningful, evidence-based practice or system change. Students select an area of the justice system in need of a new policy, model of practice or significant reform, and develop a comprehensive change-management plan for this real-world problem.

Prerequisites: 90 credit hours, JUST 302 and JUST 347

#### **JUST 441**

## DOMESTIC EXTREMISM AND HATE CRIMES

#### Spring, 3 credit hour(s)

This course examines the foundations of domestic extremism and hate crimes and how they are manifested in criminal behavior. Various groups who have been labeled as supporting or engaging in domestic terrorism and hate crimes are examined. Focus is placed on the organizational structure, philosophies, and networks of domestic extremists and hate crime groups; federal and state statutory laws impacting domestic extremism and hate crimes; and the interrelations and interactions of domestic extremist organizations and hate crime groups.

Prerequisites: Introduction to Criminal Justice (JUST 101) and completion of 45 semester credit hours or permission of the instructor.

#### **JUST 449**

#### CURRENT ISSUES IN LAW ENFORCEMENT Fall, 3 credit hour(s)

This course identifies current and emerging issues that may have an impact on a police manager. Students will integrate concepts related to selection, recruitment and training of officers; various policing philosophies; police management and operations; police misconduct and accountability and use of technology. The historical context of each issue will be considered so students develop a true understanding of each issue. Current U.S. Supreme Court decision and opinions, as well as federal and state mandates affecting agency policies and procedures, will be considered and discussed.

Prerequisites: Introduction to Criminal Justice (JUST 101) and junior level status or permission of instructor.

#### JUST 485 FRAUD EXAMINATION AND INVESTIGATION Fall, 3 credit hour(s)

This course covers the theories, principles and methodology of fraud examination and investigation. Students learn how and why fraud is committed, how fraudulent conduct is committed, how fraudulent conduct can be deterred, and how allegations of fraud are investigated and resolved.

Prerequisites: JUST 101, ACCT 101 and 45 credit hours or permission of instructor

#### **LEST 101**

#### AMERICAN LEGAL SYSTEM Fall/Spring, 3 credit hour(s)

A general overview of the American legal system, including federal and state court structures, the roles and responsibilities of various participants in the legal process, and the progress of civil and criminal cases through the courts.

#### LEST 221

## CRIMINAL PRACTICE *Fall, 3 credit hour(s)*

This course introduces students to the many aspects of Criminal Law and Criminal Procedure. Students learn the main structure of the criminal justice system, penal statues, case law, and criminal procedure with a focus on the 4th, 5th, and 6th Amendments to the United States Constitution. There will be a particular focus on Criminal Practice in the State of New York.

Prerequisites: The American Legal System

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(LEST 101) and Business Law I (BSAD 201) or permission of the instructor.

#### **LEST 310**

#### LEGAL RESEARCH

Spring, 3 credit hour(s)

An overview of the sources of law in the American system and specific instruction in finding and analyzing the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary sources.

Prerequisites: Successful completion of Expository Writing (ENGL 101) or Oral & Written Expression (ENGL 102), or permission of instructor.

### LEST 320 NEGLIGENCE AND INTENTIONAL TORTS

Fall/Spring, 3 credit hour(s)

Students explore the Law of Negligence and Intentional Torts and how these areas of law affect the business community.

Intentional torts include Business Torts, Defamation, Nuisance, Warranty, Strict Liability, Products Liability and an employer's liability for the negligence and torts of agents and employees.

Prerequisites: Business Law I (BSAD 201), or permission of instructor.

#### LEST 330

### LEGAL WRITING

Spring, 3 credit hour(s)

Instruction in writing documents commonly used in a legal setting, and in analyzing and citing the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary sources.

Prerequisites: Business Communications (BSAD 200), Legal Research (LEST 310), or permission of instructor. This is a writing intensive course.

#### **LEST 340**

## CONSTITUTIONAL LAW *Fall, 3 credit hour(s)*

This course focuses on the issues raised by the structural parts of the United States Constitution. Consideration will be given to judicial processes in constitutional cases; judicial review; and the federal courts functioning in the constitutional system. Attention will be given to the relationships of the three federal branches of government, with emphasis on some of the powers and limitations of the executive, legislative and judicial bodies that arise from principles of separation of powers and national checks and balances.

Prerequisites: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101) or Business Law I (BSAD 201) and junior status or permission of the instructor.

#### LEST 350

### CIVIL LITIGATION

Fall/Spring, 3 credit hour(s)

Introduces students to substantive and procedural requirements for, and philosophical underpinnings of, civil litigation in state and federal courts, at both the trial and appellate levels.

Prerequisites: The American Legal System (LEST 101) and Business Law II (BSAD 202), or permission of instructor.

#### **LEST 360**

#### FAMILY LAW Fall/Spring, 3 credit hour(s)

Students will explore the core procedural and substantive concepts of family law, including legal aspects of adult family relationships and the law relating to the lives of children. Students will learn how family law principles are applied in a legal practice setting.

Prerequisites: The American Legal System (LEST 101), Business Law II (BSAD 202), or permission of instructor.

### LEST 370

### REAL PROPERTY

*Fall/Spring, 3 credit hour(s)* 

Students will examine the law of real property as it relates to real estate transactions, landlord-tenant relationships, and real property disputes. Students will learn how real estate transactions are completed in a legal practice setting.

Prerequisites: The American Legal System (LEST 101), Business Law II (BSAD 202), or permission of instructor.

#### LEST 375 IMMIGRATION LAW & BORDER CONTROL

#### Fall/Spring, 3 credit hour(s)

Students will understand the historical immigration policies and controls as they evolved in the 19th and 20th centuries and then changed after the World Trade Center bombings. The policy changes and their effects will be analyzed to allow students to project the effects of future world events and policy changes. The enforcement methods and means will be studied as will the regulatory and statutory requirements for temporary visits and immigration with an emphasis on practical application of common processes.

Prerequisites: Junior Level Status or permission of the instructor.

#### **LEST 380**

WILLS, TRUSTS AND ESTATES Fall/Spring, 3 credit hour(s)

Students explore the planning and preparation of asset transfers pre-mortem and post-mortem as well as lifetime planning tools commonly associated with trusts and estates. Students learn how attorneys assist their clients to achieve their property transfer and lifetime personal planning goals through preparing wills, trusts and related documents and examine the tax considerations involved in the planning process. Students study the probate process in depth with an emphasis on the client interview process and preparation of legal documents.

Prerequisites: Legal Research (LEST 310) or junior status and approval of the instructor.

#### **LEST 388**

#### ENVIRONMENTAL LAW

Spring, 3 credit hour(s)

This course introduces students to the many aspects of Environmental Law. Students learn the main structure of the American Legal System: sources of law, classification of law, constitutional principles, and administrative agencies that are involved in environmental issues and concerns. The litigation process for environmental disputes is examined. The evolution of environmental policy is examined and primary national policies are introduced. Environmental Laws that relate to air-quality control, water quality control, toxic substance control, water management and hazardous releases, energy, and natural resources are examined. International environmental laws, particularly those of Canada, are discussed.

Prerequisites: Junior level status

#### LEST 410 AMERICAN INDIAN LAW & FEDERAL INDIAN POLICY

#### Spring, 3 credit hour(s)

This course provides an introduction to American Indian Law & Federal Indian Policies. Students examine Indian sovereignty, jurisdiction, and federal/state government to Indian relations. Students analyze events that have shaped American Indian rights under the United States Constitution and the history of those legal developments. The course covers a detailed assessment of the 1924 Citizenship Act as well as the 1968 Indian Bill of Rights Act and impact that each has had on Indian peoples in the United States.

Prerequisites: Business Law II (BSAD 202) or Introduction to Criminal Justice (JUST 101) and junior status or approval of the instructor.

#### LEST 420 CANNABIS LAW

Spring, 3 credit hour(s)

The regulation of cannabis is undergoing rapid changes in the United States and around the world. In this course, students learn the history and evolution of cannabis legislation, including decriminalization, legalization of medical marijuana, legalization of recreational marijuana, and the conflict between state laws and federal laws.

Prerequisites: LEST 101, BSAD 201, or permission of instructor

#### LEST 429 ORIENTATION TO CULMINATING EXPERIENCE Fall/Spring, 1 credit hour(s)

This course is intended as the precursor to the Senior Culminating Experience or the Senior Project in the Legal Studies (LEST) program. Seniors will meet with faculty on a weekly basis to discuss resume preparation, job interviewing techniques, on- the-job training, identifying and securing internships, internship requirements, performance assessment/evaluation as well as the expectations and requirements for the Senior Project. This course is a prerequisite to LEST 480– Internship in Legal Studies and LEST 485 – Senior Project.

Prerequisites: Senior status in the Legal Studies program.

#### **LEST 449**

#### ADVANCED LEGAL WRITING Spring, 3 credit hour(s)

Builds on skills acquired in Legal Writing to prepare students for writing more complex types of legal documents; students will analyze, cite, and find the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary sources.

Prerequisites: Legal Writing (LEST 330) or permission of instructor.

#### **LEST 450**

#### TRIAL COURT AND RULES OF EVIDENCE Spring, 3 credit hour(s)

This course provides students with a basic understanding of the legal mechanisms through which society resolves its disputes. Students will learn the details of trial and appellate process and procedures. Students will be provided with the necessary tools to develop confidence, ability and control when presenting courtroom testimony.

Prerequisites: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101) and junior level status, or permission of instructor.

#### **LEST 480**

#### LEGAL STUDIES INTERNSHIP Fall/Spring, 3 credit hour(s)

The Legal Studies Internship integrates classroom work and practical experience with cooperating businesses or agencies. The Internship allows seniors the opportunity to apply classroom learning in a legal or law enforcement setting. It is a structured field experience in which an Intern, under the guidance of a supervisor, acquires and applies knowledge and skills while working in a responsible role. The Internship will be tailored to the individual student's career interests and the needs of the supervising organization. Internship assignments and activities may include, but not be limited to, information gathering, research, drafting of documents, office management, and other tasks and responsibilities deemed necessary. This course can be taken multiple times up to a maximum of 15 credit hours.

Prerequisites: Senior status in the Legal Studies Program. All required courses must be completed before participating in the Internship. Students need permission of Program Director or Dean.

#### **LEST 485**

#### LEGAL STUDIES SENIOR PROJECT Fall/Spring, 3-15 credit hour(s)

This course is an alternative to the Legal Studies Internship. It is designed for students who are unable to complete a 15- credit internship. Students will complete a senior research project specifically addressing issues under the umbrella of legal studies. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee.

Prerequisites: Internship Orientation (LEST 429) and senior status In the Legal Studies program, or permission of the program director.

#### LPNC 100

### DRUG DOSAGE CALCULATIONS AND PHARMACOLOGY

Fall, 3 credit hour(s)

This course introduces the principles related to pharmacology. It examines a variety of drug classifications and their effects on the body. The course places emphasis on use of the nursing process in drug administration and includes drug calculations.

Prerequisites: Human Anatomy and Physiology I (BIOL 217), Composition & the Spoken Word (ENGL 101), Introduction to Psychology (PSYC 101), and PN Fundamentals (LPNC 101).

Practical Nursing Certificate Majors only.

#### LPNC 101

#### PRACTICAL NURSING FUNDAMENTALS Fall, 8 credit hour(s)

This course examines the evolution of nursing including current trends, and introduces the health care delivery system to the student. Communication techniques, including documentation, are explored. Legal and ethical considerations and the role of the LPN within healthcare are examined. Students will be encouraged to utilize the nursing process and critical thinking in providing nursing care to clients who are at various points on the health illness continuum. In lab, students will develop skills fundamental to the practice of nursing. Lab and theoretical content will be applied in the long-term care and clinic settings. Three hours lecture, three hours laboratory, a twelve-hour clinical component required weekly.

Prerequisites: Human Anatomy and Physiology I (BIOL 217), Composition & the Spoken Word (ENGL 101), Introduction to Psychology (PSYC 101), Drug Dosage Calculations and Pharmacology (LPNC 100), or permission of instructor. Practical Nursing Certificate Majors only.

#### LPNC 102 PRACTICAL NURSING: MEDICAL-SURGICAL NURSING

Spring, 3 credit hour(s)

This course introduces students to data gathering and nursing care concepts focusing on maternity, newborn, pediatric, and mentally-ill clients. The nursing process and clinical reasoning skills are utilized to adapt nursing concepts and procedures to these special populations.

Prerequisites: LPNC 101 PN Fundamentals, ENGL 101 Composition and the Spoken Word, BIOL 217 Anatomy and Physiology I - Corequisites: LPNC 103 PN Medical-Surgical Nursing, BIOL 218 Anatomy and Physiology II, PSYC 101 Introduction to Psychology

#### LPNC 103

#### PRACTICAL NURSING: MEDICAL-SURGICAL NURSING Spring, 8 credit hour(s)

Students utilize clinical reasoning and the nursing process in learning about fundamental disease processes and the LPN's role in prevention of illness, treatment of disease, and the restoration of health in the adult client. Concepts

related to safety, emotional support, communication, client teaching, and pharmacology are integrated throughout the course. Students utilize the nursing laboratory to enhance their psychomotor and clinical reasoning skills in practicing advanced nursing skills. Clinical experiences provide opportunities for students to apply theory/lab in the medical- surgical units and specialty units of acute care hospitals and clinics. Clinical component is required.

Prerequisites: LPNC 100 Drug Dosage Calculation & Pharmacology, LPNC 101 PN Fundamentals, BIOL 217 Anatomy and Physiology I, ENGL 101 Composition and the Spoken Word -Corequisites: LPNC 102 Practical Nursing - Special Populations, BIOL 218: Anatomy and Physiology II, PSYC 101 Introduction to Psychology

#### MATH 099 FUNDAMENTALS OF APPLIED MATHEMATICS Fall, 3 credit hour(s)

This course connects mathematical concepts and procedures to real-life applications relevant to a variety of technical trade fields. Topics include: a review of fundamental arithmetic concepts, order of operations, measurement and conversions, ratio and proportion, signed numbers, exponents and radicals, estimation, and an introduction to algebra. For students with no algebra background or for those receiving less than 75 on the New York State Math A or Integrated Algebra Regents or equivalent examination, or permission of instructor. Three hours lecture per week.

#### MATH 100 BEGINNING ALGEBRA Fall/Spring, 3 credit hour(s)

This course is designed to prepare the student for Intermediate Algebra (MATH 106). It assumes a limited algebra background at the secondary level. Topics include: a review of arithmetic operations, signed numbers, exponents, basic geometry concepts (such as angle measure, area and volume formulas), operations with polynomials, solving linear equations, and elementary word problems. Three hours lecture per week.

#### **MATH 101**

#### APPLIED COLLEGE MATHEMATICS Fall, 4 credit hour(s)

This course is designed to prepare students for success in technical and pre-engineering technology programs. It assumes an algebraic background at an introductory level. The course connects mathematical concepts and procedures to real-life applications relevant to a variety of technical trade fields. Topics include: an introduction to algebra, practical plane geometry, solid figures, angle measurement in degrees and radians, trigonometric ratios, solving systems of equations graphically and algebraically, and solving quadratic equations.

Applications using algebra concepts are stressed in this course.

#### MATH 106 INTERMEDIATE ALGEBRA Fall/Spring, 3 credit hour(s)

This course reviews and builds on the basic, fundamental concepts of algebra, which are required in many other courses and areas of study. Topics include: a review of fundamental concepts, first degree equations and inequalities, graphing and systems of equations, rational expressions, factoring, exponents and radicals, quadratic equations. Three hours lecture per week. AAS CREDIT ONLY. Prerequisite: Beginning Algebra (MATH 100) with a grade of C or better recommended or high school equivalent, or permission of instructor.

Prerequisites: Beginning Algebra (MATH

100) with a grade of C or better, or New York State Math A or Integrated Math Regents or equivalent examination with a grade of 70 or above, or permission of instructor.

#### MATH 111 SURVEY OF MATHEMATICS Fall/Spring, 3 credit hour(s)

A study of various mathematical topics including an introduction to quantitative reasoning skills, truth table logic, sets, probability, and geometry. This course is designed for non-technical oriented students. It is appropriate for students in liberal arts.

Prerequisites: Intermediate Algebra (MATH 106) with a grade of C or better, or 2 NYS high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examination, or permission of instructor.

#### MATH 115 MATHEMATICS FOR ELEMENTARY TEACHERS I

Fall/Spring, 3 credit hour(s)

The study of the development, meaning, and representations of numeration systems, operations

on whole numbers, number theory and the real number system. The focus of the course will be on mathematical representations for K-8 topics via problem solving. Three hours lecture per week. The majority of the course will be activity-based (exploration of topics through problem solving activities.) Prerequisite: Intermediate Algebra (MATH 106) or Math A plus one additional year of high school mathematics, or permission of instructor.

Prerequisites: Intermediate Algebra (MATH 106) with a grade of C or better, or two (2) high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examinations, or permission of instructor.

#### MATH 116 MATHEMATICS FOR ELEMENTARY TEACHERS II

#### Fall/Spring, 3 credit hour(s)

The study of the development, meaning, and representations of statistics, patterns and functions, concepts of geometry, and measurement of two- and three- dimensional figures. The focus of the course will be on the construction of mathematical representations for K-8 topics via problem solving. Three hours lecture per week. Prerequisite: Mathematics for Elementary Teachers I (Math 115) or permission of instructor.

Prerequisites: Mathematics for Elementary Teachers I (Math 115) with a grade of C or better, or permission of instructor.

#### MATH 121

## COLLEGE ALGEBRA

Fall/Spring, 4 credit hour(s)

This course provides basic algebraic concepts and an introduction to trigonometric and logarithmic functions. Emphasis is placed on equations and inequalities; polynomials, rational, exponential and logarithmic functions; and graphing and data analysis including modeling and linear regression. Additional topics include complex numbers; radical functions; right triangle trigonometry; systems of equations; and elementary transcendental functions.

Prerequisites: Intermediate Algebra (MATH 106) with a grade of C or better, or two (2) high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examinations, or permission of instructor. Cannot be taken for credit by students with credit in Pre-Calculus Algebra (MATH 123).

#### **MATH 123**

### PRE-CALCULUS

Fall/Spring, 4 credit hour(s)

This course provides an intense study of topics which are fundamental to the study of Calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Additional topics include complex numbers; systems of equations and inequalities; trigonometric identities; and trigonometric applications.

Prerequisites: Intermediate Algebra (MATH 106) with a grade of C or better, or 3 NYS high school regents math courses with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor. Cannot be taken for credit by students with credit in College Algebra (MATH 121)

#### MATH 131 COLLEGE TRIGONOMETRY Spring, 3 credit hour(s)

This course is designed for those students who lack the trigonometry skills needed to perform successfully in Calculus I. Topics include: angle measurement; right triangle trigonometry; trigonometric identities; trigonometric equations; graphs of trigonometric functions; inverse trigonometric functions; oblique triangles; and exponential and logarithmic functions.

Prerequisites: College Algebra (MATH 121) with a grade of C or better, or 3 years of high school mathematics with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

#### MATH 141 STATISTICS

Fall/Spring, 3 credit hour(s)

This course is an introduction to the standard methods of descriptive statistics, probability, and inferential statistics. Topics include: organization and presentation of data, descriptive measures of data, linear correlation and regression analysis, probability, binomial and normal probability distributions, t-distributions, estimation of parameters, and hypothesis testing. The Chi-square distribution and Chi-square applications are covered if time permits.

Prerequisites: College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123), Survey of Mathematics (MATH 111), or Mathematics for Elementary Teachers II (MATH 116) with a grade of C or better, or 3 years of high school mathematics with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

#### MATH 151 BUSINESS CALCULUS Fall/Spring, 4 credit hour(s)

This course is an intuitive introduction to the Calculus. Topics include: Review of functions, analytical geometry of the line, properties of limits; the derivative with applications; transcendental functions; and integrals with applications. Selected additional topics will be offered, as time permits, at the discretion of the instructor.

Prerequisites: College Algebra (MATH 121) or Pre-Calculus Algebra (MATH 123) with a grade of C or better, or for students who have taken 3 NYS high school regents math courses with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

### MATH 161

#### CALCULUS I Fall, 4 credit hour(s)

This course is the first of a three-semester sequence of Calculus courses. Topics include: A quickreview of functions and graphs; limit and continuity; the derivative and its properties; diferentiation of algebraic and trigonometric functions; curve sketching; related rates; applied extrema problems; other applications of differentiation; numerical methods; antidifferentiation.

Prerequisites: College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123) or College Trigonometry (MATH 131) with a grade of C or better, or for students who have taken 3 NYS high school regents math courses with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

#### MATH 162 C ALCULUS II Spring, 4 credit hour(s)

This course is the second of a three- semester sequence in Calculus. Topics include: differentials, definite integrals and their applications; integration of exponential, logarithmic, trigonometric and inverse trigonometric functions; techniques of integration; series; parametric equations and polar coordinates.

Prerequisites: Calculus I (MATH 161) with a grade of C or better recommended or permission of instructor.

#### MATH 263 CALCULUS III

Fall, 4 credit hour(s)

This course is the third of a three-semester sequence of Calculus courses developed for students in Engineering Science who expect to transfer to an engineering program at a four-year institution upon graduation.

Other qualified students may also take this course. Topics include conic sections, parametric and polar relationships, vector valued functions and basic differential geometry of plane and space curves, multivariable functions, partial derivatives and their applications, multiple integration and vector analysis (optional). Four hours lecture per week. Prerequisite: Calculus II (MATH 162) with a grade of C or better recommended or permission of instructor.

Prerequisites: Calculus II (MATH 162) with a grade of C or better or permission of instructor.

#### MATH 341 STATISTICS II

Spring/Fall, 3 credit hour(s)

This course includes confidence intervals and hypothesis testing for population proportions, variance and standard deviation; hypothesis testing two samples for differences between means; correlation and regression, including multiple regression; finding prediction intervals and hypothesis tests for the linear correlation coefficient; Chi-square tests and the F- distribution; non-parametric tests. Three lecture hours per week. Pre-requisites: Statistics (MATH 141) or permission of instructor.

Prerequisites: MATH 141 with a grade of C or better, or permission of instructor

#### MATH 351 DISCRETE MATHEMATICS Fall/Spring, 3 credit hour(s)

This course studies the basic tools and techniques of discrete mathematics and their applications. The topics include sets, logic, proofs, functions and relations, algorithms, elementary number theory, counting methods, discrete probability, pigeonhole principle, recurrence relations, introduction to graph theory and Boolean algebras. Three hours of lecture per week.

Prerequisites: College Algebra (MATH 121) or Pre- Calculus Algebra (MATH 123) with a grade of C or better, or permission of instructor.

### MATH 361 LINEAR ALGEBRA

#### Fall/Spring, 3 credit hour(s)

This course is an introduction to the theory of finite dimensional abstract vector spaces and linear transformations. Topics include: systems of linear equations, matrices, matrix algebra, determinants and inverses, linear combinations and linear independence, abstract vector spaces, change of basis and coordinates, inner product spaces, orthonormal bases. We also consider linear transformations, isomorphisms, matrix representation of linear maps, eigenvalues and eigenvectors, diagonalization and similarity. The applications include computer graphics, Markov chains, chemistry, lenear regression, network flow, electrical circuits, and differential equations. Three lecture hours per week. Pre- requisites: Calculus II (MATH 162) or permission of the instructor.

Prerequisites: MATH 162 or permission of the instructor.

#### MATH 362 DATA ANALYSIS

## Spring, 4 credit hour(s)

This course is an introduction to data analysis. Software will be used to analyze and interpret data throughout the course. Included topics are multiple regression, data modeling, along with an introduction to different distributions such as Gamma and Beta distributions.

Prerequisites: MATH 141, MATH 361

#### MATH 364 DIFFERENTIAL EQUATIONS Fall/Spring, 3 credit hour(s)

A course in Ordinary Differential Equations. Topics include: First-order differential equations, higher-order differential equations with constant and variable coefficients, applications of first and second-order linear equations, Laplace transforms, systems of linear differential equations and numerical methods for ordinary differential equations (optional).

Prerequisites: MATH 162 with a grade of C or better or permission of instructor.

#### MATH 371

### GRAPH THEORY

Fall/Spring, 3 credit hour(s)

This course is an introduction to the basic concepts of graph theory. Common classes of graphs such as paths, trees and cycles are analyzed. We also consider connectivity, traversability, and conditions for planarity. Applications are given to chemistry, engineering and computer science. Map colorings (including the famous four color theorem) are also considered. Three lecture hours per week. Prerequisites: Calculus II (MATH 162) or permission of the instructor.

Prerequisites: MATH 162 or permission of the instructor.

#### MATH 401

#### REAL ANALYSIS

### Fall/Spring, 4 credit hour(s)

This course is a proof-based course that covers the fundamentals of mathematical analysis: definitions and theorems regarding point set topology (applied to the real numbers), convergence of sequences, subsequences and series of numbers, continuity and differentiability of functions, the theory and practice of the Riemann integral, the theoretical rationale regarding convergence or divergence of sequences and series, and Fourier series. Also covered are uniform continuity and uniform convergence, specifically when it relates to the change in the order of limit operations.

Prerequisites: MATH 263 and MATH 361 with a grade of C or better or permission of the instructor.

## **Course Descriptions: Mechanical**

#### MATH 461 ADVANCED CALCULUS Spring/Fall, 4 credit hour(s)

This course is sequel to Calculus III and serves as an introduction to topics in Advanced Calculus. Topics include line, surface and volume integrals in two and three dimensional space; investigations of the gradient of a scalar field, discussion of conservative fields and potential functions; the divergence and curl of vector fields; generalizations of the fundamental theorem of calculus to evaluate integrals; curvilinear coordinates, multiple integrals and transformation o f multiple integrals; implicit functions; Jacobians; partial derivatives; higher order partial derivatives; mean value theorems; infinite series; Taylor series and an introduction to Fourier series. Subject applications are given to fluid and solid mechanics, Electrostatics, and Electromagnetism.

Prerequisites: Calculus III (MATH 263) and Linear Algebra (MATH 361) with a grade of C or better or permission of the instructor.

#### MECH 101 DRAWING FOR ENGINEERS

#### Fall, 1 credit hour(s)

Learn basic drawing skills including, sketching, geometric construction, measuring, isometrics, orthographic views, section views, dimensioning, auxiliary views, and sheet layout.

#### **MECH 102**

## PARAMETRIC MODELING

Spring, 2 credit hour(s)

An introduction to parametric design. The course covers parametric modeling fundamentals, solid geometry concepts, fundamentals of parametric construction tools, use of symmetrical features, advanced 3D construction tools, sheet metal tools, and basic assembly modeling. Software implementation of the skills learned in MECH101 and the creation of industry- accepted drawing sets are covered as well.

Prerequisites: MECH 101

#### MECH 103 INTRO TO HVAC-R Fall, 3 credit hour(s)

This course is an introduction to heating and air conditioning systems used to achieve a comfortable indoor environment. It includes a straightforward study of heating and cooling loads and introductory equipment selection. The topics of proper ventilation and refrigeration requirement of a building is developed through ASHRAE standards.

### MECH 112

3D MODELING Fall/Spring, 3 credit hour(s)

A 3D CAD Modeling course that introduces the student to topics of dimensioning, tolerances, assembly and detail drawings, gears, cams and 3D Rapid prototyping systems. 3D Modeling concepts, ASME standards, and GD&T will be emphasized. All CAD drawings will be created using solid modeling software.

#### MECH 121 MANUFACTURING PROCESSES I Fall/Spring, 3 credit hour(s)

This applied learning course provides an introduction to material removal, casting, and heat treatment processes. The student begins with a fundamental understanding of machine tools theory and practice. Instruction includes precision layout and measurement, lathe operations and tooling, milling operations and tooling, drills, reamers, and drilling machines. Instruction involves the selection and calculation of proper cutting speeds and feeds for processes involving different materials. Instruction also includes an investigation to the variety of casting processes, products produced through each process and common defects found. Students further investigate material properties and how change can occur through processing and heat treatments. The laboratory provides the opportunity to apply the material from lecture through the hands on operation of industrial tooling and equipment.

#### MECH 122

#### INTRODUCTION TO 3D PRINTING

This course introduces the fundamental concepts of 3D extrusion printer technology, operation, maintenance, and repair. The components and technology that make 3D printing possible are investigated before students learn the processes involved in moving from a parametric 3D model through the slicing software and then to printing. Fundamental skills like safety, maintenance, troubleshooting, and repair are introduced and practiced during the course. NOTE: In lieu of a textbook, students are required to purchase their own printer for this course. The recommended printer is a Creality Ender 3 which can be purchased through Amazon for \$189.00. We will unbox and assemble printers on day 1 of the course, so please purchase your printer prior to the start of the semester and bring it to Lab 1.

#### **MECH 128**

#### ELECTROMECHANICAL TECHNOLOGY Spring, 3 credit hour(s)

This course provides the knowledge base needed to understand the principles, concepts, and applications of electro- mechanics. It presents problem solving techniques that are critical for troubleshooting situations. Topics covered include: Nature of motion, simple and compound machines, torque, power transmission, motion devices, electric circuits, electromagnetic circuits and devices, and maintenance procedure for electrical and mechanical machines.

Prerequisites: College Algebra (MATH 121), College Physics I and Lab (PHYS 121/125).

#### MECH 221 MET LAB

### Spring, 1 credit hour(s)

In this course, students explore concepts related to statics, strengths, and materials courses through labs designed to reinforce key concepts. Students utilize knowledge and skills developed during the first two years of their engineering education to solve a simple design problem. Written communication skills are practiced and refined through the creation of lab reports documenting key information for each lab and/or design experiment.

Prerequisites: ENGS 101, Co-Requisites: ENGS 203, ENGS 205

#### MECH 223 INTRODUCTION TO CNC Fall, 3 credit hour(s)

A course designed to introduce students to the capabilities of CNC machine tools used in industry, to teach students the fundamentals in programming CNC lathes and milling machines, to provide students the opportunity to setup and operate CNC equipment and to experience the use of CAD/ CAM technology. Two hours lecture, three hours laboratory per week.

Prerequisite: Manufacturing Processes I (MECH 121) or permission of instructor.

#### **MECH 232**

#### MACHINE DESIGN Spring, 3 credit hour(s)

Design of machine elements subjected to static, dynamic and fluctuating loads. Theory includes design of beams, shafts, mechanical power transmission devices. A design project is required for the course. The recitation session will be used for solving numerical problems and for consultation on the semester design project.

Prerequisites: Strength of Materials (CONS 272) or Engineering Strength of Materials (ENGS 203), or permission of instructor.

#### MECH 241

FLUID MECHANICS

Spring, 3 credit hour(s)

This course develops a basic knowledge of fluids under static and dynamic applications. Properties of fluids, pressure, fluid statics, Bernoulli's and the energy equation are explored in respect to applications in the mechanical industry.

Flow rate, pipe sizing, and minor losses in piping systems are addressed.

#### MECH 242

FLUID POWER LAB

### Spring/Fall, 1 credit hour(s)

A study of force and motion in hydraulic and pneumatic systems, involving cylinders, pumps, valves, and accumulators. Electrical, hydraulic, and pneumatic controls will be studied, with an emphasis on sequential operation of fluid devices. Both electrical and fluid schematic diagrams will be produced.

Prerequisites: Corequisites: Fluid Mechanics (MECH 241) or permission of instructor.

#### **MECH 301**

#### TECHNICAL DYNAMICS

Fall/Spring, 3 credit hour(s)

Students study the principles of dynamics and the solution of applied engineering problems. Twodimensional dynamic analysis of particles and rigid bodies are resolved using fundamental analytical methods and computer simulation.

Rectilinear, curvilinear, and rotary motion, D'Alembert's principles of work and energy, impulse and momentum, and three-dimensional kinematics and dynamics are covered.

Prerequisites: Machine Design (MECH 232) or permission of instructor.

#### **MECH 303**

## GEOMETRIC DIMENSIONING & TOLERANCE

Spring, 2 credit hour(s)

Introduction to the terminology and applications of Geometric Dimensioning and Tolerancing (GD&T). Students learn and apply the key principles of the ASME Y14.5-20XX standard. Students read and interpret industry drawings with GD&T, create their own drawings utilizing GD&T, and fabricate and measure assembly parts to ensure compliance.

Prerequisites: MECH 121 (Manufacturing

Processes) and MECH 102 (Parametric Modeling)

#### **MECH 312**

#### ENGINEERING DESIGN

This course focuses on learning and practicing an industry-accepted process to design mechanical objects; students start with product discovery and a goal of delivering a viable product by the end of the semester. Sketching, hand drawing, parametric modeling, and GD&T are utilized in concert with written communication to document this process. Mathematical models and other principles learned in statics, strengths, materials, and machine design among others are used alongside measurements, tests, and experiments to evaluate and advance the design state. Hand tools, 3D printing, woodworking, and/or machine tools are utilized throughout this iterative process to experimentally verify generated concepts and test prototypes as appropriate.

Prerequisites: MECH 303, ENGS 350

#### MECH 322

#### **ADVANCED 3D PRINTING**

This course builds on the topics of Introduction to 3D Printing. Topics include print material selection, mechanical properties of printed parts, dual extrusion printing, volume optimization, large-scale prints, accuracy, sizing and tolerances, resin printers, functional prototypes & production, emerging technology, limitations of 3D printing and health risks. Weekly labs examine new topics and offer opportunities for introducing, practicing, and refining 3D printing skills with an emphasis on creating functional prototypes.

Prerequisites: MECH 122

#### MECH 332

## INTERMEDIATE MACHINE DESIGN *Fall, 3 credit hour(s)*

This course is a continuation of MECH 232 – Machine Design. Design of shafts, keys, couplings and seals provide application to tolerances and fits. The study of bearing types, loads, design life and selection along with fastener selection, machine frames, connection and joints; linear motion, motion control and electric motors and controls used in automated machinery.

Prerequisites: Machine Design (MECH 232) or permission of instructor.

#### **MECH 341**

#### INTERMEDIATE FLUID MECHANICS

This course is an intermediate step in students understanding of fluid mechanics. Topics include fluid kinematics, Bernoulli's equation, mass, energy, and momentum analysis of flow systems, internal flow, external flow, compressible flow, and differential analysis of fluid flows. The continuity, stream function, and Navier- Stokes equations are development for 2-D and 3-D flows. The introduction of similitude and dimensional analysis is also included.

Prerequisites: MECH 241 and 45 credits or more or permission of the instructor

#### **MECH 342**

#### THERMODYNAMICS

Spring, 3 credit hour(s)

This course will investigate thermal power and its applications using the first and second laws of thermodynamics. The properties of liquids and gases will be considered in their current and emerging applications to energy production. The fuel sources will be discussed for their energy input and output heat values. The efficiency of all energy applications will be explored while evaluating the theory of heat transfer. Applications of the Rankin, Otto, Brayton, and refrigeration cycles will be used in evaluating the energy production of thermal systems.

Prerequisites: College Physics II (PHYS 122) and Calculus I (MATH 161), or permission of instructor.

#### MECH 343 HEAT TRANSFER Fall/Spring, 3 credit hour(s)

This course explores the various methods of transferring heat from a source to a sink in engineering systems. Topics will focus on the energy balance of a system. The transport phenomena of heat transfer will be studied in detail, allowing students to internalize these physical principles of conduction, convection, and radiation.

Prerequisites: College Physics II (PHYS

122) and Calculus I (MATH 161), or permission of instructor.

#### **MECH 350**

#### QUALITY IMPROVEMENT Fall/Spring, 3 credit hour(s)

Statistical concepts related to quality control and improvement. Theory, construction, and interpretation of control charts in an industrial manufacturing environment. Probability as it relates to acceptance sampling and ISO 9000 quality standards.

Prerequisites: Junior or senior level status

#### **MECH 351**

#### DESIGN OF EXPERIMENTS Spring, 3 credit hour(s)

This course provides methodologies that engineers, technologists, and management personnel need to plan and conduct experiments to quantify cause and effects relationships in complex systems. Design of experiments test multiple factors at one time determining whether changes to products, processes, and systems areimprovements. Students will perform simple comparative experiments isolating known sources of variation; while multiple level factional designs will allow analysis of variance (ANOVA) to predict models of interactions that optimize a process.

Prerequisites: Calculus I (MATH 161) and Junior level status, or permission of instructor.

#### MECH 377 CAPSTONE RESEARCH & PROPOSAL Fall. 2 credit bour(s)

This course is part I of a senior design course. Its purpose is to allow the student to research and propose a project. The project will be constructed and tested in MECH 477. Examples include, but are not limited to, new product development or improvements to an existing product. Course faculty must approve all projects.

Prerequisites: Completion of 90 credit hours or permission of instructor.

#### **MECH 412**

## VIBRATIONS AND NOISE CONTROL *Fall/Spring, 3 credit hour(s)*

The objective of this course is to provide students with relevant skills to model and analyze vibrating mechanical systems and equipment. Instruction includes methods for solving free, harmonic, and general forced responses and the design of suppression systems. Students gain experience with accelerometers and varies other tools needed to measure vibration and how to mitigate noise due to vibration.

Prerequisites: MECH 241 and junior level status or permission of the instructor.

#### **MECH 416**

## APPLIED COMPUTATIONAL FLUID DYNAMICS

Fall/Spring, 3 credit hour(s)

This course introduces the student to modeling and analyzing fluid mechanics problems via the finite difference and finite volume method. Fundamentals of CFD theory, solution, procedures, techniques, and analysis are discussed. Topics include computational grid generation, fluid model setup, convergence and accuracy analysis, data interpretation, model validation and discussion of conclusions. Students will use CFD software to solve various fluid problems.

Prerequisites: Intermediate Fluid Mechanics (MECH 341), Differential Equations (MATH 262), or permission of instructor.

#### **MECH 417**

#### APPLIED FINITE ELEMENT METHOD Fall/Spring, 3 credit hour(s)

This course introduces the student to modeling and analysis of mechanical systems via the finite element method. Topics include the theory and procedures to design computer models to simulate various applied mechanical problems, validation of computer models, and interpretation of numerical results, mesh and accuracy analysis, and discussion of conclusions. Students will use FEM software to solve various mechanical and heat transfer problems.

Prerequisites: Machine Design (MECH 232), Differential Equations (MATH 262), or permission of instructor

#### MECH 443

#### TECHNICAL PROPULSIONS

Fall, 3 credit hour(s)

This course investigates propulsion systems. Conservation of momentum, mass, and energy are applied to many types of propulsions systems. The course examines and analyzes propeller design (airplane and boat), turbojets, turboprops, ramjets, and rockets.

Prerequisites: MECH 301 (Technical Dynamics), MECH 342 (Thermodynamics), and MATH 364 (Differential Equations) - Corequisites: MECH 341 (Intermediate Fluid Mechanics)

#### MECH 477

#### CAPSTONE PROJECT

Spring, 3 credit hour(s)

This course provides a learning experience that allows a student to design, implement, test, and analyze a project that was proposed in MECH 377.

Prerequisites: MECH 377 Capstone Research & Proposal - Corequisites: Completion of 90 credit hours or permission of instructor.

#### **MECH 480**

## CO-OP EXPERIENCE IN MECHANICAL TECHNOLOGY

Spring, 1-6 credit hour(s)

The course provides real world learning experience through professional cooperative education placement in a private/public organization related to the student's academic objectives and career goals. This course requires students to be involved in the design, fabrication, and testing of a system, a component, a software, or a machine where real world constraints such as manufacturability, reliability, safety, environment, aesthetics, and costs are important. In addition to their work experience, students are required to submit bi-weekly reaction papers and an academic portfolio and presentation to a Faculty Coordinator.

Prerequisites: Junior standing, consent of academic advisor, approval by Dean of CSOET.

#### **MKTX 310**

#### INSTRUMENTATION AND CONTROLS Spring, 3 credit hour(s)

This course will introduce instrumentation systems. process measurements, and process control. Specifically, the course willd iscuss measurement terminology, differentiating between analog and digital, describe the instrumentation used for electronic testing and develop the principles of operation of transducers used for process measurement and control.

Prerequisites: ENGS 263/264 Electric Circuit/ Lab

#### **MKTX 320**

#### MECHATRONICS LABORATORY I Fall, 1 credit hour(s)

In this laboratory, the experiments are designed to give students hands on experience with components and measurement equipment used in the design of mechatronic products. Students learn the functions of operational amplifier, diodes/LEDs, Transistors, relays, sensor, and digital components.

Prerequisites: ENGS 264 Electric Circuit Lab, MKTX 216 Digital Fundamentals and Logic Design Lab

#### MKTX 325

## MICROCONTROLLERS

*Spring, 3 credit hour(s)* This course introduces microcontrollers. The fundamental skills needed to understand, use, and design microcontroller-based systems are explored.

The course focuses on 8-bit microcontroller architecture.

Prerequisites: MKTX 215/216 Digital Fundamentals and Logic Design/Laboratory

#### **MKTX 370**

#### MECHATRONICS LABORATORY II Spring, 1 credit hour(s)

This mechatronics laboratory emphasizes the applications of analog electronics, digital electronics, sensors and transducers, actuators, and microcontrollers. Laboratory experiments are designed to give the student hands-on experience with components and measurement equipment used in the design of mechatronic products. Design and construction of mechatronics systems are emphasized.

Prerequisites: MKTX 310 Instrumentation and Control - Corequisites: MKTX 325 Microcontroller

### MKTX 410

#### **ROBOTICS ANALYSIS AND SYNTHESIS** *Fall, 3 credit hour(s)*

This course teaches the fundamentals of robotics through implementation of control theory and high level system dynamics and modeling. Students write computer code, implement system controllers, use sensory equipment, collect and analyze data, and design and develop robotic systems.

Prerequisites: MKTX 310 Instrumentation and Controls

#### MKTX 477

#### MECHATRONICS CAPSTONE I Fall, 2 credit hour(s)

This is the first of a two course sequence for Mechatronics Capstone Project where students address open-ended problems.

Prerequisites: Senior standing in Mechatronics or permission of instructor.

#### MKTX 478

#### MECHATRONICS CAPSTONE II Spring, 2 credit hour(s)

This is the second of a two-course sequence for Mechatronics Capstone project where students demonstrate the proposed problem resolution.

Prerequisites: MKTX 477 Mechatronics Capstone I

#### MSPT 101

#### POWERSPORTS SERVICE Fall, 3 credit hour(s)

This course is an introduction to the general theories of system and maintenance of powersports vehicles, including motorcycles, snowmobiles and all-terrain vehicles.

#### **MSPT 110**

## ENGINE AND POWER TRANSMISSION SERVICE

Spring, 4 credit hour(s)

This course involves the complete disassembly, inspection, repair and reassembly of modern modular constructed powertrain assemblies. The principles of operations key to high performance, compact engines/transmission assemblies are thoroughly covered.

Prerequisites: Powersports Service (MSPT 101) or permission of instructor.

#### **MSPT 112**

#### POWERSPORTS ELECTRICAL SYSTEMS Fall, 3 credit hour(s)

This course is a study of fundamental electrical circuits and relative theory as applied to powersports machines. Series, parallel, series-parallel circuits, magnetism, direct and alternating current fundamentals; batteries, charging systems, starters, lighting systems, and basic electronics are studied.

Prerequisites: None - Corequisite: MSPT 122 Powersports Electrical Lab or with permission of instructor.

#### **MSPT 113**

#### POWERSPORTS ENGINE DIAGNOSTICS Spring, 3 credit hour(s)

With the completion of this of this course of study, the student will be able to diagnose and repair a machine with a no- start condition resulting from a fuel or ignition problem. Knowledge and understanding of sophisticated engine fuel and ignition systems is the focus of this course. Students study primary ignition circuits, secondary firing, points and condenser, magneto, capacitor discharge, halleffect and transistor theory. Electronic computer scanners, gages and other diagnostic devices are used throughout the course. Study of fuel systems begins with fuel delivery and includes electronic fuel injection.

Prerequisites: MSPT 101 Powersports Service, MSPT 112 Powersports Electrical Systems, MSPT 122 Powersports Electrical Systems Lab, or with permission of instructor. - Corequisite: MSPT 114 Powersports Engine Diagnostics Labor with the permission of the instructor

#### MSPT 114

## POWERSPORTS ENGINE DIAGNOSTICS LAB

#### Spring, 1 credit hour(s)

The Laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, both hard-copy and electronic, while testing systems with digital volt/ohm meters and computer scanners. Fuel and powertrain control systems are diagnosed with the latest tools available. With the completion of both lecture and lab, (MSPT 113 and MSPT 114) students will be able to diagnose and repair a machine with a no-start condition resulting from a fuel or ignition problem. the student will be able to access computer information, including inputs, outputs, and miscellaneous tests.

Prerequisites: None - Corequisite: MSPT 113 or with the permission of the instructor

#### **MSPT 120**

#### FRAME AND SUSPENSION SYSTEMS Spring, 3 credit hour(s)

This course covers the theory, diagnostic and service procedures used in suspension and frame systems unique to the Powersports arena. Braking and suspension concerns are integrated into frame design theory.

Prerequisites: Powersports Service (MSPT

101) or permission of instructor.

#### MSPT 122

#### POWERSPORTS ELECTRIC SYSTEMS LAB Fall, 1 credit hour(s)

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, both hard-copy and electronic. Testing involves batteries; series, parallel, and series-parallel circuits, as well as charging and starting systems component identification and service.

Prerequisites: None - Corequisite: MSPT 112 or with the permission of the instructor

#### **MSPT 130**

#### MARINE PROPULSION SYSTEMS Fall, 3 credit hour(s)

A study of the different types of propulsion systems relative to various types of aquatic craft, including jet and propeller will be studied. The theory and construction of propulsion systems will be discussed.

#### **MUSC 101**

#### INTRODUCTION TO MUSIC Fall, 3 credit hour(s)

Introduction to Music samples 500 years of music history and includes units on classical, blues, jazz, popular, Broadway, film, and world music. In the process, it gives the student the tools needed to analyze and evaluate music in a variety of styles for lifelong growth.

#### NCR N02

#### **]SOLAR READY VETS**

#### Fall/Spring/Winter/Summer, 0 credit hour(s)

The Solar Ready Vets Program is a national training program created by the United States Department of Energy, which is designed to get transitioning soldiers and jobs in the solar industry. The program is a five week 200 hour training program that covers the material needed to pass the North American Board of Certified Energy Practitioners (NABCEP) PV associate exam, basic electricity, system design basics, cost justification, safety training, hands on training with solar equipment, completing a solar PV installation, resume writing, interview techniques, and opportunities to interview with solar companies. The course is delivered over five weeks with classes running daily for eight hours per day.

#### NCR N03

## CDL - COMMERCIAL DRIVER LICENSE TRAINING

#### *Fall/Spring/Summer, 0 credit hour(s)*

CDL – Commercial Driver License Training will provide the student with the required knowledge and skills to pass the New York State Department of Motor Vehicles, Road Test, for the class of license they wish to receive, Class A or B. The program is 50 hours consisting of 20 hours classroom training and 30 hours if individual behind the wheel training with an instructor. Major topics covered are; Driving Skills, Safety, Vehicle Controls, Mechanical Systems and Documentation requirements. The course is delivered over a time period, with evening classes and individual behind the wheel hours scheduled between the student and instructor.

#### NCR N04

## CERTIFIED CLINICAL MEDICAL ASSISTANT

#### Fall/Winter/Spring/Summer, 0 credit hour(s)

The Clinical Medical Assistant course is designed to prepare students to function as professionals in multiple healthcare settings. Medical assistants with a clinical background perform various clinical tasks including assisting with the administration of medications and with minor procedures, performing an EKG electrocardiogram, obtaining laboratory specimens for testing, educating patients, and other related tasks. Job opportunities are prevalent with physician's offices, clinics, chiropractor's offices, hospitals and outpatient facilities. The course is delivered over 14 weeks containing 140 classroom hours. After classroom training is complete there will be a clinical experience of 160 clinical hours at a local health organization.

#### **NURS 101**

## FUNDAMENTALS OF NURSING *Fall*, 6 credit hour(s)

This course provides the student with knowledge and skills basic to nursing. Clinical experiences assist students in applying NURS 101 theory to client care. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting. Three hours lecture, three hours laboratory, and a six-hour clinical component required weekly.

Prerequisites: Pharmacology I (NURS 103), Nursing Seminar (NURS 105), Anatomy and Physiology I (BIOL 217), Composition and the Spoken Word (ENGL 101). NURSING MAJORS ONLY.

#### NURS 103 PHARMACOLOGY I Fall, 1 credit hour(s)

This introductory pharmacology course will explore the basic principles surrounding pharmacology. Topics include basic pharacological principles, dosage calculations, regulatory compliance, patient education, and reduction of medication errors. Restricted to nursing students.

Prerequisites: Fundamentals of Nursing (NURS 101), Nursing Seminar (NURS 105), and Composition & the Spoken Word (ENGL 101). NURSING

MAJORS ONLY or permission of instructor.

#### NURS 104 PHARMACOLOGY II

### Spring, 1 credit hour(s)

This pharmacology course explores the various classifications of drugs, and their associated nursing care. Drugs used to treat psychiatric, reproductive, bone/joint disorders, analgesics, and those commonly used during pregnancy will specifically be discussed

Prerequisites: Pharmacology I (NURS 103), Fundamentals of Nursing (NURS 101), Mental Health Nursing (NURS 106), Maternal/Child Nursing (NURS 107), or permission of instructor.

NURSING MAJORS ONLY.

## NURS 105

## NURSING SEMINAR

Fall, 1 credit hour(s)

This course serves as an introduction to the nursing program. It includes differentiating a program of study from individual courses: clarifying experiences; learning study skills and test taking strategies; practicing stress and coping techniques; and enhancing organizational and time management skills. Students explore critical thinking within the context of nursing. The seminar format provides an opportunity to apply critical thinking to current coursework. Attendance with active participation in discussions is expected. Attendance is required in this course because of the importance of dialogue in thinking and learning. The different viewpoints shared during the seminar will help expand the thinking of all participants.

Prerequisites: Nursing Students Only

#### **NURS 106**

## MATERNAL NEWBORN NURSING Spring, 4.5 credit hour(s)

Concepts from nursing fundamentals are adapted to the nursing c,are of the family. The course emphasizes utilization of all components of the nursing process in caring for individuals, within the context of family and community, during the childbearing period. Concepts of pregnancy, labor and delivery, post-partum, and newborn will be discussed. The student will build on skills using the nursing process and critical thinking to meet maternal health care needs within the family system. Clinical experiences are provided in area hospitals, community agencies and women's health clinics.

Prerequisites: NURS 101, NURS 103, NURS 105, BIOL 217, ENGL 101, Completion of Infection Control and Child Abuse Courses - Corequisites: BIOL 218, NURS 104, NURS 107, PSYC 101

#### **NURS 107**

#### MENTAL HEALTH NURSING

This course offers an examination of concepts and theories related to psychiatric and mental health nursing within the context of the therapeutic relationship. Aspects of primary, secondary, and tertiary prevention are addressed as a basis for promoting and sustaining optimum mental health functioning. Emphasis is placed on relationship-centered care, teamwork, quality and safety for diverse patient populations with psychiatric disorders. Prerequisites: Human Anatomy and Physiology I (BIOL 217), Fundamentals of Nursing (NURS 101), Pharmacology I (NURS 103) and Nursing Seminar (NURS 105); and Composition & the Spoken Word (ENGL 101). - Corequisites: Human Anatomy and Physiology II (BIOL 218), Pharmacology II (NURS 104), Maternal/Child Nursing (NURS 106), and Introduction to Psychology (PSYC 101). NURSING MAJORS ONLY.

#### **NURS 200**

#### PHARMACOLOGY III

Fall, 1 credit hour(s)

This course explores classifications of drugs used to treat fluid and electrolyte imbalances, infection and cancer. Additionally, drugs used in the treatment of respiratory gastro-intestinal, and endocrine disorders will be discussed.

Prerequisites: Pharmacology II (NURS 104), Mental Health Nursing (NURS 107), and Maternal/Child Nursing (NURS 106). NURSING MAJORS ONLY.

#### **NURS 201**

#### MEDICAL-SURGICAL NURSING I Fall, 10 credit hour(s)

Course content focuses on application of nursing process to care of pediatric and adult patients experiencing medical-surgical conditions along the health-illness continuum. Topics covered include those related to acute/complex respiratory, endocrinology, gastrointestinal, oncologic, musculoskeletal and fluid, electrolyte and acid-base disorders. Students apply their learning to clients in medicalsurgical clinical settings. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting. Six hours lecture, two hours laboratory, and a nine-hour clinical component required weekly.

Prerequisites: Maternal/Child Nursing (NURS 106), Mental Health Nursing (NURS 107), and Anatomy & Physiology I (BIOL 217). - Corequisites: Microbiology (BIOL 209), Pharmacology III (NURS 200), Human Development (PSYC 225) or Child Development (PSYC 220).

NURSING MAJORS ONLY.

#### **NURS 202**

#### MEDICAL-SURGICAL NURSING II Spring, 10 credit hour(s)

This course focuses on application of nursing process to care of pediatric and adult patients experiencing medical-surgical conditions along the health-illness continuum. Topics covered include those related to acute/complex cardiovascular, neurologic, hematologic, integumentary, immunologic, sensory, reproductive, emergency, and disaster events or disorders. Students will apply their learning to clients in medical-surgical clinical settings. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting.

Prerequisites: Maternal/Child Nursing (NURS 106), Mental Health Nursing (NURS 107), Medical-Surgical Nursing I (NURS 201), Microbiology (BIOL 209), and Human Development (PSYC 225) or Child Development (PSYC 220). - Corequisites: Professional Issues and Trends in Nursing (NURS 203), Pharmacology IV (NURS 204).

NURSING MAJORS ONLY.

#### **NURS 203**

## PROFESSIONAL ISSUES AND TRENDS IN NURSING

Students explore and analyze socio- economic and political variables that affect professional nursing and healthcare. Students examine the professional growth and transition of the student nurse, current issues in healthcare, nursing management, and career development.

Prerequisites: Medical-Surgical Nursing I (NURS 201). Writing intensive course. NURSING MAJORS ONLY.

#### **NURS 204**

#### PHARMACOLOGY IV

Spring, 1 credit hour(s)

This course explores nursing care associated with the classifications of drugs used to treat cardiovascular, blood, sensory, neurological, immune, and skin disorders. In addition, drugs used in the emergency setting will be examined.

Prerequisites: Pharmacology III (NURS 200), Medical-Surgical Nursing I (NURS 201), and Medical-Surgical Nursing (NURS 202). NURSING MAJORS ONLY.

#### **NURS 300**

### CONCEPTUAL FRAMEWORKS IN NURSING

#### Fall/Spring, 3 credit hour(s)

This course examines the historical development and evolution of nursing theory and its interrelationship to research and professional nursing practice. The course includes critical thinking activities used to conceptualize, apply, analyze, and synthesize knowledge related to specific nursing theories and their importance in nursing education, practice, and research. A group project that incorporates the students' knowledge of nursing theory and nursing theorists will be used to demonstrate an understanding of the relevance of theory to practice.

Prerequisites: Students must be enrolled in the RN-BS program or permission of instructor.

#### NURS 302

## LEGAL & ETHICAL ISSUES IN HEALTH CARE

#### Spring, 3 credit hour(s)

The student will examine the legal and ethical issues related to health care as they impact the health services and health care decision making. A variety of commonly experienced legal situations and ethical dilemmas will be discussed, including professional liability, patients' rights, abortion, AIDS care, informed consent, organ transplantation, health care delivery and resource allocation and issues related to death and dying.

Prerequisites: Students must be enrolled in the RN-BS program or permission of instructor.

#### **NURS 303**

### HEALTH ASSESSMENT IN NURSING

Fall, 4 credit hour(s)

This course will provide the student with knowledge and skills basic to health assessment in nursing. The course emphasizes critical thinking skills required for accurate collection and analysis of client health information and provides opportunities for enhancement of physical assessment skills. Students will be responsible for finding a qualified preceptor (with the approval of the course instructor) in order to successfully complete the clinical portion of this course. Prerequisites: Students must be admitted into the RN-BS program or permission of instructor.

#### NURS 304 HEALTH PROMOTION AND RESTORATION Spring, 3 credit hours

This course provides the student with knowledge of the major individual and community models and theories that guide health-promotion interventions across the life span. This course presents information that enhances the students' ability to provide holistic health promotion and preventive care. The planning, implementing and evaluating of health promotion, prevention, and restoration activities for individuals, families, and communities is stressed. Three hours lecture per week.

Prerequisites/Corequisites: Conceptual Frameworks in Nursing (NURS 300), Health Assessment in Nursing (NURS 303), or permission of instructor. Enrolled in RN-BS.

#### **NURS 370**

## RESEARCH METHODS IN HEALTH SCIENCES

Fall/Spring, 3 credit hour(s)

The purpose of this course is to understand and apply research findings to practice.

Prerequisites: Enrolled in RN-BS, Statistics (MATH 141) or equivalent coursework or permission of instructor.

### NURS 400 NURSING MANAGEMENT AND

LEADERSHIP Spring, 3 credit hour(s)

This course introduces the student to the conceptual basis for the application of leadership and management principles. The student gains a better understanding of the application of these principles in the management and coordination of health care delivery systems. Exploration of the critical components of leadership and management in diverse health care settings and application of course content enhances the coordination of quality client care and the role of the nurse as a leader and manager. Two hours lecture per week and 45 hour preceptorship.

Prerequisites: Conceptual Frameworks in Nursing (NURS 300), Legal and Ethical Issues in Health Care (NURS 302), Health Assessment in Nursing (NURS 303), Health Promotion and Restoration in Nursing (NURS 304) or permission of instructor. Writing intensive course.

#### **NURS 402**

## COMMUNITY HEALTH NURSING *Fall*, 4 credit hour(s)

This course will examine public and community health theory and practice as they relate to the Registered Professional Nurse. Public health principles, epidemiology, and community health nursing theory will be utilized by the student in conducting a community health assessment and implementation of a service-learning project within the community. Four hours lecture per week, Service Learning Project.

Prerequisites: Conceptual Frameworks in Nursing, (NURS 300), Health Assessment in Nursing (NURS 303), Health Promotion and Restoration (NURS 304), Research Methods in the Health Sciences (NURS 370), or permission of instructor.

#### NURS 403 TRANSCULTURAL NURSING Spring, 2 credit hour(s)

This course provides the student with an overview of the influence of culture on health care practices and in the delivery of nursing care for individuals, groups, and communities. Increased awareness of culturally diverse nursing care and a sound understanding of the impact of cultural beliefs, values, and practices upon health and health care delivery is a direct outcome of this course. The student explores and reflects upon their own cultural beliefs related to health and health care delivery and examines client behaviors, cultural perspectives, and barriers to transcultural communication.

#### **PHTA 100**

## INTRODUCTION TO PHYSICAL THERAPY *Fall, 2 credit hour(s)*

In this course, students are introduced and acclimated to the Physical Therapist Assistant program, and the physical therapy profession. Students are familiarized with the ICF Disablement Model and Patient/Client Management as a framework for guiding physical therapy practice. They receive introduction, to a variety of practice settings and the team approach to rehabilitation. Students receive an introduction to the basic principles of medical terminology, physical therapy documentation, and reimbursement. Legal and ethical standards of conduct and the APTA's Core Values are identified and discussed. Students begin developing a greater awareness of and appreciation for the values and differences of others through self-reflection.

Prerequisites: PHTA majors only

#### **PHTA 101**

#### FUNDAMENTAL PHYSICAL THERAPY SKILLS AND MODALITIES

Fall, 3 credit hour(s)

In this course, students are introduced to basic physical therapy skills necessary for providing patient care across the continuum of physical therapy settings. Students develop competency in basic infection control procedures, data collection, bed mobility, transfers, gait training with assistive devices, wheelchair management, application of thermal modalities, and basic therapeutic exercise. Students develop professional communication and clinical problem-solving skills through weekly case study implementation.

Prerequisites: PHTA majors only.

#### **PHTA 102**

#### CLINCAL KINESIOLOGY Spring, 3 credit hour(s)

In this course, students study aspects of human motion beginning with the structure and functions of the skeletal, muscular, articular, and nervous systems, as well as concepts of arthrokinematics and biomechanics. The course focuses on application of knowledge of origins, insertions, actions and innervations of extremity and trunk musculature and palpable surfaces of the same as they relate to functional human movement. Students will apply this

knowledge to analysis of the gait cycle and posture. Prerequisites: Grade of C or better in BIOL 217, PHTA 100, PHTA 101

#### **PHTA 103**

#### MUSCULOSKELETAL PATHOLOGIES Spring, 4 credit hour(s)

Students are introduced to tissue healing in

relation to musculoskeletal pathologies and their role in assisting the physical therapist with management of this patient population. The principles and techniques of therapeutic exercise are presented and related to specific musculoskeletal pathologies across the lifespan. The student will learn to apply a variety of exercise techniques when given the physical therapy plan and goals. There will be a focus on educating the patient and/or care giver throughout the course. Students will also begin to read and understand professional literature. Three hours lecture, three hours laboratory per week.

Prerequisites: Introduction to Physical Therapy (PHTA 100), Fundamental Physical Therapy Skills (PHTA 101), Clinical I (PHTA 104) and Human Anatomy and Physiology I (BIOL 217). - Corequisites: Kinesiology (PHTA 102), Musculoskeletal Pathologies (PHTA 103), Clinical II (PHTA 106) and Human Anatomy and Physiology II (BIOL 218), or permission of instructor.

### **PHTA 104**

### CLINICAL I

Spring, 4 credit hour(s)

In this course, the student is assigned to a physical therapy clinical site where they work full time under the direct supervision of a licensed physical therapist or a registered physical therapist assistant. This provides the student with the opportunity to put the knowledge and skills acquired in the classroom and laboratory into practice in the clinical setting. A strong emphasis is placed on communication and professional behaviors.

Prerequisites: PHTA majors only

#### **PHTA 105**

#### MUSCULOSKELETAL ASSESSMENT Spring, 2 credit hour(s)

In this course, students are introduced to data collection methods used to assist the physical therapist with assessment of the musculoskeletal system, including the role of the PTA in the assessment process. Students will develop skill in assessment of muscle strength and range of motion using goniometry and manual muscle testing. Students will be taught soft tissue mobilization techniques for assessment and treatment of common musculoskeletal impairments.

Prerequisites: PHTA 100, PHTA 101, BIOL 217.

#### **PHTA 203** PTA SEMINAR I

Fall, 2 credit hour(s)

This seminar course allows second year PTA students to engage in activities and discussions to foster the development of the Core Values of the PT and PTA, building on concepts introduced in PHTA 100. Guest speakers, class assignments and group discussion as well as outside activities will promote students' integration of the American Physical Therapy Association Core Values of accountability, altruism, collaboration, compassion/caring, duty, excellence, integrity, and social responsibility, in preparation for culminating clinical experiences and clinical practice as a Physical Therapist Assistant.

Prerequisites: PHTA 104

#### **PHTA 204** CARDIOPULMONARY AND INTEGUMENTARY PATHOLOGIES Fall, 4 credit hour(s)

In this course, students will apply musculoskeletal knowledge from the previous semester to amputee and prosthetic rehabilitation, and orthotics. Students will study the cardiovascular and pulmonary systems and related pathologies. Cardiopulmonary rehabilitation principles and management will be discussed and applied. Conditions of the integumentary system will be discussed with emphasis on physical therapy management of wounds and burns. Students will also receive an introduction to common conditions related to other body systems and their management from a physical therapy perspective. Other systems will include endocrine and metabolic, gastrointestinal, genital and reproductive, hematologic, hepatic and biliary, immune, lymphatic, renal and urologic.

Prerequisites: PHTA 104, BIOL 217, BIOL 218, or permission of instructor

#### **PHTA 205**

#### NEUROMUSCULAR PATHOLOGIES Fall, 4 credit hour(s)

In this course, students will study neuroanatomy as applied to peripheral and central nervous system disorders. Principles of neurological rehabilitation and management of patients with neurological conditions are discussed and applied.

Students learn about normal motor development, theories of motor control, and motor learning as applied to the rehabilitation of patients with neuromuscular conditions.

Prerequisites: PHTA 104, BIOL 217, BIOL 281 or permission of instructor

## **PHTA 206**

#### ADVANCED PHYSICAL THERAPY MODALITIES Fall, 2 credit hour(s)

Students will learn basic principles of electricity and electrotherapy. Application of electrotherapeutic agents for pain control, neuromuscular stimulation, and tissue/wound healing will be studied and applied. Students will be introduced to spinal traction as a therapeutic modality. Students will enhance their research skills by reviewing and critiquing

course topics. 1 hour lecture, 3 hours lab per week Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

current professional literature related to various

#### **PHTA 207** CLINICAL II

Spring, 6 credit hour(s)

This clinical experience correlates with content taught in courses PHTA 100 through PHTA 206. The student is assigned to a physical therapy clinical site where they will work under the direct supervision of a licensed physical therapist or registered physical therapist assistant. This will provide the student with the opportunity to put the knowledge and skills learned in the classroom and laboratory into practice in a clinical setting. The PTA student will demonstrate clinical problem solving skills based on academic knowledge and previous lab and clinical experiences.

This experience will take place during the fourth semester and will last six full time weeks.

Prerequisites: PHTA 203, PHTA 204, PHTA 205, PHTA 206

**PHTA 209** CLINICAL III Spring, 6 credit hour(s)

This clinical experience correlates with content taught in courses PHTA 100 through PHTA 207. The student is assigned to a physical therapy clinical site where they will work under the direct supervision of a licensed physical therapist or registered physical therapist assistant. This will provide the student with the opportunity to put the knowledge and skills learned in the classroom and laboratory into practice in a clinical setting. The PTA student will demonstrate clinical problem solving skills based on academic knowledge and previous lab and clinical experiences.

This experience will take place during the fourth semester and will last six full time weeks.

Prerequisites: PHTA 203, PHTA 204, PHTA 205, PHTA 206, Co-requisite: PHTA 207

#### PHTA 210

#### PTA SEMINAR II

Spring, 2 credit hour(s)

This course is designed to provide for the transition from the student role to the graduate role. Review of national exam material on a weekly basis throughout the semester will help to prepare students for the licensing exam. Students will participate in transitional activities by preparing employment documents, completing licensure paperwork, participate in a mock interview and sit for a mock national exam. Students will be required to submit a self- directed plan for career development and lifelong learning. A student/faculty conference is required for each student prior to graduation.

Prerequisites: PHTA 203, PHTA 204, PHTA 205, PHŤA 206

#### **PHYS 108**

**TECHNICAL PHYSICS** 

Spring, 4 credit hour(s)

This course is designed to introduce students to the physical laws and principles inherent in the study of mechanics, wave mechanics, optics, electricity and magnetism; time permitting modern physics. There willbe emphasis placed on the following topics: vibrations and waves, electricity and magnetism, and wave optics. Dimensional analysis and problem solving will be stressed.

Prerequisites: MATH 136 or permission of instructor

#### **PHYS 115**

BASIC PHYSICS

*Fall/Spring*, 4 credit hour(s)

Topical coverage includes systems of units, scientific method, scientific mathematics (including basic trigonometric functions), vectors, friction, forces and translational equilibrium, torques and rotational equilibrium, uniformly accelerated motion, Newton's Laws, work, energy, and power. Emphasis is on development of laboratory and problem solving skills including description, organization, analysis, summarization, and criticism in accordance with the scientific method.

Prerequisites: Beginning Algebra (MATH 100) or permission of instructor. No science background is assumed.

#### **PHYS 121**

#### COLLEGE PHYSICS I *Fall/Spring*, 3 credit hour(s)

This is an introductory college physics course which uses algebra and trigonometry in developing some of the fundamental concepts of classical physics. Topics covered are units of measurement,

vectors, velocity, acceleration, force, Newton's Laws of Motion, gravity, momentum, work, energy, power, circular motion, rotational motion and thermodynamics.

Prerequisites: Corequisites: MATH 121 College Algebra or its equivalent.

#### **PHYS 122**

COLLEGE PHYSICS II

Spring, 3 credit hour(s)

This is the second semester of an introductory college physics course which uses algebra and trigonometry in developing some of the fundamental concepts of classical physics. Topics covered are electrical forces and fields, electrical energy, capacitance and resistance, direct current circuits, reflection and refraction of light, wave optics.

Prerequisites: College Physics I (PHYS 121) or permission of instructor.

#### **PHYS 125**

#### PHYSICS LAB I

Fall/Spring, 1 credit hour(s)

Physics Laboratory I is a laboratory course to accompany PHYS 121 (College Physics I). Students will have laboratory experiments concerning one and two dimensional translational mechanics and graphical analysis.

Prerequisites: Corequisite: College Physics I (PHYS 121) or permission of instructor.

#### **PHYS 126**

#### PHYSICS LAB II

Spring, 1 credit hour(s)

This is a laboratory course to accompany College Physics 2, PHYS122. Experiments examine electricity, DC circuits, and optics.

Prerequisites: Corequisite: College Physics II (PHYS 122) or University Physics II (PHYS 132) or permission of instructor.

#### **PHYS 131**

UNIVERSITY PHYSICS I

Fall/Spring, 3 credit hour(s)

This is an introductory college physics course which uses basic calculus in developing some of the fundamental concepts of classical physics. Topics covered are measurement, vector manipulation (including unit vector notation), linear kinematics and dynamics, motion in a plane, and conservation of energy and linear momentum.

Prerequisites: Corequisite: Calculus I (MATH 161) or permission of instructor.

#### **PHYS 132**

#### UNIVERSITY PHYSICS II

#### Spring, 3 credit hour(s)

This calculus based course covers topics in the area or electricity, magnetism and optics. Topics include electric fields, electric potential, conductivity, capacitance, magnetic fields, inductance, DC circuits, EM waves, geometric optics and physical optics.

Prerequisites: University Physics I (PHYS 131) - Corequisite: Calculus II (MATH 162); or permission of instructor

#### **PHYS 133** UNIVERSITY PHYSICS III Fall, 3 credit hour(s)

This is the third semester of an introductory college physics course which uses basic calculus in developing some of the fundamental concepts

of classical physics. Topics covered are rotation of rigid objects, static equilibrium of extended bodies, simple harmonic motion, gravitation, fluid mechanics, the law of thermodynamics and kinetic theory of gases.

Prerequisites: University Physics I (PHYS 131) - Corequisite: Calculus II (MATH 162) or permission of instructor.

#### **PHYS 135**

#### UNIVERSITY PHYSICS LAB I Fall, 1 credit hour(s)

This is a laboratory course to accompany PHYS 131, University Physics I. Experiments will include one and two dimensional translational mechanics and graphical analysis.

Prerequisites: Corequisite: University Physics I (PHYS 131) or permission of instructor.

### **PHYS 136**

#### UNIVERSITY PHYSICS LAB II Spring, 1 credit hour(s)

This is a laboratory course to accompany University Physics II (PHYS 132). Experiments examine electricity, circuits, and optics.

Prerequisites: University Physics II (PHYS 132) or permission of instructor.

#### **PHYS 137**

#### UNIVERSITY PHYSICS LAB III Fall, 1 credit hour(s)

This laboratory course is to accompany University Physics III (PHYS 133). THe student will perform experiments related to rotational motion, oscillations and waves, static equlibrium, properties of material, and termal physics.

Prerequisites: Corequisite: University Physics III (PHYS 133) or permission of instructor.

#### **PHYS 202** MODERN PHYSICS

#### Spring, 3 credit hour(s)

The atomic view of matter, Bohr model, relativity, particle properties of waves, wave properties of particles, introduction to quantum mechanics, quantum theory of the hydrogen atom, the solid state, introduction to Fourier series and integrals and statistical mechanics.

Prerequisites: University Physics II (PHYS 132) or permission of instructor.

#### **PHYS 301**

#### INTRODUCTION TO PHOTONICS Fall/Spring, 3 credit hour(s)

This course explores the production and nature of light including: the laws of reflection and refraction, theory of image formation, principles of wave optics (including interference, diffraction and polarization), fundamentals of fiber optic theory, principles of lasers and laser safety, and the basics of holography with image processing. Throughout the course, emphasis is placed on applications of photonics in medicine, transportation, manufacturing, communications, environmental monitoring and consumer devices.

Prerequisites: College Physics II (PHYS 122) or University Physics II (PHYS 132), or permission of instructor.

#### **PHYS 330** INTRODUCTION TO CLASSICAL **MECHANICS** Fall/Spring, 3 credit hour(s)

This course is a presentation of Newtonian mechanics at the intermediate level. Topics include dynamics of particles and rigid bodies, rotating reference frames, conservation laws, gravitational fields and potentials, planetary motion, wave motion, oscillations, LaGrangian and Hamiltonian equations.

Prerequisites: University Physics II (PHYS 132) or College Physics II (PHYS 122), or permission of instructor.

#### **PHYS 340**

## ELECTROMAGNETISM

*Fall/Spring, 3 credit hour(s)* 

This course is an intermediate level presentation of the physics of the electromagnetic field. The course will explore the applications of electromagnetism in medicine (magnetic resonance imaging), and the interdependencies between electric and magnetic fields which are the essence of the theories of circuits, lines, antennas and guided waves. Topics include Electric and magnetic fields using vector methods, Gauss's law, theory of dielectrics, Ampere's law, Faraday's law, vector potential, displacement current, Maxwell's equations, wave propagation in dielectrics and conductors, and production and propagation of radiation.

Prerequisites: University Physics II (PHYS 132) or College Physics II (PHYS 122), Calculus II (MATH 162), or permission of instructor.

#### **PHYS 410**

#### SOLID STATE SCIENCE

Fall/Spring, 3 credit hour(s)

This course explores how the diverse properties (mechanical, electronic, optical and magnetic) of solid materials can be related to interactions at the atomistic level. Topics include crystal structures; bonding in solids; x-ray, neutron, and electron diffraction in crystals; lattice vibrations; energy bands in solids; the free-electron model; semiconductor and semiconductor devices.

Prerequisites: Modern Physics (PHYS 202) or permission of instructor.

#### **PHYS 420**

#### INTRODUCTION TO QUANTUM MECHANICS

#### Fall, 3 credit hour(s)

This course is a senior-level introduction to the theory and formalism of non-relativistic quantum mechanics and its applications. This course provides the background with which to understand and meet the challenge of new applications of quantum mechanics. Principles of quantum mechanics and some mathematical techniques of solving quantum mechanical problems are examined.

Prerequisites: University Physics II (PHYS 132) or College Physics II (PHYS 122); Calculus II (MATH 162), or permission of instructor.

#### **POLS 101**

#### INTRODUCTION TO POLITICAL SCIENCE

#### Fall/Spring, 3 credit hour(s), GER 3

This course introduces students to the study of politics and government and examines the impact of politics in our lives. Students learn about the fundamentals of political theory and american government, examine the differences between forms of government and politics around the world, and analyze the relations between counties in the international community. Students consider contemporary issues of civil and human rights,

political violence, globalization, and the workings of democracy in light of the theories and systems presented throughout the semester.

#### POLS 105 INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS Fall/Spring, 3 credit hour(s)

This course examines the fundamental components of American government and politics, including political culture, interest representation, political participation, government institutions, and government policymaking. Students develop a basic knowledge of American politics and the tools for careful and critical evaluation of current events and political phenomena. Through the framework of the Constitution, this course examines governmental and political issues from the founding until now, including federalism, civil liberties and rights, political processes such as campaigns and elections, and the checks and balances between branches of government.

Prerequisites: POLS 101

#### **PSYC 101**

## INTRODUCTORY PSYCHOLOGY

Fall/Spring, 0 credit hour(s)

In this course, students are given an introduction to the scientific analysis of behavior. Attention is given to the historical background of present-day psychology, scientific methodology, the physiological basis of behavior, perception, learning, motivation, emotion, personality and the analysis and measurement of individual difference.

#### PSYC 220

CHILD DEVELOPMENT

#### Fall/Spring, 3 credit hour(s)

In this course, students will explore the growth and development of the child from conception to adolescence. A variety of major theories and research will be covered to give an overview of the changes that occur in areas such as cognition, personality, social relationships, family, behavior, physical development, and sociocultural factors throughout the life of the child. Applications to parenting, teaching, and current societal trends will be discussed. Students may receive credit for either PSYC 220 OR PSCY 225, but not both.

Prerequisites: PSYC 101

#### PSYC 225

HUMAN DEVELOPMENT

Fall/Spring, 3 credit hour(s)

In this course, students will explore lifespan developmental psychology: the quantitative and qualitative ways in which people change over time from conception through death. The course prepares students to grow in their ability to describe, explain, predict, and intervene in human behavior as demanded in the helping professions, and, in their lives as family members and citizens of the wider community. This course is an alternate to Child Development (PSYC220). Students cannot receive credit for both.

Prerequisites: PSYC 101 or permission of instructor.

#### PSYC 275

#### ABNORMAL PSYCHOLOGY

*Fall/Spring, 3 credit hour(s)* 

In this course, students will learn about psychopathology: the scientific study of the inability of people to behave in ways that foster their own well-being and the well- being of the greater society. The course examines psychological disorders – their symptoms, causes, and treatments – from multiple theoretical perspectives. Strengths and weaknesses in psychological assessment, the psychiatric diagnostic system, and mental health practices are explored.

Prerequisites: PSYC 101 or PSYC 111 or permission of instructor.

#### PSYC 300

#### CULTURAL PSYCHOLOGY Fall/Spring, 3 credit hour(s)

In this course, students will examine psychological concepts, theory, and research on variations and commonalities in human behavior, both within and across cultures. As a means of exploring the extent to which culture influences psychological phenomena, students will examine their own and different cultural practices and behaviors from around the world, and critically evaluate psychological topics from a cross- cultural perspective. Topics may include, but are not limited to: individualism and collectivism, perspectives on the self, culture and development, acculturation, among others.

Prerequisites: PSYC 101 and 45 credits

#### PSYC 308 PERSONALITY AND INDIVIDUAL DIFFERENCES

Fall/Spring, 3 credit hour(s)

Introduction to the diverse ways of conceptualizing, assessing, and studying personality. Personality psychology is the scientific study of individual differences in characteristic patterns of thinking, feeling, and behaving. Students will learn about different approaches to the study, assessment, and application of personality and individual differences, including psychoanalytic, trait, humanistic, biological, cognitive, behavioral/social learning, and cultural, among others.

Prerequisites: PSYC 101 or permission of instructor

#### PSYC 310

## COUNSELING THEORIES & PRACTICE *Fall/Spring, 3 credit hour(s)*

In this course students will learn of the major theories of psychological counseling, common issues, and principles in the practice of the helping professions. A critical presentation of the theoretical models will focus on the concepts, principles, techniques, goals, and contributions of each approach to counseling. The uses and limitations of each theory will be discussed. Issues related to the helping professions will include standards of professionalism, ethics, and legalities.

Prerequisites: Minimum of 9 credits of psychology with a "C" or better average, including Introductory Psychology (PSYC 101), Abnormal Psychology (PSYC 275), Child Development (PSYC 220) or Human Development (PSYC 225), or permission of the instructor.

#### **PSYC 315**

#### CRISIS INTERVENTION Spring, 3 credit hour(s)

Introduction to the most common types of crisis events arising in settings such the hospital emergency room, community mental health center, community hotline, correctional facilities, and police services. The course provides knowledge of the major assessment methods and models of intervention apPrerequisites: PSYC 101

#### **PSYC 316**

#### UNDERSTANDING TRAUMA Fall/Spring, 3 credit hour(s)

In this course, students will be introduced to trauma, types of trauma, and how an individual can overcome and heal from traumatic events. The course will provide foundational knowledge of the biological, social, cultural, psychological, and developmental impact of trauma. Trauma informed assessment and care and its application in the health care field and educational settings will be examined.

Students will gain an understanding of psychological disorders that may manifest from the experience of trauma.

Prerequisites: PSYC 100, PSYC 275

#### PSYC 320 HEALTH PSYCHOLOGY Fall, 3 credit hour(s)

In this course, students will examine the theories, research, and practice of health psychology. Students will explore the role of social determinants of health and wellness; the application of social and psychological factors to understand health promotion and prevention; and the interaction of psychological and biological factors through various topics including stress and coping, the placebo effect, chronic illness, and pain. Students will investigate how health-related theory and research can be applied for the benefit of both personal behavior change, and the health of communities.

Prerequisites: PSYC 101 and 60 credits or permission of instructor

#### PSYC 340

#### SOCIAL PSYCHOLOGY

### Fall/Spring, 3 credit hour(s), Online

In this course, students undertake a scientific examination of how thoughts, feelings, and behaviors are influenced by the perceived or real presence of other people (i.e., individual behavior and thought in social situations). Core areas of examination include social cognition (e.g., heuristics, schemata, and affect), social perception (e.g., emotion, attribution, and impression formation), social influence (e.g., conformity, compliance, obedience, and prosocial behavior), attitudes (including prejudice, discrimination, and stereotypes), and the self (e.g., self-concept, social comparison, and stereotype threat).

Prerequisites: Introduction to Psychology (PSYC 101) or Introduction to Sociology (SOCI 101) or Introduction to the Science and Technology of Behavior (SSCI 245), junior level status, or permission of instructor.

#### PSYC 350

#### EDUCATIONAL PSYCHOLOGY Spring, 3 credit hour(s)

In this course students will study human behavior in educational settings: the application of child and adolescent development and learning principles; including use of tests and measurements, motivation, exceptional learners, classroom and behavior management, cognitive strategies, and introduction to the concept of "expert" teacher and student.

Prerequisites: PSYC 220 or PSYC 225

#### PSYC 406 WORKPLACE PSYCHOLOGY Fall, 3 credit hour(s)

In this course, students will explore the intersection of the workplace and psychology. Students can expect to apply theory and principles to solve real life work issues. Topics include employee selection, performance & training evaluation, group dynamics, employee motivation & commitment, employee selection, leadership, organizational culture & development, and stress management.

#### PSYC 410

## COUNSELING SKILLS AND PROCESS *Fall/Spring, 3 credit hour(s)*

An examination and practice of the skills, techniques, and process of counseling for students entering one of the helping professions. Specific techniques will be described, demonstrated and practiced. The stages of the counseling process and the goals and methods of each stage will be discussed and practiced.

Prerequisites: HUSV 315 or permission of instructor

#### SOCI 101

#### INTRODUCTION TO SOCIOLOGY Fall/Spring, 3 credit hour(s)

This course is an introduction into the Sociological study of society by exploring fundamental social theories and research methods used by sociologists to examine the interactions between social structures and individuals. The goal of the course is to gain a basic knowledge of sociological concepts and techniques, with a focus on the cultivation of the sociological imagination. This course will examine concepts such as culture, social structures and institutions, social processes of socialization, stratification, and change, deviance, race, ethnicity, and gender.

#### SOCI 105

### AMERICAN SOCIAL PROBLEMS

Fall/Spring, 3 credit hour(s)

In this course, students will explore the social, economic, and ideological basis of social problems in American society. This course is grounded in a sociological approach, applying different theoretical perspectives and research methods to identify and understand contemporary social problems. Students will examine problems as they relate to social inequality, identity, wellbeing, and institutions. Students will engage material to understand the extent of each problem, how these problems arise in society, and consider possible solutions. The relationship between social problems and organizational policies will also be discussed, particularly in regard to social policy approaches. Global contexts are incorporated when international comparisons offer solutions for consideration.

#### **SOCI 205**

## SOCIAL DEVIANCE & CONTROL Fall/Spring, 3 credit hour(s)

An introduction to the ideological and theoretical foundation of Social Deviance and Social Control. Attention is given to micro/macro forms of deviance including the gamut from individual forms of deviance to state organized deviance. The course will examine the complex nature and the role agents of social control play in creating and enforcing norms and deviant labels. The course will examine a range of empirical data that attempt to explain the existence and occurrence of deviance.

Prerequisites: Introduction to Sociology (SOCI 101) or permission of instructor.

#### **SOCI 210**

#### SOCIOLOGY OF THE FAMILY Fall/Spring, 3 credit hour(s)

The study of family as a key social unit with the emphasis on structure, functions, problems and future of the institution.

Cross-cultural comparisons, the relationship between the family and other institutions, and family-related policies also will be discussed. Three hours lecture per week.

Prerequisites: Introduction to Sociology (SOCI 101) or permission of instructor.

#### **SOCI 250**

#### SOCIOLOGY OF MASS MEDIA Fall/Spring, 3 credit hour(s)

The course will begin by exploring the component and the basic concepts of mass media. Special emphasis is on the social construction power of the mass media. The positive role of the mass media will be explored as well as the negative impact. The social control function of the mass media will be explained. The course is aimed at providing a critical assessment of the social construction power of the mass media with an emphasis on images, content and context as presented in the mass media. The course will explore the images of various segments of American society as presented in the mass media including racial/ethnic groups, gender and sexual orientation, age and class.

Prerequisites: Introduction to Sociology (SOCI 101) or permission of instructor.

#### **SOCI 300**

#### RACE AND ETHNIC RELATIONS: AMERICAN AND GLOBAL PERSPECTIVES Fall/Spring, 3 credit hour(s)

In this course students will examine and asses racial and ethnic relations. Students will be exposed to theories and research that explores the nature of ethnic stratification, incorporation, exclusion, and identity. Focusing on the United States; the course will survey key institutions and identify issues that reflect on inclusion/exclusion/identity. In addition, the course will briefly explore critical issues in racial and ethnic relations from a global context.

Prerequisites: SOCI 101

#### **SOCI 305**

#### GENDER IN THE MEDIA Fall/Spring, 3 credit hour(s)

The course will begin by reviewing the components and the basic concepts of mass media. The course will focus on the power of social construction of the mass media in creating appropriate images of masculinity and femininity including sexual orientation. The course will survey the various theoretical traditions coming from sociology, psychology and gender studies exploring gender dynamics as portrayed in the media. The course will examine research exploring the impact and the ideological consequences of the power of the mass media within the arena of gender dynamics.

Prerequisites: SOCI 101 or permission of instructor and junior level status with a GPA 2.00.

#### SOCI 308 SOCIOLOGY OF FOOD Fall/Spring, 3 credit hour(s)

This course explores the significant relationships between people, culture, and food across societies. From the family dinner table to debates surrounding environmental impacts, the production, distribution, and consumption of food reflects social institutions, agricultural systems, politics, and identity. The emergence of food and eating as a sociological subtopic provides a platform for investigating areas such as: social problems, inequality and stratification, power, media, family, labor and work, health, nutrition and safety, ecology, and globalization.

Prerequisites: ENGL 101

#### **SOCI 312**

## ADVOCACY, ACTIVISM AND SOCIAL CHANGE

#### Fall/Spring, 3 credit hour(s)

In this course, students will develop an understanding of both national and international social movements while engaging in advocacy and activism. This course is grounded in an applied sociological approach, exploring strategies and mechanisms for facilitating social change and participating in social justice action. Students will examine the historical and theoretical foundations of social change, particularly as related to identities involving race, class, and gender. This course will present the relationship between society, social institutions, and advocacy work, with opportunities for students to develop practical skillsets in campaigning.

Prerequisites: None - Co-requisite: SOCI 101

#### SOCI 313

WOMEN AND AGING

Fall/Spring, 3 credit hour(s)

In this course students will explore the impact of aging on women, with special emphasis on the diverse experiences, challenges, and social and economic conditions of older women. Topics include the social construction of older women; historical and theoretical perspectives on midlife and older women; relationships with family and friends; racial, ethnic, and demographic issues; spirituality; economic issues; and living arrangements and care giving.

Prerequisites: SOCI 101

#### **SOCI 320**

## SOCIOLOGY OF HEALTH, ILLNESS AND HEALTH CARE

#### Fall/Spring, 3 credit hour(s)

Using the sociological perspective, this course explores how social factors such as age, gender, social class and race / ethnicity influence personal experiences of health, illness, and health care utilization. This course challenges assumptions about health, illness and health care. Topics include the social construction of illness and health, a critique of the 'sick role', the meaning and experience of disability, chronic pain and chronic illness, an exploration of health care systems in the developed and developing worlds, and the challenges and opportunities facing both consumers and providers of health care in the 21st century.

Prerequisites: Junior level status; Introduction to Sociology (SOCI101) or Introduction to Gerontology (HLTH 104/ SOCI104) or permission of instructor.

#### SOCI 325

#### SOCIOLOGY OF DISASTER Fall/Spring, 3 credit hour(s)

The foundational premise of this course is that disasters are social in nature; revealing, or exacerbating, existing social inequalities. Analyzing a series of case studies using methodology from classical

and contemporary sociology this course prepares students to better understand, plan for, and respond to disasters. The course uses a problem- based learning model in which students work in small groups to help a particular community prepare for a particular hazard.

#### SOCI 330

#### SOCIOLOGY OF GENDERED LIVES Fall/Spring, 3 credit hour(s)

This course focuses on social changes in gender relations, gender inequalities and the social construction of gender. Sociological theories are used to analyze different social institutions and spheres of society. Topics include creation of gender differentiation, power, privilege, gendered performances, masculinities, femininities, sexualities, social inequalities and subordination, and social movements concerned with gender.

Prerequisites: Introduction to Sociology (SOCI 101) or American Social Problems (SOCI 105) or permission of instructor.

#### SOCI 330

#### SOCIOLOGY OF GENDERED LIVES Fall/Spring, 3 credit hour(s)

In this course students will study social changes in gender relations, gender inequalities and the social construction of gender. Using sociological theories different social institutions and spheres of society will be analyzed. Topics will include creation of gender differentiation, power, privilege, gendered performances, masculinities, femininities, sexualities, social inequalities and subordination. W,e will, also look at social movements concerned with gender.

Prerequisites: SOCI 101

#### SOCI 360

#### SUSTAINABLE DEVELOPMENT Fall, 3 credit hour(s)

Defined as "development that meets the needs of current generations without diminishing the possibility of future generations to meet their own needs", sustainable development has become a ubiquitous yet controversial catch phrase employed by the Word Bank, the IMF, the United Nations and other international development agencies. Critics claim the term is merely a cover for continued neo- colonialism while its proponents argue that it allows space for a genuine consideration of the environmental and social good in policies aiming for economic growth. This course develops students capacity to understand these competing claims and develop their own definition of what sustainable development should look like internationally and domestically.

#### SOCI 361 SUSTAINABLE DEVELOPMENT IN CENTRAL AMERICA LAB

### Winterterm - Study Abroad, 1 credit hour(s)

This study abroad experience investigates development in Central America and the degree to which communities can navigate the social structures (historical, economic, cultural etc.) and build a healthier, more equitable, environmentally sustainable and economically secure future. This two-week experience is set in two countries, Panama, and Costa Rica, who, as neighbors, share a language and some history but have distinct stories in terms of development. The two- country model allows students to more fully grasp the variety of challenges and opportunities that countries throughout Central and Latin America and develop research questions of their own.

Prerequisites: SOCI 360 or SSCI 271

#### **SOET 101**

## INTRO TO COMPUTER USAGE FOR TECHNICIANS

Fall/Spring, 1 credit hour(s)

This course introduces students to the Windows Operating environment including creating and manipulating files and folders. Topics pertaining to word processor, spreadsheet and presentation software are introduced with laboratory assignments and instruction.

#### SOET 116

#### INTRO TO COMPUTER AIDED DRAFTING AND DESIGN Fall, 2 credit hour(s)

This course introduces the student to the use of a computer to produce engineering drawings. Students shall learn fundamental functions of auto-CAD software (most current version). Other topics covered in the course include Orthographic Projection, National Drafting Standards and Conventions, detail Drawings, Assembly Drawings, Architectural, Constructions, Electrical, PLMG/HVAC and Civil CADD topics. Two laboratory hours per week.

### SOET 250 INTRO TO 3D CAD AND BIM

Fall, 2 credit hour(s)

This course introduces students to commercial construction drawings using object based Computer Aided Design (CAD/REVIT) software used by engineers, architects and designers also known as Building information Modeling (BIM). Produce plans, sections elevations, 3D models, quantities, and other data which are fully coordinated and can be readily manipulated, accessed and shared. In addition BIM allows students to perform design tasks, query quantities and takeoffs, and generate drawing sheets for construction documentation needs.

#### SOET 314 ADVANCED CADD Spring, 3 credit hour(s)

Students learn advanced methods, tools, and applications of 2D AutoCAD software. Students learn to use external references (XREFS) in CADD project files. Other topics include: learning to use attributes and dynamic blocks, scaling objects, using annotative tools and view ports, and alternate formatting. Students create civil, architectural and MEP type drawings using advanced CADD tools and industry concepts. A higher level of communication in CADD is emphasized with utilization of advanced tools to maintain control of and standardize CADD files for a commercial project. Projects mimic real world expectations of a professional CADD designer.

Prerequisites: SOET 116 or SOET 114; or permission of the instructor

#### SOET 348 ENGINEERING SAFETY Spring, 1 credit hour(s)

This course covers topics such as: The basic hazards and preventative measures from falls, mechanical injuries, heat and temperature, pressure, electricity, fires, explosions, toxic materials, radiation, vibration, noise, and computer safety.

Prerequisites: Student should be in his/her second year, or permission of instructor.

#### **SOET 349**

## INDUSTRIAL SAFETY AND HEALTH *Fall, 3 credit hour(s)*

This course explores provides the student with the key issues on engineering safety and health in workplace environments. Topics covered include historical perspective, laws and regulations, the human element, hazard assessment, prevention, control and management of safety and health.

Prerequisites: Junior level status or permission of instructor.

#### **SOET 352**

#### ADVANCED REVIT AND BUILDING INFORMATION MODELING (BIM) MANAGEMENT

Fall, 3 credit hour(s)

Building Information Modeling (BIM) generates and manages all components of a building's life cycle. BIM is a new industry

standard, knowledge and efficiency which is highly sought after by employers. Students expand upon their knowledge of how the software works to learn about how it is used as a management tool. Students learn how to coordinate, update, and share design data with team members throughout the design and construction phases of a building project. Specifically, students learn how to set up office standards with templates that include annotation styles, preset views, sheets, and schedules; create custom element types and families, and establish a Company/Firm BIM foundation. This course prepares students for certification exams associated with Autodesk Revit certification.

Prerequisites: Student should be in his/her second year, or permission of instructor.

#### **SOET 353**

#### ADVANCED BUILDING INFORMATION MODEL (BIM) 2 Full 2 and is hear(c)

Fall, 3 credit hour(s)

Students learn how to use BIM as a catalyst to improve collaboration, enhance shared ownership of project goals, and drive synergies between the project plan, design strategy and BIM strategy, thereby increasing the level of engagement in project teams. This course covers 3D (visusalication/clash detection), 4D (Time Simulation/Virtural construction/construction sequencing), 5D Estimating/cost simulization, 6d Sustainability and Energy analysis, 7D (Life cycle/Maintenance/Facilities management) components of BIM.

Prerequisites: SOET 352 or permission of the instructor

#### SOET 373 MANAGEMENT TELECOMMUNICATIONS Spring/Fall, 3 credit hour(s)

This course provides the student with opportunity to learn both voice and data communications, why companies and corporations feel that telecommunications is vitally important as well as how the regulatory environment affects the telecommunications industry. The technology is explained in an easy to understand, yet thorough, manner. Current and emerging technologies, the International Organization for Standardization, how telecommunications works, designed, and managed are covered. The student will learn why it is necessary to manage telecommunications, the functions of the telecommunications department, issues that telecommunications managers will be dealing with, and many real-world case studies.

Prerequisites: Junior level status or permission of instructor.

#### **SOET 374**

#### INDUSTRIAL MANAGEMENT Fall/Spring, 3 credit hour(s)

Industrial management is a multi- disciplinary field that focuses on managing all aspects of an organization's operations. Topics covered include operations and productivity, operations strategy in a global environment, project management, forecasting, design of goods and services, sustainability in the supply chain, managing quality, statistical process control, process strategy, capacity and constraint management, location strategies, and layout strategies.

Prerequisites: MATH 121 College Algebra or MATH 123 Pre-Calculus, and MATH 141 Statistics, or permission of instructor.

### SOET 377 ENGINEERING ETHICS

Fall, 1 credit hour(s)

This course extends the student's analytical skillset to include moral deliberation. Topics covered include engineering code of ethics, responsibility in engineering, the social and value dimensions of technology, trust and reliability, engineers in organizations, engineers and environment, international engineering professionalism, global issues, respect for diversity, and cases studies.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of instructor.

#### **SOET 378**

#### ETHICS FOR ENGINEERS

Fall/Spring, 3 credit hour(s)

This course extends the student analytical skills to moral deliberation. Topics covered include engineering code of ethics, responsibility in engineering, the social and value dimensions of technology, trust and reliability, engineers in organizations, engineers and environment, international engineering professionalism, global issues, respect for diversity, case studies analysis, and research term paper.

Prerequisites: Junior level status or permission of instructor.

#### **SOET 400**

## TECHNICAL COMMUNICATIONS *Fall*, *3 credit hour(s)*

This course reinforces and improves students technical communication skills through writing, oral, and graphical communication. Students review concepts of proper sentence and paragraph structure and organization. Technical report writing reinforces proper verb tense, word choice, and writing style for a number of technical writing systems (e.g. full technical reports, letters, memos, fact-sheets). Students review program related technical literature to learn about proper use and referencing of technical, peer-reviewed literature. Editing and review skills are developed. Students conduct technical literature reviews of program related material, learn to synthesize the content, and present it in an oral presentation. Oral presentations are made using PowerPoint and by creating technical posters. These presentations also improve the student's graphical communication skills.

Prerequisites: ENGL 101 and 45 earned credits, or permission of instructor

#### SOET 410

ENGINEERING TECHNOLOGY SEMINAR Spring, 3 credit hour(s)

This seminar course provides a forum in which students will present project/internship proposals and results to peers and faculty. Practicing professionals will additionally give presentations on current engineering technology issues facing students upon graduation. This course will serve all students in the Canino School of Engineering Technology's baccalaureate programs requiring a project or internship and will expose each to the diversity of programs in the School. Three hours lecture per week.

Prerequisites: Enrolled in the culminating experience course for major program of study, or permission of instructor.

### SOET 477

CAPSTONE PROJECT Fall/Spring, 3 credit hour(s)

This course provides a learning experience that allows students to propose, design and implement a project. This could be a study of a problem and solution of specific equipment, new product design, improvement of an existing product and many others. All projects must be approved by course faculty. Three hours of lecture per week. Pre-requisites: Senior level status or permission of program director.

Prerequisites: Completion of seven semester coursework (senior level status) or permission of program director.

#### SOET 480

FE EXAM REVIEW

Spring, 0 credit hour(s)

This course is a review of the necessary knowledge to pass the Fundamentals of Engineering exam. Prerequisites: Senior status

#### SPAN 101

## CONTEMPORARY SPANISH I

*Fall/Spring, 4 credit hour(s), GER 9* This course will introduce the student to the sound system and grammatical structure of the Spanish language. The focus will be on developing and increasing skill levels in the areas of aural comprehension, speaking, reading, and writing. At the end of one semester, the student will have a basic understanding of grammar, including word formation, verb conjugations, idiomatic expressions, and will recognize cognates. This course will also discuss various cultural aspects of the Spanish-speaking

world. Three hours lecture, one hour laboratory per week. This course is only for the true beginner or for a student who has had less than two years of high school Spanish.

#### SPAN 102 CONTEMPORARY SPANISH II Fall/Spring, 4 credit hour(s), GER 9

This course will build upon the grammatical structure of the Spanish language learned in first

semester Spanish. The focus will be on developing and increasing skill levels in the areas of aural comprehension, speaking, reading and writing. The student will learn to describe situations in the present, past and future tenses. At the end of the semester, the student will have an intermediate understanding of grammar, including word formation, complex verb conjugations, and idiomatic expressions. This course will also discuss various cultural aspects of the Spanish-speaking world. Students must have passed Spanish 101 (first semester Spanish), or have had at least three years of high school Spanish to enroll in this class. Speakers of Spanish may enroll in this course with the permission of the instructor.

Prerequisites: Contemporary Spanish I (SPAN 101) or have had at least three years of high school Spanish. Speakers of Spanish may enroll in this course with the permission of the instructor.

### SPCH 104

#### INTRODUCTION TO SPEECH Spring, 3 credit hour(s)

This course is an introduction to the principles of Effective Speech Communication. It includes techniques of audience analysis, establishing credibility as a speaker, planning, organizing and researching material, and delivery and use of audio visual aids. Both informative and persuasive speaking are covered. Three hours lecture per week.

#### **SPMT 100**

#### SPORTS MANAGEMENT MAJOR PREP Fall, 1 credit hour(s)

A requirement for all sports management students, this course is designed to help prepare sports management students for success in the major, as well as, college as a whole. The course will introduce students to critical reading, critical thinking and academic writing and the expectations of each throughout the program. In addition, topics such as college success strategies, learning/study techniques and available resources will be covered.

#### **SPMT 101**

#### FOUNDATIONS OF SPORTS MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course is designed to provide students with an overview of sports management issues, trends, and career opportunities. The course will examine marketing, financial, ethical, and legal management principles and apply those principles to amateur, professional and lifestyle sport settings.

Prerequisites: Introduction to Business (BSAD 100) or permission of instructor

#### **SPMT 202**

#### SPORT IN SOCIETY

Fall/Spring, 3 credit hour(s)

This course examines sports using the sociological perspective. The course will focus on current and past issues within the sociology of the sporting landscape. Students will utilize critical thinking skills, past research and theories to examine the role of sports as a key social institution that influences and is influenced by the larger society.

#### SPMT 203

#### LEADERSHIP FOR SPORTS PROFESSIONALS

Fall, 3 credit hour(s)

This course will first introduce students to theories, approaches, and styles of leadership, as

well as, the role that ethics and ethical decision making play in shaping leader behavior. Students will analyze leadership practices within different sport settings. Case studies of sport leaders from multiple sport levels and structures will be used to examine best practices in sport leadership. Critical issues in sport leadership such as gender and ethnicity will be examined as well. Students will also begin to explore their own leadership thoughts and tendencies and emphasis will be placed on the promotion of personal leadership development with a focus towards successful sport leadership.

Prerequisites: Foundations of Sport Management (SPMT 101) or permission of instructor

#### SPMT 240

### SPORTS GOVERNANCE

Fall/Spring, 3 credit hour(s)

This course is an examination of governance structures within professional and amateur sport organizations. Students will explore policy elements and issues within scholastic, amateur, campus recreation, intercollegiate athletics, professional sport (North American and International), and Olympic sport. This course will examine the mission, structure and function of sport governing bodies such as the NCAA and NAIA in Intercollegiate Athletics, Players Associations in Professional Sports, and the IOC, NOC's and OGOC's in Olympic sport.

Prerequisites: Foundations of Sport Management (SPMT 101) or Introduction to eSports Management (ESPT 100), OR permission in instructor

#### SPMT 241 LEGAL ISSUES IN SPORT Fall/Spring, 3 credit hour(s)

This course is designed to introduce students to legal applications within the sport industry. Through the use of case studies, this course provides an in-depth look at amateur and professional sports legal issues, such as; due process, anti-trust, free speech, duty of care, care owed to athletes and spectators, injuries, assumption of risk, contributory negligence, Title IX, contracts, tort law, and the growing instance of violent acts at or as a result of sporting events.

Prerequisites: Business Law I (BSAD 201) or permission of instructor

#### SPMT 242 SPORTS FINANCE

Fall/Spring, 3 credit hour(s)

This course deals with the importance of finance and accounting theory within the sport industry. Students will explore elements that influence the financial world then apply such elements to the specific sport business world. Revenue and expense categories for professional and collegiate sports teams will be differentiated and evaluated in terms of league policies and current economic conditions. From case studies, this course will examine business structure, sources of capital and financial management in the unique business environment of professional and college sports.

Prerequisites: SPMT 101 Foundations of Sports Management or permission of instructor

#### SPMT 244 SPORTS STATS I Fall, 1 credit hour(s)

This course introduces students to the role and importance of statistics in sports and sports organizations and the role statistics plays in sports reporting. This course introduces students to statistics and Statcrew software used in inputting and compiling statistics for the following sports: golf, cross country, soccer, volleyball, and basketball. Students learn what statistics are kept for each sport and how to analyze and interpret those statistics. With hands on training, students learn how to use Statcrew software to record live stats. In addition, students examine the ethical issues involved in the use and reporting of sports stats from a team and global perspective.

Prerequisites: Foundations of Sport Management (SPMT 101) and GER 1 Math course; or permission of instructor

## SPMT 245

#### SPORTS STATS II Spring, 1 credit hour(s)

This course introduces students to the role and importance of statistics in sports and sports organizations and the role statistics play in sports reporting. This course introduces students to statistics and Statcrew software used in inputting a,nd com,piling statistics for the following sports: ice hockey, lacrosse, softball and baseball. Students learn what statistics are kept for each sport and how to analyze and interpret those statistics. With hands on training, students learn how to use Statcrew software to record live stats. In addition, students examine the ethical issues involved in the use and reporting of sports stats from a team and global sport perspective.

Prerequisites: Foundations of Sport Management (SPMT 101) and GER 1 Math course; or permission of instructor

#### **SPMT 300**

#### SPORTS MANAGEMENT PRACTICUM Fall/Spring, 1-3 credit hour(s)

The Sports Management Practicum course offers students curriculum opportunities to engage in practicum experiences after their sophomore year for earned credit. The practicum course provides opportunity for a student to observe a working sports management professional perform his/her duties and allow students the opportunity to participate in a limited role in performing tasks under supervision of practicum supervisor. Students may earn a maximum of three upper level credits through the practicum course. The three credits may be earned in one semester or split between semesters. One credit of practicum is equal to 40 hours of supervised work. Practicum supervisors and students may never exceed the hour requirement for a practicum course enrolled for. Students must fulfill all expectations and requirements of the practicum course to pass.

Prerequisites: Junior Standing in the program, Minimum G.P.A. of 2.0, completion and acceptance of all practicum applications, forms, and contracts.

#### SPMT 306 SPORTS OPERATIONS AND FACILITIES MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course examines the various techniques and strategies used in meeting the want and needs of consumers in the sports industry. The course examines the differences between sports marketing and traditional marketing. Students will learn about the importance of market research and segmentation in identifying the right sports consumers. Students will also learn how data-based marketing can be used to connect.

Prerequisites: Human Resource Management

(BSAD 310), Leadership for Sport Professionals (SPMT 203), Principles of Management (BSAD 301) or permission of instructor

#### SPMT 307 SPORTS MARKETING Fall/Spring, 3 credit hour(s)

This course examines the various techniques and strategies used in meeting the want and needs of consumers in the sports industry. The course examines the differences between sports marketing and traditional marketing. Students will learn about the importance of market research and segmentation in identifying the right sports consumer. Students will also learn how data-based marketing can be used to connect with sport consumers and the development of sponsorship and endorsement packages.

Prerequisites: Foundations of Financial Accounting (ACCT 101) and Expository Writing (ENGL 101), or junior level status, or permission of instructor.

#### **SPMT 308**

#### SPORTS EVENT MANAGEMENT Fall/Spring, 3 credit hour(s)

This course will focus on the fundamentals of sports events management at multiple levels – recreational, college, and professional. Components will include program planning, organization, budgeting, marketing, risk management, safety and security, staffing, conducting the event, promotional activities, and other factors associated with successful management of sport events. Students will be responsible for the management of at least one sport/recreation event on campus.

Prerequisites: Sports Operations and Facilities Management (SPMT 306) or permission of instructor

#### SPMT 311

### SPORTS INFORMATION

Fall/Spring, 3 credit hour(s)

This course is designed to introduce students to the working elements of an effective sports information office in a college setting. Students learn the techniques and strategies used by sports information professionals for effective communication including writing, publications, wed site design and management, digital sports photography, and social media. Students also are introduced to the various technologies and software widely used in sports information.

Prerequisites: (SPMT 101) Foundations of Sports Management, or permission of instructor

#### **SPMT 312**

#### SPORTS ENTREPRENEURSHIP Fall/Spring, 3 credit hour(s)

This course evaluates the skills, attitude, and commitment necessary to successfully operate an entrepreneurial venture. Students assess their personal strengths and entrepreneurial capabilities as well as explore and identify opportunities for small business ventures within the sport marketplace. Students assemble the key components of a business plan and will learn to evaluate idea feasibility and financial requirements.

Prerequisites: BSAD 100, AND SPMT 101, SPMT 241, SPMT 307, OR ESPT and BSAD 203; OR permission of instructor.

#### SPMT 315

#### INTERNATIONAL STUDY ABROAD Spring, 3 credit hour(s)

This course provides students a short-term study abroad opportunity and will provide theoretical and professional insight and a first-hand experience in international sports. The course meets during the spring semester, and shortly the spring semester is complete, students travel to various cities in Europe while exploring the European Model of Sport. Students will attend lectures from European sport executives, conduct workshops, and tour sports facilities and attend sporting events. Lectures will cover structure and characteristics of international sports, marketing, event and facility management, and international sports governance.

Prerequisites: 45 credit hours or permission of instructor

#### **SPMT 320**

#### GLOBAL SPORT PERSPECTIVES Spring, 3 credit hour(s)

Global sport study introduces students to structure and critical issues of the sport business environment from a global perspective. International sport governance, globalization of professional sport, international sports mega-events, and global media technology will be assessed to recognize trends and create sport management strategy. The impact of social changes and global market expansion will be demonstrated in a review sport culture, and commerce.

Prerequisites: Junior or senior standing in SPMT program or permission of instructor

#### **SPMT 330**

#### PSYCHOLOGY OF SPORT & EXERCISE Spring, 3 credit hour(s)

In this course, students will explore the psychological variables that impact athletic participation and performance. Through the integration of cognitive, sociocultural, behavioral, and clinical research and practice, students will gain understanding of sport and exercise participants, different sport and exercise environments, group processes, and ways to improve performance, growth, and well-being of sport and exercise participants

Prerequisites: Introductory Psychology (PSYC 101) or Foundations of Sports Management (SPMT 101)

#### SPMT 410 ORIENTATION TO *CULMINATING EXPERIENCE IN SPORTS MANAGEMENT*

Fall/Spring, 1 credit hour(s)

This course prepares the student for their internship or senior project in sport management. Students will learn the processes involved in selecting and securing an internship site along with the necessary skills and appropriate behavior necessary for a successful internship experience. Students will also learn how to prepare an appropriate resume and will prepare a resume to be used in the internship process. Students will also be introduced to interviewing techniques and tips and will apply such through a mock interview process. Alternatively, if the student chooses the senior project route, the course will provide them with the collaboration with their advisor and classmates that will create the foundation for, and plan of, what is to be accomplished in satisfaction of the requirements for completion of the senior project. This course is a prerequisite

to Sports Management internship (SPMT 421) and Sports Management Senior Project (SPMT 422).

Prerequisites: Senior level status in SPMT and completion of required Sport Management courses through semester six, or permission of instructor

#### SPMT 411 SPORTS PUBLIC RELATIONS

## *Fall/Spring, 3 credit hour(s)*

This course focuses on the application of media relations, communications, sport marketing, and demographical concepts in a sport organization. Students will develop a sport public relations campaign that will utilize various broadcast, electronic, and print media. Students will learn how to generate and run focus groups, as well as generate media packets, press releases, and presentation of their public relations campaign.

Prerequisites: Sports Operations and Facility Management (SPMT 306), Sports Marketing (SPMT 307), Sports Event Management (SPMT 308), or permission of instructor

#### **SPMT 412**

#### SPORTS SALES AND SPONSORSHIPS Fall/Spring, 3 credit hour(s)

In this course students will learn techniques and strategies for enhancing and expanding sport sales and sponsorships, as well as, related sport promotions strategies. Students will examine the sports sales process and compare the strengths and disadvantages of various selling strategies and methods. Sponsorship opportunities will be reviewed and students will learn key elements of sport sponsorship sales, implementation and evaluation.

Prerequisites: SPMT 307 Sports Marketing; OR ESPT 100 Introduction to eSports Management and 45 Credits earned; OR permission of instructor

#### SPMT 413 CONTINUING ISSUES IN COLLEGE SPORTS ADMINISTRATION *Fall, 3 credit hour(s)*

Senior Seminar Course. Using a seminar format, this course will study the enterprise of college athletics in the United States. Primary focus, discussion and research will center on current contemporary issues in college athletics including but not limited to NCAA policies, gender equity & Title IX, graduation rates, recruitment ethics, hazing, drug testing, pay for play, diversity in coaching, financial issues, student-athlete behavior, and academic reform and how these issues impact the function, management and leadership of intercollegiate athletic programs.

Prerequisites: Senior level status in SPMT or permission of instructor

#### SPMT 414

#### LABOR RELATIONS IN SPORT Fall/Spring, 3 credit hour(s)

This course examines labor markets in sport and the infrastructural interests of management (league and teams) and players (players associations, players, agents/attorneys). Students review collective bargaining agreements and evaluate the impact of salary caps, free agency and athlete compensation frameworks. This course examines athlete salaries and agent representation and the unique labor markets of Major League Baseball and the National Football League.

Prerequisites: Legal Issues in Sport (SPMT 304), Human Resource Management (BSAD 310), or permission of instructor

#### SPMT 415 SPORTS MANAGEMENT AND BROADCASTING

Fall/Spring, 3 credit hour(s)

This course examines different forms of sports media including print, broadcast, and internet and their impact on sports. Students learn the fundamentals of various components of sports media such as writing game and feature stories, writing strategies for broadcast, active voice, internet streaming, shooting on location, anchoring and play by play, and production of the various forms of sports media. Students examine economic, ethical, gender, and race issues in sports media. This experiential course offers students an opportunity to apply knowledge and skills to sports media activities using the college's athletic program and high school sports programs as their media focus.

Prerequisites: Sports Public Relations (SPMT 411) or permission of instructor

#### **SPMT 421**

#### SPORTS MANAGEMENT INTERNSHIP Fall/Spring, 6-9 credit hour(s)

The internship for sport management students provides a structured opportunity to apply theories, concepts, and skills learned in the classroom in a sport management/industry setting. The internship is individualized based on the career interests of the student and the specific needs of the organization. Internship proposals are presented and approved prior to registration for the course.

Prerequisites: 1) SPMT 410 2) A combined G.P.A. of 3.0 in all SPMT courses completed (or permission of program director) 3) Completion and acceptance of SPMT Internship Application

#### **SPMT 422**

## SPORTS MANAGEMENT SENIOR PROJECT

#### Spring/Fall, 3 credit hour(s)

This course is an alternative to SPMT 421 for students unable to complete a 15-credit internship. Students complete a senior research project specifically addressing a critical issue in a sport management setting or germane to a sports profession.

Under the guidance of a faculty mentor, the student submits a research proposal, conducts research, prepares a thesis style report, and presents a defense to a thesis committee. Length and depth of the project dependent upon credit value.

Prerequisites: SPMT 410 & SPMT senior standing or permission of instructor

#### SPMT 430

## ADVANCED SPORTS MARKETING & SALES

#### Spring, 3 credit hour(s)

This course focuses on identifying and evaluating social media and ticket sales strategies in professional and collegiate sport. Specifically students will learn ticket operation policies, customer relationship management methods, and social media marketing opportunities. Students will design a comprehensive sales and social media program for a selected sport organization and dynamically present his or her new value added strategy. An interview and sales call project will provide valuable insight into "front office" ticket sales season ticket holder retention, prospecting, and servicing accounts.

Prerequisites: BSAD 100, SPMT 101, SPMT 307, SPMT 308, SPMT 412

#### **SPMT 431**

#### APPLIED SPORTS MEDIA BROADCAST Fall/Spring, 3 credit hour(s)

This experiential course builds on the fundamentals of sports media and broadcasting learned in SPMT 415 providing opportunity for the application of principles, best practices, theories and techniques of different sports media components. Working collaboratively, students will produce three sports shows throughtout the semester based on topics assgined. Students will write and deliver copy, and work the various stations in the control room. Each student is also responsible for doing one Weekly Roo Review, which will focus on SUNY Canton athletics during a one week period. Students will also collaboratively do at least one live broadcast of an on-campus sporting event.

Prerequisites: Sports Media and Broadcasting (SPMT 415) or permission of instructor.

#### **SPMT 432**

#### APPLIED SPORTS EVENT MANAGEMENT Fall/Spring, 3-15 credit hour(s)

This experiential course builds on the fundamentals of sports events management learned in SPMT 308 providing opportunity for the application of principles, best practices, and theories of successful event management. As a group, students are responsible for the total management of a major sporting event available to the public at large. Students have hands-on opportunity for all components of the event including planning, organization, budgeting, marketing, public relations, leading personnel, risk management planning, conducting the event and event assessment. Students are also required to work and/or shadow two major off-campus events and provide critical assessment of each. Students also apply principles and best practices to a series of case studies throughout the semester.

Prerequisites: Senior SPMT standing, Sports Event Management (SPMT 308) or permission of instructor.

#### SPMT/ECON 313 ECONOMICS OF SPORT

### Spring, 3 credit hour(s)

This course utilizes economic theory to assess market outcomes in the professional and collegiate sport industry. Fan decisions to attend games will be evaluated according to economic principals such as scarcity and demand. Further, fan responsiveness to ticket prices will include price elasticity, marginal revenue and price discrimination considerations. Students assess sport media markets, management decision making, and league structure in terms of market outcomes. The impact of stadium subsidies on economic impact is reviewed. This course content will aid students in interpreting current events and sport management decision making through the application of economic principles.

Prerequisites: (FSMA 210) Introduction to Finance

#### SSCI 181

#### ALCOHOL DRUGS & SOCIETY Fall/Spring, 3 credit hour(s)

Students examine the various aspects of drug abuse and addiction including theories, models, individual drug classifications and social consequences. Additional topics include the impact on family systems, overview of treatment approaches, and public policy in the United States.

#### SSCI 221

## INTRODUCTION TO CHINESE HISTORY & CULTURE

#### Fall/Spring, 3 credit hour(s)

This course introduces students to the major aspects of Chinese history and culture. The first seven weeks of the semester are focused on the history of China before 1949, particularly the major Chinese dynasties together with coverage of the historical events, people as well as their significance and influence; the second seven weeks cover a variety of topics related to post-1949 China's political structure, economic reform, population policy and educational system, etc. The knowledge that the students have learned at the "history" stage enables them to have a deeper understanding of today's China.

#### SSCI 271

#### CONTEMPORARY GLOBAL ISSUES Fall/Spring, 3 credit hour(s)

In this course students are introduced to global politics and issues through the lens of globalization. Students examine how globalization relates to political systems, environmental issues, poverty, migration, human rights, terrorism, conflict, and the economy. The focus is on the interrelated nature of politics, society, and economics across the globe and on the shared future we forge.

#### SSCI 275

## INTRODUCTION TO UKRAINE Fall/Spring, 3 credit hour(s)

Introduction to major aspects of the Ukrainian history and culture. Cultural topics related to family, religion, population demographics, government, arts, music, literature and education will be included. Contemporary life in Ukraine and the broad sweep of historical forces contributing to today's culture will be the focus of the course. The recent events in Ukraine will be discussed, such as the election of October-December 2004 and the "Orange Revolution." Ukraine gained its independence in 1991 and is fiercely proud of this independence from the Soviet Union.

#### SSCI 306

ANIMALS, PEOPLE, & SOCIETY Fall/Spring, 3 credit hour(s)

In this course students will st

In this course students will critically explore the evolving relationship between humans and other animals. Applying an interdisciplinary framework, we will draw from scientific, philosophical, and cross- cultural approaches to engage topics from the field of Human Animal Studies. Discussion will focus on animal-human borders, animal rights, our relationship with wildlife, the link between animals and human oppression, and modern human- animal collaborations. We will explore the complexity of animal roles in society, and the varied meanings assigned to them, as pets, partners, entertainment, therapeutic and rehabilitative assistants, spiritual symbols, test subjects, and livestock. Students will have the opportunity to engage in discipline-specific research opportunities relating the significance of animals to their field, while also expanding their overall interdisciplinary knowledge.

#### SSCI 310

#### HELPING THE GRIEVING CHILD Spring, 3 credit hour(s)

Children are often the forgotten mourners. How does our society support grieving children and communicate with children about the sensitive topics of dying and death? This course will examine how adults, including parents, funeral directors, teachers, and health care professionals can talk to children about death and loss in general. This study of children's grief will include an examination of the developmental stages and children's reactions to death. Specific techniques, activities, and rituals designed to facilitate a child's grief will be explored and discussed.

Prerequisites: ENGL 101 and PSYC 101

#### SSCI 315

#### DEATH, DYING & BEREAVEMENT Fall/Spring, 3 credit hour(s)

This course is designed to present various ways in which social science views the human experience of death, dying, and bereavement. Drawing from sociology and psychology, this course introduces macro and micro level theories and associated concepts. Micro-level concepts and theories about the interaction patterns between the dying patients and the family, medical staff and others involved are examined. Also discussed are: societal (or macro level) theories of social change, the ethical problem of euthanasia, and the needs of the dying; the biological, social, and psychological factors in the lengthening of life; and the consequences of death, dying, and bereavement. Cross-cultural experiences with these phenomena are also examined.

Prerequisites: PSYC 101 or SOCI 101 and 30 credit hours, or permission of instructor.

#### SSCI 370

## RESEARCH METHODS IN SOCIAL SCIENCE

*Fall/Spring, 3 credit hour(s)* 

In this course students will engage in a comprehensive study of the scientific research methods utilized in the social and health sciences. Students are trained to be critical consumers of published research. Topics covered include the scientific method; critically evaluating research; qualitative and quantitative research analysis; operationalization and measurement, sampling techniques, surveys, field research, secondary data analysis, experimental research, correlation; and data management, analysis, and interpretation.

Prerequisites: ENGL 101, MATH 141 and PSYC 101 or SOCI 101 or ECON or ECON 103 or permission of instructor.

#### **TCOM 100**

### INTRODUCTION TO TECHNOLOGICAL COMMUNICATIONS

#### Fall, 3 credit hour(s)

This course offers students a first step into the study and practice of Technological Communications, the craft of getting their ideas across in the Digital Era. Students construct information architecture, writing, editing, user experience design, and instructional planning while gaining a working knowledge of a range of tools available to help them create and share their work. Students also start a portfolio of projects designed to explore the boundaries of communication in the 21st century.

#### **TCOM 330**

#### DIGITAL NARRATIVE WORKSHOP Spring, 3 credit hour(s)

This course is a writing intensive digital workshop where students hone the knowledge and skills they have developed in previous Technological Communications courses. As an advanced workshop

this course is intended for students already producing solid work and is meant to provide a disciplined, creative environment where students focus on the craft of writing alongside technology. Students read and discuss notable digital writing projects while also providing constructive oral and written feedback on the projects of their peers in a workshop setting. Students produce multiple projects over the course of the semester which are revised and submitted into their professional portfolio. At the end of the course, students seek publication for their work.

Prerequisites: In Technological Communication Program; AND ENGL 221 Creative Writing, or ENGL 315 Short Fiction: Art of the Tale, or ENGL 350 Flash Fiction; OR received permission from the instructor.

#### **TCOM 350** ELECTRONIC LITERATURE: FROM CYBERTEXT TO VIDEO GAMES Spring, 3 credit hour(s)

In this course students explore the practices and theories of screen-based literature by tracing the transformation of electronic literature from hypertext fiction to augmented reality stories to massive online games (MMOGs). The first half of the course is spent reading, interacting with, and assessing existing hypertext fiction and early indie computer games such as Afternoon, A Story. The second half of the course allows students to experience more immersive stories such as augmented reality documentaries, interactive fiction, hacktivist narrative games, and cooperative MMOGs. Students apply conceptual and aesthetic principles to build experimental stories and games in various platforms such as Twine, ARIS, Unity, and Siftr.

Prerequisites: ENGL 101

#### **TCOM 360**

#### ONLINE MEDIA AND POP CULTURE Spring, 3 credit hour(s)

Students explore new forms of online media and their interaction with various types of popular culture, including television, news, literature, film, and politics. Platforms like Tumblr, Twitter, Facebook, and YouTube are discussed, as well as tools like podcasts, RSS feeds, and push notifications. Transformative works and implications for copyright law are also examined. Students learn online skills while analyzing the content of popular culture and its dissemination to the wider public.

#### **TCOM 400** INTERNSHIP IN TECHNOLOGICAL COMMUNICATIONS I

Fall, 3 credit hour(s)

Students develop technological communications skills in a professional environment. Students work closely in technological communications with an organization, building their portfolio and gaining important community experience. Students also attend a weekly seminar and provide regular updates of their progress.

Prerequisites: Senior status in TCOM program

#### **TCOM 410**

### INTERNSHIP IN TECHNOLOGICAL COMMUNICATIONS II

Spring, 3 credit hour(s)

This course provides students with the opportunity to build on experiences in TCOM 400 and further develop practical communications skills in a real-world setting. Students work closely with an organization to assess its needs, and build a project designed to address these needs. Students also have a weekly seminar and provide regular updates of their progress.

Prerequisites: TCOM 400 Internship in TCOM I and Senior status in TCOM program

#### **TCOM 420** SENIOR SEMINAR IN TECHNOLOGICAL COMMUNICATIONS

Spring, 3 credit hour(s)

This class offers students the opportunity to look towards their professional future as they synthesize their Technological Communications coursework by completing and enhancing their professional portfolio, designing, and constructing a semesterlong capstone project, and completing preparations for career opportunities.

Prerequisites: Senior status in TCOM program

#### **VAST 105** VETERINARY ASSISTING Spring, 1 credit hour(s)

This course provides students with an understanding of the roles of all members of the veterinary health care team and the knowledge and skills necessary to assist veterinarians and veterinary technicians in the practice of their professions. It instructs students in proper basic care and husbandry of animals, as well as the monitoring of general animal health indicators. It emphasizes the proper handling and restraint of animals for examinations and medical procedures. Care of veterinary supplies, equipment, and facilities is also covered, with an emphasis on meticulous disinfection, sterilization, and infection control measures.

Prerequisites: Enrollment in the Health Science Career Studies Certificate and successful completion of Medical Terminology of Disease (HLTH 200) or permission of instructor.

#### **VSAD 301**

#### VETERINARY PRACTICE MANAGEMENT Spring, 3 credit hour(s)

The purpose of this course is to provide the student with current information in veterinary practice management. Students will apply concepts, principles and skills they have learned in previous coursework to situations specific to veterinary practice management. Topics include: veterinary hospital human resource management, management of reception and front desk procedures, telecommunications and information technology managment of veterinary practice, veterinary hopsital revenue and financial control, management of veterinary medical records, veterinary inventory control, veterinary facilities management, and marketing a veterinary practice.

Prerequisites: Enrollment in or completion of a degree in a Veterinary or Business related program and at least 45 credits earned overall, or permission of instructor.

#### **VSAD 302**

#### ANIMAL CARE INSTITUTION MANAGEMENT Fall, 3 credit hour(s)

This course instructs students in veterinary hospital design; veterinary equipment acquisition, training, maintenance, and replacement; insurance for veterinary facilities; and programs and services administered by veterinary technicians. The course also addresses the management of specific types of the career interests of the student and the needs of the supervising organization. Internship assignments may include information gathering, analysis, planning, implementation, evaluation, and other responsibilities. The student must complete 40 hours of internship experience to receive one credit hour of course work (for a total of 12 credits/480 hours).

Prerequisites: Senior Seminar (HSMB 410), completion of other program requirements, or permission of the Program Director or Dean.

Prerequisites: Enrollment in or completion of a degree in a Veterinary or Business related program and at least 45 credits earned overall, or permission of instructor.

#### **VSAD 308**

#### VETERINARY SERVICE ADMINISTRATION INTERNSHIP ORIENTATION Spring, 1 credit hour(s)

This course prepares students for the Internship for Veterinary Services Management, helps each student secure an appropriate internship site, helps students plan appropriate tasks and activities to complete during their internships, and establishes a contract between SUNY Canton, the internship site, and the student.

Prerequisites: Senior status in the Veterinary Services Management program or permission of instructor.

#### **VSAD 402**

#### **VETERINARY BUSINESS & FINANCIAL** MANAGEMENT Fall, 3 credit hour(s)

This course introduces skills necessary to become proficient in one of the critical competencies required for Certified Veterinary Practice Manager certification: Finance. Students utilize Quickbooks accow1ting software on a virtual server to perform financial management tasks as they pertain to veterinary medicine and animal industries, and to generate and analyze financial reports. They discuss retirement accounts and investment accounts, and their implementation in a veterinary practice setting. They will also discuss outside entities (accountants, financial advisors) with whom they will work to establish ,financial accounts, report financial data, and make timely and accurate payment of financial obligations.

Prerequisites: Enrollment in or completion of a degree in a Veterinary or Business related program and at least 45 credits earned overall, or permission of instructor.

This course is intended to be a culminating

experience for the student, building upon and rein-

forcing material of previous course work. Working

in conjunction with a field supervisor, the student

will perform delegated duties associated with those

of a veterinary facility manager or administrator.

The internship will be individualized according to

#### VSAD 408

#### VETERINARY SERVICE ADMINISTRATION INTERNSHIP Spring, 12 credit hour(s)

## **VSCT 100**

#### HUMAN ANIMAL BOND Fall, 1 credit hour(s)

The Human Companion Animal Bond course is an interdisciplinary approach to understanding human animal relationships. Topics include mechanisms of attachment, social and psychological aspects of human animal interactions, pet loss and bereavement, physical and mental health benefits of animals, and animal assistance therapy programs. Major focus will be on developing the student's interdisciplinary knowledge and understanding of the issues surrounding animals in society.

#### **VSCT 101**

#### FUNDAMENTAL VETERINARY NURSING SKILLS I

#### Fall, 2 credit hour(s)

This course introduces students to the Veterinary Technology profession and fundamental animal care nursing skills. Students learn how to properly restrain cats and dogs, administer parenteral injections on models, take a patient history, complete medical records, conduct a physical examination, and perform clinical procedures related to primary patient care. Students also learn to identify cat and dog breeds and surgical instruments. Competencies related to basic nursing care are conducted at the end of the course. Course is limited to freshman students in the Veterinary Science Technology curriculum. One hour lecture, two hours laboratory per week. This course is a prerequisite to all other required VSCT courses.

Prerequisites: College Biology I (BIOL 150), College Chemistry I (CHEM 150), Introduction to Animal Agriculture (VSCT 103), or permission of instructor.

#### **VSCT 102**

#### COMPANION ANIMAL BEHAVIOR Spring, 2 credit hour(s)

This course is designed to help veterinary technicians gain insight and understanding into normal animal behavior. Emphasis is on analyzing problem behavior, preventative counseling, taking a behavioral history and client education of common canine and feline behavioral problems. In addition, avian and equine behavioral issues will also be discussed.

Prerequisites: VSCT 203, VSCT 204

#### **VSCT 103** INTRODUCTION TO ANIMAL AGRICULTURE Fall, 2 credit hour(s)

An introductory course designed to familiarize the student with the use of animals to produce food, fiber, or profit. Beef cattle, dairy cattle, horses, sheep, swine, goats, and other animals will be discussed. The intent of this course is to provide the student with insight as to the functions and needs of the animal owner/producer. Common production schemes, terminology, and animal breeds will be addressed.

Prerequisites: Enrollment in Veterinary Technology (2278) or Veterinary Science Technology (521)

#### **VSCT 104**

#### VETERINARY OFFICE PRACTICES Spring, 1 credit hour(s)

This course introduces basic veterinary office practices that would be expected of a graduate veterinary technician. The course covers business and professional skills such as: record keeping,

scheduling appointments, professionalism and client communication. This course also provides hands-on experience with current veterinary practice software.

Prerequisites: VSCT 101 Fundamental Veterinary Nursing Skills I and restricted to Veterinary Technology (2278) or Veterinary Science Technology (521)

#### **VSCT 112**

#### VETERINARY CLINICAL PATHOLOGY I Spring, 3 credit hour(s)

An introduction to Veterinary Clinical Pathology as it relates to normal and abnormal physiology of animal species. Emphasis will be placed on techniques and sample handling rather than diagnosis. This course includes instruction in general laboratory equipment, use and function of spectrophotometer, and the proper preparation of biological samples. Students will learn basic diagnostic techniques that include complete blood count, urinalysis, and examination of feces for internal parasites. Enrollment limited to students in the veterinary technology programs (521 & 2278).

Prerequisites: VSCT 101 or permission of instructor.

## VSCT 114

#### ANIMAL ANATOMY & PHYSIOLOGY Spring, 3 credit hour(s)

An introduction to the fundamental understanding of animal structure and function. Emphasis placed on the practical aspects of anatomy and physiology of different species. Discussion will include tissues, organs, and body systems which make up the living mammalian organism. Two hours lecture, two hours laboratory per week.

Prerequisites: Veterinary Nursing Skills I (VSCT 101) and College Biology I (BIOL 105) or permission of instructor.

#### VSCT 115

#### FUNDAMENTAL VETERINARY NURSING SKILLS II

Spring, 2 credit hour(s)

This course is a continuation of material covered in Fundamental Veterinary Nursing Skills I. Students review handling and restraint techniques for dogs and cats and continue with identification of dog breeds and surgical instrumentation.

Students identify, handle, and discuss husbandry of birds, small mammals, and selected exotic species. Instrumentation and restraint techniques for horses and livestock are also covered. Students perform nursing procedures including wound care and bandaging, diagnostic procedures for the eye, and subcutaneous and intramuscular injection techniques, among others, and discuss the examination and care of pediatric and geriatric patients. Students perform surgical preparation and assisting techniques, CPR, and endotracheal intubation on models and prepare surgical instruments and supplies for use. Animal welfare and the pet overpopulation crisis are also covered and client education is further developed. This course has 50 minutes of lecture and two hours of laboratory per week.

Prerequisites: VSCT 101 - Fundamental Veterinary Nursing Skills I or permission of instructor

#### **VSCT 201** VETERINARY TECHNOLOGY PRECEPTORSHIP I Spring, 1 credit hour(s)

The preceptorship is designed to involve the

students in the daily activities that are encountered in a veterinary practice, animal research facility or other allied animal health facility. The clinical site is selected by the student, however, they must be under the direct supervision of either a licensed veterinarian or a licensed veterinary technician. A minimum of 120 hrs of participation in a position relating to veterinary technology in a faculty approved facility is required. The preceptorship is performed during the summer.

Prerequisites: VSCT 101, VSCT 103, VSCT 104,VSCT 112, VSCT 114, VSCT 115.

#### **VSCT 202**

#### VETERINARY CLINICAL PATHOLOGY II Fall, 3 credit hour(s)

A course of continued study (VSCT 112) in veterinary clinical pathology dealing with diagnostic laboratory procedures and their correlation with pathological conditions. This course includes discussion of normal hematology of the common domestic mammals and birds. Hematopoesis, classification of anemias and abnormal leukograms are also covered. Students will also be instructed in the identification, life cycles and controls of animal parasitisms as well as the method and interpretation of a complete urinalysis. Laboratory practice is Hematology, Chemistry, Parasitology and Urinalysis of all the major domestic species of animals is included.

#### **VSCT 203**

#### SMALL ANIMAL MEDICINE & THERAPEUTIC TECHNIQUES Fall, 3 credit hour(s)

This course is designed to introduce the students to many of the common procedures performed by licensed veterinary technicians in a small animal clinical situation. The students will be instructed on many of the common canine and feline diseases and will become familiar with the signs, therapeutic treatments and methods of prevention. Small animal zoonotic diseases will be discussed to familiarize the students to the topics that veterinary staff are frequently called upon to answer. The students will perform venipuncture and intravenous catheter placements. Other procedures such as cystocentesis, stomach tube placement, blood transfusions, EKG use and splint application will be demonstrated. Students will anesthetize the animals used in the laboratories so that the skill for that week can be performed. Students will assist with the neutering of the animals after the lab skills for that week are completed and will be allowed to assist with the anesthetic monitoring and the recovery of the animals Prerequisites: VSCT 112, VSCT 114, VSCT 115.

#### VSCT 204

#### LARGE ANIMAL MEDICINE & THERAPEUTIC TECHNIQUES Fall, 2 credit hour(s)

Course is designed to prepare the Veterinary Science student for a role in a large animal veterinary practice. Emphasis will be on restraint and handling, physical exam and therapeutic methods of the food, fiber and equine patient. Students will also have an understanding of specialized diagnostics, anesthetic principles and surgeries and associated with these animals. This course also includes discussion of regulatory medicine and its importance to agriculture and public health.

Prerequisites: VSCT 112, VSCT 114, VSCT 115

#### VSCT 205 RADIOGRAPHIC TECHNIQUES Fall, 2 credit hour(s)

This course is designed as an introduction to radiological and other types of imaging in a veterinary facility. Students will be required to position patients, calculate exposure values, exposed radiographic film and process films manually, automatically and digitally. Students will examine radiographs taken by their lab groups and critique them for their diagnostic quality.

Students will be instructed on radiation hazards and how to avoid them. The use of ultrasound will be demonstrated and alternative technologies for imagining such as fluoroscopy, CT, MRI and nuclear scintigraphy will be discussed. Prerequisites: VSCT 112, VSCT 114, VSCT 115

#### VSCT 206 ANESTHETIC PRINCIPLES

Fall, 3 credit hour(s)

This course is an introduction to anesthetic principles as they relate to animal medical and surgical care. The student will be presented with information on basic preanesthetic agents, anesthetic agents, and anesthetic monitoring devices. The student will have hands-on experience with preanesthetic, anesthetic, and postanesthetic evaluation/monitoring techniques and devices. Students will be presented with the potential human and animal hazards associated with anesthetic drugs. CPR and the recognition and treatment of emergency situations will be addressed. Pain control and analgesics commonly used in multi- modal pain treatment will be covered.

Prerequisites: VSCT114, VSCT 115

#### VSCT 207

## HEALTH & DISEASE OF FARM ANIMALS *Fall, 3 credit hour(s)*

This course is designed to acquaint students with the most common infectious and non-infectious diseases of cattle, horses, sheep, goats and swine. The causative agent of these diseases will be identified and emphasis will be placed on care of the animal and the prevention of these disease. Basic discussion of immunology and vaccination theory is also included as well as proper husbandry of these animals and how this relates to the wellbeing of these animals. Diseases of public health importance and zoonotic potential are also included.

Prerequisites: Enrollment in Veterinary Technology (2278) or Veterinary Science Technology (521) and BIOL 150

#### **VSCT 209**

#### VETERINARY TECHNOLOGY PRECEPTORSHIP II Fall, 1 credit hour(s)

The preceptorship is designed to involve the students in the daily activities that are encountered in a veterinary practice, animal research facility or other allied animal health facility. The clinical site is selected by the student, however, they must be under the direct supervision of either a licensed veterinary technician. A minimum of 120 hrs of participation in a position relating to veterinary technology in a faculty approved facility is required. Emphasis in this course is on the integration of skills learned in the veterinary technology clinical coursework during the previous semesters. These tasks may include history taking and physical exam, surgical nursing, laboratory procedures, radiology as well as therapeutics and

animal care. The preceptorship is performed during the winterterm.

Prerequisites: VSCT 202, VSCT 203, VSCT 204, VSCT 205, VSCT 206, VSCT 207

#### VSCT 210 VETERINARY MICROBIOLOGY Spring, 3 credit hour(s)

This course consists of the study of pathogenic organisms encountered in animals and the diseases that they cause. Basic concepts of cytology and the interpretation of cytological slides are also covered. The laboratory focuses on the management of a veterinary microbiology lab as well as the isolation and identification of veterinary pathogens. Enrollment is limited to students in the veterinary technology programs (521 & 2278)

Prerequisites: BIOL 209, VSCT 112, VSCT 202, VSCT 203 VSCT 207

#### VSCT 211

## ANIMAL HOSPITAL PRACTICES & PROCEDURES

Spring, 3 credit hour(s)

This course is considered the capstone course for the Veterinary Science Technology curriculum and is only open to students in their last semester of the program. This class creates an environment similar to that of a working veterinary practice and allows students to practice and further enhance the skills necessary for a licensed veterinary technician. During each class meeting, students are required to write graded assignments. They will also complete longer reflective papers as part of the semester assignment. Students are also required to research a case study and prepare a written reference paper and deliver an oral presentation using PowerPoint. Students enrolling in this class are expected to perform two weeks of kennel duty.

Prerequisites: VSCT 201, VSCT 202, VSCT 203, VSCT 204, VSCT 205, VSCT 206, VSCT 207, VSCT 209

#### VSCT 212

#### RESEARCH ANIMAL TECHNIQUES Spring, 1 credit hour(s)

This course is a foundation course in developing skills necessary for employment in an animal research facility. Husbandry and clinical techniques specific to laboratory animals will be discussed. Emphasis will be on providing quality animal care, monitoring the health and well-being of laboratory animals, and understanding ethical issues surrounding animal research. Enrollment limited to students in the veterinary science programs (521 & 2278).

Prerequisites: Fundamental Veterinary Nursing Skills I (VSCT 101) or permission of instructor.

#### VSCT 213 PRACTICAL NUTRITION Spring, 2 credit hour(s)

This course will cover the feeding of small animals in health and disease during the various stages of the life cycle. The major dietary nutrients will be discussed at length. Nutrient deficiencies and excesses will be discussed and human and animal case examples used. Dietary management of specific diseases that affect small animals (and to a lesser extent large animals) will be a primary focus. Homemade, raw and commercial diets will be discussed.

Interpreting pet food labels and calculating the amount of food to feed an animal will be covered.

#### **VSCT 214**

#### VETERINARY PHARMACOLOGY

Spring, 2 credit hour(s)

This course is designed for Veterinary Science Technology students as an

introduction to Pharmacology. The various classes of drugs used in Veterinary medicine will be discussed in regard to use, side effects, contraindications, method of administration, etc. Upon completion of this course, a student should have a working knowledge of the commonly used drugs in a veterinary hospital. One hour lecture, two hours laboratory per week. This course is only open to fourth semester Veterinary Science Technology students who have successfully completed all prior Veterinary Science courses.

Prerequisites: VSCT 202, VSCT 203, VSCT 206

#### **VSCT 303**

#### ADVANCED VETERINARY NURSING Spring, 3 credit hour(s)

This course aids students who have already completed fundamental courses in veterinary technology in developing their knowledge and skills. Emphasis on specific concepts of patient assessment, critical care nursing, advanced fluid therapy, transfusion medicine, respiratory therapy and mechanical ventilation, rehabilitation, advanced imaging, clinical nutrition, and emergency medicine. Use of advanced electronic equipment in veterinary practice is discussed.

Prerequisites: VSCT 202, VSCT 203, VSCT 205, VSCT 206, and at least 45 credits earned, or permission of instructor.

#### **VSCT 305**

#### ANIMAL BEHAVIOR IN VETERINARY PRACTICE

#### Spring, 3 credit hour(s)

This course examines the normal and abnormal behavior of domestic animals, with emphasis on analyzing companion animal behavior disorders, taking a behavioral history, examining treatment methods and providing client education and preventative counseling. Common pharmaceutical therapies used in behavioral modification will be discussed. Domestic ruminant, bird and captive animals' behavioral issues will also be discussed.

Students will be expected to analyze case studies and discuss possible modification tactics.

Prerequisites: VSCT 203 Small Animal Medicine and Therapeutic Techniques, VSCT 204 Large Animal Medicine and Therapeutic Techniques.

#### **VSCT 401**

#### ISSUES & PERSPECTIVES IN VETERINARY MEDICINE

#### Fall, 3 credit hour(s)

This course allows the student to explore legal and ethical issues as they pertain to veterinary medicine and animal industries. Students are required to thoroughly research topics and present their own thoughts and conclusions. Student research, debate, case studies, and other modalities are used.

Prerequisites: VSCT 202, VSCT 203, VSCT 204 and at least 45 credits earned overall, or permission of instructor

#### WELD 101

OXY-FUEL WELDING, CUT, PLASMA Fall, 4 credit hour(s) This course begins with compressed gas and general shop safety. Oxy-fuel cutting, welding, and brazing are covered along with plasma cutting. Additional cutting methods will be discussed, including more traditional saw cutting methods and laser cutting.

## WELD 102

## SMAW (STICK) & GOUGING *Fall, 4 credit hour(s)*

In this course, students learn about Shielded Metal Arc Welding with an overview and use of multiple electrode materials. All positions and procedures are taught and practiced as they apply to each electrode, to include gouging.

#### WELD 103

### BLUEPRINT READING

Fall, 3 credit hour(s)

In this course, students learn the technical skills required for blueprint reading. This includes the interpretation of trade drawings and welding symbols, and the application of those skills to practical situations.

#### WELD 110

GMAW & FCAW (MIG)

Spring, 3 credit hour(s)

In this course, students learn the basic technology/equipment as well as the practical skills required for Gas Metal Arc Welding and Flux Core Arc Welding processes. Welding non-ferrous metals with spool gun attachments are also covered.

Prerequisites: WELD 101 or WELD 102

#### WELD 112

METALLURGY & TESTING

Spring, 3 credit hour(s)

In this course, students learn the basic metallurgy knowledge needed for welding including heat treating. Metal and weld testing processes are also covered.

#### WELD 113

## SHEET METAL FABRICATION *Fall, 3 credit hour(s)*

In this course, students learn pattern making and metal bending processes for sheet metal fabrication. Spot welding and press brake procedures are also covered.

Prerequisites: WELD 101, WELD 103

#### WELD 201

## GTAW (TIG)

Fall, 4 credit hour(s)

In this course, students learn the basic technology/equipment as well as the practical skills required for Gas Tungsten Arc Welding of both ferrous and non- ferrous metals.

Prerequisites: WELD 101, WELD 102

#### WELD 202

**CODE & INSPECTION** 

Spring, 2 credit hour(s)

Welding codes and inspection processes are covered.

Prerequisites: WELD 112

#### WELD 210

#### WELDING CERTIFICATION

Spring, 3 credit hour(s)

This course covers the various certifications available in the welding industry as well as the procedures to qualify for a specific weld. Students perform welding certification and qualification procedures. Prerequisites: WELD 110, WELD 201, WELD 202

#### WELD 211

## BLACKSMITHING & ORNAMENTAL FABRICATION

Spring, 3 credit hour(s)

Casting, forging, heat treating, and blacksmithing practices are covered.

Prerequisites: WELD 101, WELD 112

#### WELD 212

#### FABRICATION & REPAIR

Spring, 2 credit hour(s)

Students will use techniques and procedures common to the the welding and fabrication industry to build functional assemblies and repair parts, including cast iron.

Prerequisites: WELD 110, 112, WELD 113, WELD 201

#### WELL 101

#### YOGA

*Fall/Spring*, 1 credit hour(s)

In this course, students will be introduced to basic yoga postures, breathing techniques, meditation and relaxation.

#### WELL 102

#### PERSONAL FITNESS

Fall/Spring, 1 credit hour(s)

In this course, students will focus on fitness theory, basic fitness training and conditioning principles, and work towards individual fitness goals.

#### WELL 103 PRACTICING MINDFUL LIVING AND MINDFULNESS Fall/Spring, 1 credit hour(s)

Explore mindful living and meditation in the context of health and wellness. Students will learn and practice a variety of approaches and applications to mindfulness, and reflect on their experiences.

#### WELL 104

### ALTERNATIVE APPROACHES TO MENTAL AND PHYSICAL WELLNESS

Fall/Spring, 1 credit hour(s)

Explore the various mind-body approaches to mental and physical wellness. Comprehensive overview of fundamental concepts of theory and philosophy and common applications of each practice. Students will gain understanding of the terms "holistic" and "alternative" in the context of health and wellness practices and approaches. The practices reviewed are often integrated into a larger health-care plan for individuals, so students will gain understanding into their most common complementary roles. Topics will be presented\* by professionals in the field, giving students firsthand access to discuss the practice with highly experienced individuals. Reading material prior to class will be based on recommendations by the presenting practitioner. The course is designed to expand the students' knowledge of practices associated with psychological and physical wellness. This course is not intended, nor designed, to train or certify individuals to practice any of the covered topics.

#### WELL 380 FOUNDATIONS IN MIND-BODY HEALTH AND WELLNESS

### Fall/Spring, 3 credit hour(s)

Engage in an interdisciplinary examination of what it means to be "well." Using a biopsychosocial framework and the mind- body connection as a foundation for study, students will explore a definition of health that involves the satisfaction of physical, psychosocial, cultural, economic, and spiritual needs (among others). Students will undertake a critical examination of how wellness has been defined across different cultures (both historical, and current); explore the West's preoccupation with wellness as an individual pursuit; examine the social structures and institutions that contribute to/ are necessary for people and communities to be well; dissect the normalization of stress and how it disrupts health and wellness; and reflect on their own personal practices that lead to health and wellness.

#### WELL 382

#### THE LIMITLESS MIND: LESSONS ON DEDICATION, RESILIENCE AND MENTAL FORTITUDE

*Fall/Spring, 3 credit hour(s)* 

In this course, students will explore the concept of the limitless mind as it relates to athletic endeavors and other life applications. Colloquially referred to as "grit," a term that has expanded in its usage over the years, students will learn about a host of traits and skills that contribute to the development and deployment of mental fortitude. In particular, students will examine the concepts of working strenuously toward challenges, maintaining effort and interest over years despite failures and adversity, self-discipline, managing plateaus in performance, among others, as they apply to athletic endeavors (e.g., ultramarathoning) and a variety of other life domains, such as schools and workplaces.

#### YOGA 105 YOGA NIDRA

Fall/Spring, 1 credit hour(s)

Introduction to Yoga Nidra ("yogic sleep") and its traditional and clinically tested benefits. Yoga Nidra is a guided meditation technique practiced while lying down, eyes closed. This technique falls under the limb of yoga called pratyahara, or sense withdrawal, as it is practiced by focusing only on sound and internal awareness. The practice has been traditionally used to explore the self (memories, emotions, instincts, drives), and increase awareness throughout all stages of consciousness to improve memory, learning, and sleep, plus decrease anxieties, bad habits and more. In the modern day, there has been research exploring the state of consciousness produced by the practice, as well as how it can be applied for stress, hormonal irregularities, sleep, and anxiety.

#### YOGA 120

#### YOGA THEORY Fall/Spring, 3 credit hour(s)

Introduction to yoga theory and philosophy, and current research related to types of yoga and how they differ, why yoga is practiced and how it can apply to and benefit daily life. Students will learn about the 8 limbs of ashtanga yoga, plus bandhas and mudras introduced in hatha yoga, and physiology of various breathing techniques and yoga postures.

Prerequisites: WELL 101



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## State University of New York

## ABOUT SUNY

The nation's largest comprehensive public university system, The State University of New York (SUNY), was established in 1948. Since its founding, the SUNY system has evolved to meet the changing needs of New York's students, communities, and workforce. SUNY initially represented a consolidation of 29 unaffiliated institutions, including 11 teachers colleges. All of these colleges, with their unique histories and backgrounds, united for a common goal: To serve New York State.

Today, the system includes 64 schools, a mix of 29 state-operated campuses and five statutory colleges—including research universities, liberal arts colleges, specialized and technical colleges, health science centers, land-grant colleges—and 30 community colleges. These institutions offer programs as varied as ceramics engineering, philosophy, fashion design, optometry, maritime studies, law, medical education, and everything in between. The University also operates hospitals and numerous research institutes.

SUNY is embedded in virtually every community in New York State: Remarkably, 93 percent of New Yorkers live within 15 miles of a SUNY campus, and nearly 100 percent live within 30 miles. In many communities, SUNY is also the region's largest employer. While SUNY students are predominantly New York State residents, hailing from every one of the state's 62 counties, the University also draws students from every other state in the United States, the District of Columbia, four U.S. territories, and 160 nations from around the world. One out of three New York State high school graduates choose SUNY, and the total enrollment of nearly 400,000 full-time and part-time students represents 37 percent of New York State's higher education student population. SUNY also employs 88,000 faculty and staff and counts more than 3 million living alumni, residing in New York State and throughout the world.

SUNY attracts the best and brightest scholars, scientists, artists, and professionals and boasts nationally and internationally recognized faculty in all major disciplines.



Faculty are regular recipients of prestigious awards and honors.

The State University of New York is committed to serving as the state's strongest economic and quality-of-life driver and providing quality education at an affordable price to New Yorkers and students from across the country and the world.

### THE BOARD OF TRUSTEES

The Board of Trustees is the governing body of the State University of New York. It consists of 18 members, 15 of whom are appointed by the Governor, by and with consent of the New York State Senate. In addition, the President of the Student Assembly serves as student trustee and the Presidents of the University Faculty Senate and Faculty Council of Community Colleges serve as ex-officio trustees.

Among the authorities of the Board of Trustees is the power to:

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- Establish new campuses.

For additionalv information about the State University of New York, visit www.suny.edu.



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JAMES L. SHEPPARD (08), *Assistant Director* of *Counseling*; B.A., SUNY Buffalo; M.S., SUNY Plattsburgh; Li-censed Mental Health Counselor

### HEALTH SERVICES

JULIE A. CRUICKSHANK (06), Associate Director of Health Services; A.A.S., SUNY Canton; B.S.N., SUNY Plattsburgh; M.S., Grand Canyon University; RN

ROSEMARIE C. HEISSE (98), *College Physician*; B.A., Boston University; Doctor of Osteopathy, Philadelphia College of Osteopathic Medicine

JENNIFER HYNES (12), Supervisor of College Nursing Services; LPN, North West Tech

FARREN C. LOBDELL (07), *Director of Wellbeing Programs and Initiatives*; B.A., SUNY Potsdam; M.S., SUNY Plattsburgh

KATHARINE MATTHIS (23), *Physician Assistant*;

AMANDA L. PERSONS (19), *Director of Student Health Services*; B.A., SUNY Oswego; B.S., SUNY Upstate; M.S., SUNY Upstate

KIM M. RICHARDS (18), *Psychiatric Nurse Practitioner*, M.N., Upstate Medical University

KRISTIN WESTON (18), *Nurse Practitioner*, D.N.P., Frontier Nursing University

### STUDENT LIFE

NICODEME F. AUGUSTE (16), Associate Director of Residence Life/Director of Title IX, B.S., SUNY Canton; M.Ed., St. Lawrence University

ROBERT BRUCE (13), Assistant Director of Student Activities, Involvement, and Leadership (SAIL); B.M., Berk-lee College of Music

PRISCILLA COLLINS (11), Executive Director of Student Activities, Involvement, and Leadership (SAIL); A.A.S., B.B.A., SUNY Canton; M.A., CUNY Queens College; Health Care Management Certificate, St. Jo-seph's College; Health Care Administration & Policy Advance Certificate, CUNY School of Professional Stud-ies; SUNY Chancellor's Award for Excellence 2023

CHELSEA ELLIS (18), *SAIL Engagement Coordinator*; A.A.S., B.S., SUNY Canton; Health Care Management

LASHAWANDA T. INGRAM (05), *Director of Diversity and Orientation/Chief Diversity Officer*; B.S., M.S., SUNY Buffalo; Chancellor's Award for Excellence in Professional Service 2018

JOHN M. KENNEDY (06), Director of Residence Life & Men's Cross-Country Coach; A.S., SUNY Canton; B.S., SUNY Geneseo; M.Ed., St. Lawrence University LOUISA LEWIS (16), Associate Director of Residence Life; B.S., Montclair State University; M.Ed. St. Lawrence University

KRISTEN B. ROBERTS (07), Assistant Dean of Students; B.A., Mount St. Mary College; M.Ed., St. Lawrence University; NorthStar Award 2013

RICHARD J. THAYER (13), *Director of Student Affairs Technology*; A.A. Monroe Community College; B.A., SUNY Potsdam; M.S., John Jay College of Criminal Justice; SUNY Canton President's Meritorious Service Award 2021

SARAH L. TRUAX (13), Associate Director of Residence Life; B.S., SUNY Cobleskill



RASHID K. AIDUN (07), Associate Professor, Engineering Science; B.S., National University of Iran; M.S., Syracuse University; Ph.D., Clarkson University; Chancellor's Award for Excellence in Faculty Service 2018

KIRSTEN ANDERSEN (22), *Lecturer, Nursing:* M.S., Walden University

AMANI M. AWWAD (98), Associate Professor, Sociology; B.A., Siena Heights University; M.A., Ph.D., Western Michigan University; Research Foundation Award for Research and Scholarship 2005

BRANDON J. BALDWIN (06), Associate Professor; Automotive Technology; A.A.S., SUNY Morrisville; B.S., Cornell University; M.Ed., Buffalo State College

DAWNE M. BARKLEY (07), Associate Professor, Nursing; A.A.S., SUNY Canton; B.S.N., Florida Hospital College of Health Sciences; M.S.N., Walden University; D.N.P., Chamberlain College of Nursing; RN

WILLIAM DAVID BARNES (05), Associate Professor, Science; B.A., University of MT; M.S.T., SUNY Potsdam; Ed.D., Capella University

JENNIFER K. BOURDETTE (18), Instructional Support Associate, Engineering Technology-GMMD; B.A., SUNY Canton

KIMBERLY BOYD (14), *Lecturer, Social Sciences*; M.S., College of William and Mary

CHRISTINE M. BRASSARD (14), Assistant Professor, Nursing; A.A.S., SUNY Canton; B.S.N., M.S.N., St. Joseph's College of Maine; RN

DEREK J. BROWN (23), Instructional Support Associate; Physical Therapy; A.S., SUNY Canton

THOMAS J. BURL (19), Assistant Professor, Decision & Graphic Medial System; M.S., Capella University; PhD, Colorado Technical University

MATTHEW J. BURNETT (06), *Professor; Graphic Multi-Media Design;* A.S., North Country Community College; B.A., SUNY Plattsburgh; M.F.A., Maine College of Art; MED, St. Lawrence University; Chancellor's Award for Excellence in Scholarship and Creative Activities 2021

ROBERT F. BURNETT (06), Assistant Professor, Civil Engineering & Construction Technology; A.A.S., SUNY Canton; B.A., SUNY Potsdam; M.Ed., St. Lawrence University

BROOKE M. BUSH (18), *Instructional Support Associate, Nursing*; A.S., SUNY Morrisville DAVID T. BUTTON (11), *Lecturer, Business*; B.A., Southern Methodist University; M.S., Rensselaer Polytechnic Institute; Distinguished Citizen Award 2012

DARIEN B. CAIN (20), *Lecturer, Funeral Service Administration*; B.S., SUNY Potsdam

KEVIN M. CARVILL (16), *Lecturer, Criminal Justice*; B.A., St. Lawrence University; J.D., SUNY Buffalo

YU CHIN CHENG (08), Associate Professor, Industrial Tech. Mgmt.; B.M., Fengchia University; M.P.M., Northwestern University; M.S., Ph.D., University of Wisconsin-Madison

MARCELLA CHIROMO (21), Assistant Professor, Psychology; Ph.D., Chicago School of Professional Psychology

JESSE L. CLARK-STONE (08), Assistant Professor, Mathematics; A.S., SUNY Canton; B.A., M.A., SUNY Potsdam; Ph.D., Clarkson University

CHAD COLBERT (22), *Lecturer, Business*; M.A., Wake Forest University

LISA E. COLBERT (01), *Sr. Lecturer, Criminal Justice*; A.A.S., SUNY Canton; B.A., SUNY Potsdam, M.A., SUNY Empire State College

ROBERTO COMELLA (20), Lecturer, Decision & Graphic Media Systems; B.S., Polytechnic of Turin

LUCAS W. CRAIG (12), Associate Professor, Mechanical Engineering Technology; A.S., Jefferson Community College; B.S., M.S., Ph.D., Clarkson University; SUNY Canton President's Meritorious Service Award 2018; Chancellor's Award for Excellence in Teaching 2022

MICHELLE L. CURRIER (09), Associate Professor, Criminal Justice; B.A., SUNY Potsdam; M.L.S., Florida State University; Ph.D., Nova Southwestern University; Chancellor's Award for Excellence in Professional Service 2016

KIMBERLY A. DAVIES (15), Assistant Professor, Nursing, B.A., Graceland University; B.S.N., M.S., M.S.N., University of St. Francis; RN; DNP., Capella University

JONDAVID S. DELONG (08), *Professor, Legal Studies*; J.D., SUNY at Buffalo Law

PUTTAGOUNDER DHANASEKARAN (21), Associate Professor, Mechanical & Energy Systems; M.E., PSG Col-lege of Technology University of Madras; Ph.D., Wichita State University

ALICIA M. DUNN (21), Instructional Support Technician, Veterinary Technology; A.A.S. SUNY Canton KENNETH M. ERICKSON (97), Professor, School of Science, Health, and Criminal Justice, Science; B.S., East-ern Illinois University; M.A., SUNY Geneseo; D.V.M., University of Illinois College of Veterinary Medicine; SUNY Canton Distinguished Faculty Award 2004

CHARLES R. FENNER (06), *Professor, Business*, B.A., University of Maryland; M.B.A., City University; Ph.D., Touro University International; Chancellor's Award for Excellence in Teaching 2018

MARELA FIACCO (08), Associate Professor, Business; B.B.A., Freed-Hardeman University; M.B.A., Middle Tennessee State University, Ph.D., North Central University; SUNY Canton President's Meritorious Service Award 2021

JENNIE H. FLANAGAN (12), *Sr. Lecturer, Business*; A.S., B.T., SUNY Canton; M.S.A., Seton Hall University

STEPHEN E. FREMPONG (06), *Professor, Electrical Engineering Technology*; B.E.T., City College of the City University of New York; M.S., Pace University; Ph.D., California Coast University; Chancellor's Award for Excellence in Scholarship and Creative Activities 2015

KARLI B. FRENCH (22), Assistant Professor, Nursing; RN, B.S.N., St. John Fisher College

KAMBIZ GHAZINOUR NAINI (19), Associate Professor, Cybersecurity; M.S., University of New Brunswick, Canada; Ph.D., University of Calgary, Canada

SAEID HAJI GHASEMALI (22), Associate Professor; B.S., Iran University of Science & Technology; M.S., Sharif University of Technology; PhD., Amirkabir University

MEHDI GHAYOUMI (22), Assistant Professor, PhD., Kent State University

EMILY A. HAMILTON-HONEY (12), Associate Professor, Humanities; B.A., Western Michigan University; M.A., University of Michigan; Ph.D., University of Massachusetts

NEIL A. HANEY (06), *Instructional Support Technician, Powersports*; Powersports Performance and Repair Certificate, SUNY Canton

CULLEN L. HASKINS (13), Sr. Lecturer, Mechanical Engineering Technology; B.S., M.S., Clarkson University

MORGAN HASTINGS (20), *Lecturer, Game Design*; M.M., SUNY Potsdam

NATHAN HAVENS (13), Lecturer, Electrical Const. & Maintenance; B. Tech., SUNY Canton

## Campus Directory: Academic Personnel

NICOLE A. HELDT (95), *Professor, Biology and Chemistry*; A.S., Jefferson Community College; B.S., SUNY Oswego; M.S.T., SUNY Potsdam; Ph.D., Clarkson University

TASIA HILTON-BETTON (22), Lecturer, Healthcare Management; Ph.D., Walden University

FENG HONG (05), Associate Professor, Physics; B.S., Zhejiana University; M.S., Ph.D., North Dakota State University; SUNY Canton Distinguished Faculty Award 2010

CHENGRU HU (04), *Professor, Finance;* B.S., Peking University; Ph.D., Rutgers University

PHILIP JAMES (19), Assistant Professor, Accounting, B.S., M.S., University of West Indies; Ph.D., University of Technology, Jamaica

ANGELA E. JOHNSON (22), Assistant Professor, Nursing; M.S. SUNY Poly

WILLIAM T. JONES (08), Professor, Business & Legal Studies/Co-Chief Diversity Officer; A.S., Jefferson Community College; B.A., SUNY Oswego; M.A., Boston University; J.D., Syracuse University College of Law; Chancellor's Award for Excellence in Faculty Service 2016

ALAINYA K. KAVALOSKI (15), Associate Professor, Humanities; B.A., Edgewood College; M.A., Hebrew University; Ph.D., University of Wisconsin-Madison

ELENA A. KHAPALOVA (20), Assistant Professor, Business; A.B., Mount Holyoke College; M.B.A., Washington State University; Ph.D., Washington State University

NICHOLAS C. KOCHER (08), *Lecturer, Business*; B.A., SUNY Canton; M.B.A., Clarkson University

TATSUHITO KOYA (12), Associate Professor, Computer Informational Services/Information Technology; B.S., Worcester Polytechnic Institute; Ph.D., Northwestern University

WENDY K. KUCEYESKI (21), Assistant Professor, Veterinary Science; B.A., Hirma College; Ph.D. Ohio State University

UMESH KUMAR (09), *Professor, Finance*; B.S., Magadh University; M.B.A., University of Mumbai; Ph.D., University of Texas at San Antonio; Chancellor's Award for Excellence in Scholarship and Creative Activities 2016

PEGGY S. LAFRANCE (05), *Professor, Nursing*; B.S.N., SUNY Plattsburgh; M.S. in Nursing, Syracuse University; Ph.D., Walden University; RN PHILIP K. LAMARCHE (11), Associate Professor, Humanities; B.A., M.F.A., Syracuse University; Chancellor's Award for Excellence in Teaching 2021

MELISSA E. LEE (09), Associate Professor, Humanities; B.A., LeMoyne College; M.A., Marquette University; Ph.D., Indiana University of Pennsylvania

CHRISTINA M. LESHKO (18), *Lecturer, Social Science*; M.A., Michigan State University; Ph.D., University of the Cumberlands

CHRISTINA H. LESYK (12), Associate Professor, Psychology; B.A., Columbia University; M.S.W., Hunter College; SUNY Chancellor's Award for Excellence 2023

JIAYUAN LIN (07), *Professor, Mathematics*; B.S., Anhui University, China; M.S., Chinese Academy of Sciences, China; Ph.D., University of California

SHANE MACARTHUR (19) Instructional Support Associate, Mechanical & Energy Systems; B.T. SUNY Canton

MAUREEN F. MAIOCCO (04), *Distinguished Teaching Professor, Early Childhood*; B.A., Curry College; M.S., Wheelock College; Ed.D., Nova Southeastern University; SUNY Canton Distinguished Faculty Award 2011; Chancellor's Award for Excellence in Teaching 2014; SUNY Distinguished Teaching Professor 2022

CHRISTINA L. MARTIN (11), Sr. Lecturer & Student Teacher Coordinator, Early Childhood; B.A., SUNY Cortland; M.S.T., SUNY Potsdam; SUNY Canton President's Meritorious Service Award 2020

CHRISTOPHER M. MAYVILLE (15), Assistant Professor, Powersports; A.A.S., SUNY Canton; B.S. Technology Education, SUNY Oswego; M.S. Ed., SUNY Potsdam

KEVIN M. McADOO (11), *Sr. Lecturer, Mathematics*; A.S., SUNY Canton; B.S., Clarkson University; M.A., University at Albany

SAMANTHA L. McCARTHY (23), Assistant Professor, Nursing; M.S.N. Walden University

JENNIFER S. McDONALD (03), Professor, Physical Therapist Assistant; B.S., University of Vermont; M.S., Clarkson University; Certificate in Women's Health, Texas Women's University; D.P.T., Simmons College; SUNY Canton's Distinguished Faculty Award 2016

DANIEL N. MCLANE (19), *Lecturer, Social Science*; B.A., Binghamton University; M.A., American University; Ph.D., Colorado State

#### University

PATRICK R. McMANUS (18), *Lecturer, Social Science*; M.S., St. Lawrence University

JESSE J. MERKLEY (22), Instructional Support Associate, Automotive; A.A.S., B.A., SUNY Canton

MATTHEW G. METCALF (00), *Sr. Lecturer, Sports Management*; B.A., Saint Bonaventure University; M.S.S., US Sports Academy

DEBORAH S. MOLNAR (96), *Professor, Physical Therapist Assistant*; B.S., SUNY Buffalo; M.Ed., SUNY Potsdam; D.P.T., SUNY Upstate Medical University; SUNY Canton's Distinguished Faculty Award 2014

ALAN P. MULKIN (13), *Professor of Practice;* A.A.S., Corning Community College; B.A., SUNY Potsdam; FBI National Academy; M.Ed., St Law University

WILLIAM A. MYERS (16), Associate Professor, Business; A.A.S., SUNY Canton; B.S., Roberts Wesleyan College; M.S., Rochester Institute of Technology; Ph.D., Prescott College

SETH NIXON (13), *Sr.Lecturer, Humanities*; M.A., School Of The Art Institute Of Chicago

SEAN T. O'BRIEN (12), Associate Professor, Humanities; B.A., Xavier University; Ph.D., University of Notre Dame

EMMA OGLEY-OLIVER (23), Associate Professor, Social Science; Ph.D., Georgia State University

LAWRETTA C. ONONYE (07), Associate Professor, Physics; B.S., Edo State University; B.S., Knoxville College; M.S., Ph.D., University of Tennessee; Chancellor's Award for Excellence in Scholarship and Creative Activities 2014

BRIGHT A. OSEI (23), Assistant Professor, Economics; Ph.D., University of Mississippi

DIANE J. PARA (89), *Professor, Sports Management*; B.S., Ithaca College; M.S., Eastern Illinois University; Ph.D. Capella University; SUNY Canton President's Meritorious Service Award 2007; Chancellor's Award for Excellence in Teaching 2016

JANET L. PARCELL (12), Associate Professor, Health & Fitness; B.S., SUNY Cortland; D.P.T., Clarkson University; SUNY Canton President's Meritorious Service Award 2016

DAVID R. PENEPENT (12), Associate Professor, Funeral Services Administration; B.A., University of Wisconsin Oshkosh; M.A., University of Phoenix; Ph.D. Walden University

## Campus Directory: Academic Personnel

VICKI PERRINE (15), Assistant Professor, M.A., Seton Hall University

KELLY PETERSON (18), Assistant Professor, Criminal Justice; Ph.D., Cappella University

STEPHANIE D. PETKOVSEK (13), *Sr. Lecturer, History*; B.A., Syracuse University; M.A., SUNY Buffalo

KRISTINE D. POTTER (19), Assistant Professor, Science; Ph.D, SUNY at Buffalo

MELINDA S. PUTNEY (22), *Lecturer, Veterinary Science Technology*; M.A., SUNY Potsdam

SIRVAN RAHMATI (21), *Lecturer, Mathematics*; B.Sc. Sharif University of Technology; M.Sc. University of West Georgia; Ph.D., Wichita State University

ALICE K. REED (04), Associate Professor, Mathematics; B.A., M.Ed., SUNY Potsdam; Ph.D. Northcentral University

ANDREW L. REITER (14), Instructional Support Associate, Civil Engineering & Construction Technology; A.A.S., SUNY Canton; B.S., Rochester Institute of Technology

WILLIAM P. RIVERS (12), Associate Professor, Biology; A.A.S., SUNY Canton; B.A., Grinnell College; M.S., Ph.D., University of Tennessee

CHARLES E. ROBINSON (23), Assistant Professor, Criminal Justice; B.A., Wesleyan University; M.A., SUNY Albany; JD, Washington and Lee University School of Law

KIBRIA K. ROMAN (16), Assistant Professor, Alternative & Renewable Energy Systems; B.S., Bangladesh University of Engineering and Technology; M.S., Tuskegee University; Ph.D., University of Illinois at Urbana

CORTNEY ROOKEY (18), Instructional Support Associate, Electrical Engineering Technology; A.S., SUNY Canton

JAMES A. ROORBACH (19), *Lecturer, Criminal Justice*; B.A., Upper Iowa University; M. Ed., SUNY at Buffalo

KALANI RUBASINGHE (23) Lecturer, Mathematics; Ph.D., Clarkson University

ADRIENNE C. RYGEL (08), Associate Professor, Civil & Environmental Engineering Technology; B.S., M.S., Bucknell University; Ph.D., Dalhousie University

KAREN ST. HILAIRE (15), *Lecturer, Business*; M.S., Clarkson University NADINE SAMUELS (20), Assistant Professor, Accounting, M.A., Hofstra University

AKSEL SEITLLARI (21), Assistant Professor, Civil & Construction Technology, M.S., Epoka University, Ph.D. Michigan State University

ANTHONY T. SIGNORELLI (05), Associate Professor, Health Care Management; B.A., St. Michaels College; M.D., Vrij Universiteit, Brussel, Belgium

STACIA SMITH (07), *Lecturer, Computer Information Systems*; A.A.S., B.T., SUNY Canton; M.S., SUNY Potsdam

JENNIFER L. SOVDE (15), Associate Professor, History; B.A., Bemidji State University; M.A., Indiana University at Bloomington; Ph.D., Indiana University at Bloomington

JAMIE L. SOVIE (99), *Instructional Support Technician*, Science; A.A.S., SUNY Canton

KAREN ST. HILAIRE (15), *Lecturer, Business*; M.S. Clarkson University

JEFFREY M. STINSON (17), *Instructor, Engineering Technology*; B.S., SUNY Oswego; M.S., SUNY College at Buffalo

CHRISTOPHER S. SWEENEY (05), *Professor, Graphic Multi-Media Design*; B.A., St. Lawrence University; M.A., Ph.D., University of Rochester

RONALD J. TAVERNIER JR. (07), *Associate Professor, Biology*; A.A., Paul Smith's College; B.S., B.A., Ph.D., University of Alaska Fairbanks; Distinguished Faculty Award 2023

SOPHIA C. THEODORE (05), Associate Professor, Veterinary Science Technology; B.A., St. Lawrence University; M.S., University of Missouri-Columbia; D.V.M., University of Illinois at Urbana-Champaign

JONATHAN W. THOMPSON (22), Lecturer, Mathematics; MS.Ed., SUNY Potsdam

SHAWN TIERNAN (11), *Lecturer, Humanities*; B.A., SUNY Potsdam

PAUL TODD (21), Lecturer, Mechanical & Energy Systems; B.T., SUNY Canton

PAWEENA WAIDELICH (21), Assistant Lecturer, Criminal Justice; M.S., Kent State University

MINHUA WANG (03), *Sr.Lecturer, Information Technology*; B.S., M.S., Fudan University, China; M.S., SUNY Buffalo

JAMIE WEBER (14), *Lecturer, Humanities*; M.A., SUNY Potsdam

DUANE WESOLICK (08), *Lecturer, Social Science*; M.A., Western Carolina University

NICHOLAS S. WILDEY (18), *Lecturer, Criminal Justice*; M.S., Pennsylvania State

BARAT J. WOLFE (15), Associate Professor, Psychology; B.Sc., St. Lawrence University; M.A., University of Ottawa; Ph.D., University of Windsor; SUNY Canton President's Meritorious Service Award 2019

ANDREW WOOD (13), *Lecturer; Criminal Justice*; M.S., Boston University

SARAH L. WRAY (22), Assistant Professor, Veterinary Science Technology; DVM, Louisiana State University & Agriculture & Mehan

EUNJYU YU (07), *Professor, Humanities*; B.A., M.A., Pusan National University, South Korea; Ph.D., The Ohio State University

ALI S. ZAIDI (07), *Professor, Humanities*; B.A., Regents College; B.A., M.A., Peshawar University; M.A., Queens College; M.A., Ph.D., University of Rochester; Chancellor's Award for Excellence in Scholarship and Creative Activities 2020

# SUNY Canton Emeriti

DR. BARLOW AIKEN Professor, Life Sciences (1997)

MR. TIMOTHY ASHLEY Chief, University Police (2002)

MRS. NANCY AUSTER Distinguished Service Professor, Social Sciences (1991)

DR. DEBRA BACKUS Professor, Nursing (2017)

DR. D. ANTHONY BEANE Professor, Veterinary Technology (2021)

MS. ELLEN BEELER Manager, IT User Services (2007)

MRS. HARRIETT BEGGS Professor, Mathematics (2001)

MR. JOEL BIXBY Director, Career Services (2005)

MR. ROBERT BLICKWEDEHL Visiting Professor, Civil Engineering (2012)

MS. DOROTHY BOWERS Professor, Business (1983)

MR. EDWARD BOYD Instructor, Psychology (2020)

MR. JOHN BOYDEN, JR. Professor, Electro-Mechanical (1998)

MRS. MARY BOYLE Staff Associate, Computer Center (1997)

MR. J. ALLAN BURNHAM Director, Public Safety (1991)

MR. DAVID BUTLER Professor, Humanities (2010)

MS. DEB CAMP Director, Counseling (2006)

MRS. PATRICIA CASSARA Director, Academic Support Services (2012)

MR. ROGER CATLIN Assistant VP, Administration (1991)

MR. VARICK CHITTENDEN *Professor, Humanities (2000)* 

MR. WALTER CHRISTY Professor, Business (1990)

MR. MARTIN CLARK-STONE *Professor, HVAC (2016)* 

MS. MARTHA COLE Nurse Practitioner (2018)

MS. ELIZABETH CONNOLLY Assistant VP, Administration (2014) MRS. KERRIE COOPER Director, Financial Aid (2021

MRS. THERESA CORBINE Director, Academic Computing (2016)

MR. WAYNE CORDWELL Associate Professor, Electrical (2002)

MR. BERT COREY Director, Small Business Development Center (2006)

MR. JOHN CRARY Dean, School of Engineering Technology (2001)

MR. LEO CURRO Dean, School of Science, Health, & CJ (1998)

MR. THOMAS DALTON Professor, Construction (1999)

MR. MICHAEL DANEHY Professor, Mathematics (1995)

DR. CINDY DANIELS Associate Professor, Humanities (2011)

MR. BRUCE DARTT Professor, Engineering Science (2000)

MR. EARL DAVIES Professor, Mechanical Technology (1982)

MRS. MARY JANE DOELGER Associate Professor, Nursing (2009)

MS. CAROLE DUNCAN Instructional Support Technician, Science (1999)

DR. ROBERT EDWARDS Professor, Criminal Justice (2014)

MRS. JOAN EURTO Assistant to the President (2002)

MRS. JOANNE FASSINGER Grants Coordinator (2017)

DR. WILLIAM FASSINGER Professor, Criminal Justice (2015)

MR. RENE FAUCHER University Instructional Specialist, Johnson Ed. Comm. Ctr. (1997)

MR. DANIEL FAY Professor, Business (2018)

MR. EDWARD FAY Dean, School of Business & Public Service (2001)

MRS. LINDA FAY Program Director, Nursing (2000)

MR. BRYAN FELITTO Director, Extended Studies (1995)

MS. JANE FRANK Staff Assistant, Health Services (2013) DR. ROBERT FRASER

Vice President, Academic Affairs (1991) MR. STANLEY FRASER

Professor, Mathematics (2002)

MS. DAWN FREMONT Instructor, Dental Hygiene (2019)

MR. WILLIAM FREEBERN Associate Professor, English (1998)

MRS. JOAN FREGOE Professor, Nursing (1998)

MR. STEVEN GILBERT Associate Professor, Criminal Investigation (2010)

MS. ROBIN GITTINGS Instructional Support Technician, Veterinary Technology (2021)

MR. JOHN GOETZE Director, Physical Plant (1993)

MR. CHARLES GOOLDEN Vice President, Administration (2001)

DR. EDWARD GORDON Professor, Veterinary Science (1997)

MR. MICHAEL GORDON Professor, Economics (2006)

MR. FREDERICK GOTHAM Associate Professor, Building Construction (2002)

MS. PAULINE GRAVELINE Associate Provost (2009)

MRS. CHRISTINE GRAY Vice President, Administration (2010)

MR. EUGENE GROBELNY Technical Assistant, Physical Education (1989)

MS. CAROL GRZYWINSKI Professor, Academic Development (2002)

MR. DAVID GUCCIONE Professor, Criminal Justice (2002)

MR. JAMES HAMILTON Instructional Support Technician, Chemistry (2021)

DR. MARCELLINA HAMILTON Associate Professor, Business (2015)

MR. DAVID HARTLE Instructional Support Specialist, Electrical Engineering Technology (2020)

MR. CHRISTOPHER HASTINGS Senior Staff Assistant, Storehouse (2014) MS. DENISE HEATER

Instructor, Dental Hygiene (2014)

## **SUNY Canton Emeriti**

DR. LINDA HEILMAN Professor, Business (2015)

MR. ARTHUR HIBBARD Professor, Building Construction (1985)

MR. PAUL HITCHMAN Instructional Support Associate, Civil and Environmental Engineering Technology (2021)

DR. NANCY HORAN Associate Professor, Humanities (2006)

MS. KATHLEEN HORTON *Librarian (2011)* 

MS. ROSALIE HUNTER Associate Professor, Nursing (1987)

DR. ARTHUR HURLBUT Professor, HVAC (2007)

MRS. MARY HUSE Staff Associate, Development (1999)

MR. DAVID HYDE Technical Assistant, Air Conditioning (1985)

MR. WILLIAM IRVEN Senior Staff Assistant, College Accounting (2007)

MRS. PAULA JACQUES Professor, Nursing (2007)

DR. NADINE JENNINGS *Professor, English (2021)* 

MR. ROBERT JENNINGS Professor, Electrical Engineering Technology (2018)

MR. GEORGE JOHNSON Instructional Support Assistant, Engineering (2009)

MS. JANICE JOHNSON Associate for Technical Services, IT (2017)

MR. SHELDON KATZ Professor, Mechanical Technology (1997)

MR. DAVID KELLER Vice President, Student Affairs/Dean of Students (1997)

MR. BRUCE KENNA Associate Professor, Social Science (2015)

DR. JOSEPH KENNEDY Professor, Business/College President (2014)

MRS. JOAN KEPES Associate Professor, Humanities (1990)

DR. RALPH KLICKER Associate Professor, Mortuary Science (2011)

MR. DAVID KLOSNER Professor, Accounting (2000)

MS. SUSAN KRAMER Counselor, EOP (2015) MR. RAYMOND KRISCIUNAS Professor, History (2015)

MR. DANIEL LALLIER Instructional Support Associate, Electrical Construction (2020)

MR. JOSEPH LAMENDOLA Associate Professor, English (1995)

MR. WILLIAM LAPIERRE Professor, Automotive Technology (2002)

MR. THOMAS LASCELL Director, Personnel & Affirmative Action (2002)

MS. LINDA LAW Lecturer, Mathematics (2021)

DR. STEPHEN LEDOUX Professor, Social Sciences (2015)

MR. BRIAN LEE Senior Staff Associate, Administrative Services (2012)

MS. M. VEIGH MEHAN LEE Counselor, Counseling Center (2021)

MR. GEORGE LEEDOM Professor, Chemistry (2005)

MR. DONALD LEONARD Assistant Professor, Computer Information (2002)

MRS. SANDRA LIVERNOIS Senior Assistant to the Provost/VP, Academic Affairs (2014)

MR. STEVEN LIVERNOIS Deputy Chief, University Police (2010)

MS. DEBRA LOWRY Special Events Coordinator, Administrative Services (2014)

DR. EARL MACARTHUR President (1992)

MR. JOHN MAISONNEUVE College Accountant (2014)

MR. THEODORE MARLOWE Professor, Criminal Justice (2005)

MR. TERRY MARTIN Coach, Men's Ice Hockey (1999)

MR. WILLIAM MASON Chief, University Police (2012)

MR. PATRICK MAZZEO Associate Professor, Social Sciences (2002)

MR. RICHARD MCADAM Instructional Support Associate, HVAC (2020)

MR. THOMAS MCCABE Associate Professor, Business Admin. (1995)

DR. JOHN MCKEAN Dean, School of Business & Liberal Arts (1992) MRS. CLAIRE MEDVE Professor, Mathematics (2020)

MS. SHEILA MEHAFFY Assistant for University Systems Analysis, IT (2016)

MR. WILLIAM MEIN Professor, Computer Information Systems/Assistant Dean, School of Engineering Technology (2010)

MS. SUSANNE MERRITT Associate Professor, Secretarial Science (1985)

MR. RONALD MESHUREL Director, Canton Institute (2006)

MS. ANITA MILLER Physician Assistant (1994)

MR. DANIEL MILLER Assistant Professor, Mechanical Engineering Technology (2019)

MR. MARK MILLER Director, EOP (2016)

MR. FREDERICK MONACO Professor, Mathematics (2000)

MR. JAMES MONROE Professor, Science (1993)

MR. KERMIT MORGAN Professor, Life Sciences (1990)

MS. MARY MORGAN Associate Professor, Secretarial Science (1983)

MS. ROSANNA MOSER Professor, Business (2008)

DR. MOLLY MOTT Associate Provost/Dean, Academic Support Services and Instructional Technologies (2021)

MR. HARRY MOULTON Instructional Support Associate, Building Construction (2002)

DR. DIANE MUEHL Associate Professor, Sociology (2018)

MR. GORDON MYERS Director, Personnel & Affirmative Action (1985)

MR. ALEX NEUBERT Professor, Physical Science (2006)

DR. JOHN NIXON Professor, Social Sciences (2010)

MR. RONALD O'BRIEN Professor, Mathematics (1992)

DR. MICHAEL O'CONNOR Associate Professor, Business (2019)

MR. JOHN OHST Assistant Professor, Academic Development (2006)

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## **SUNY Canton Emeriti**

MRS. MARILYN PAULS Instructional Support Technician, Nursing (1996)

MR. MICHAEL PEEBLES Professor, Science (2010)

DR. ERIC PELLEGRINO Professor, Business/Executive Assistant to the President (2000)

MS. LINDA PELLETT Interim Provost/Vice President, Academic Affairs (2010)

MR. MICHAEL PINKERTON *Lecturer, Nursing (2020)* 

MR. ROBERT PINKERTON Senior Programmer Analyst, IT (1995)

MR. HARRY PODGURSKI Director, Counseling (1995)

MS. JOAN POPE Assistant to the Provost/VP, Academic Affairs (2002)

MR. JOHN POPE Professor, Computer Information (1998)

MS. BARBARA PORTER *Registrar (2012)* 

MRS. JUDITH PORTER Assistant Professor, Office Technology (2009)

MR. JAMES PRENTICE Director, Telecommunications (1998)

MRS. JESSICA PRENTICE Personnel Associate, Human Resources (1998)

MR. JOHN QUACKENBUSH Professor, Automotive Technology (1990)

MS. PAMELA QUINN Professor, Dental Hygiene (2019)

MR. WAYNE RATOWSKI Associate Professor, Electrical Engineering (2004)

MRS. KATHRYN RAYMO Associate Director, Admissions (2002)

MRS. MARIE REGAN Distinguished Service Professor, English (1996)

MR. JOSEPH REILLY Assistant Professor, Civil and Construction Technology (2020)

MS. JANICE ROBINSON Associate Professor, Business (2021)

MRS. MARILYN RODEE Senior Advisor, Admissions (1999)

MR. THOMAS ROGERS Assistant Professor, Social Sciences (1982) MR. DOUGLAS ROSE

Associate Professor, Humanities (2005)

MR. JOHN ROSSI Associate Professor, Electrical (1995)

MR. DAVID ROURKE Personnel Director (2017)

MS. NANCY ROWLEDGE Associate Director, Human Resources (2017)

MS. JOANNE ROZANSKI Instructional Support Associate, Dental Hygiene (2013)

MS. SUE RUMMEL Associate Professor, Humanities (2007)

MR. FREDERICK RYCROFT Director, Physical Plant (2002)

MR. GERALD SAWYER Senior Staff Assistant, Physical Plant (2010)

MR. GILBERT SCHUGART Professor, Computer Information (2000)

MR. JOHN SHAPAZIAN, JR. Associate Professor, Accounting (2000)

MS. ANNE SIBLEY Assistant to Vice President, Advancement (2019)

MR. STANLEY SKOWRONEK Lecturer, Air Conditioning Maintenance and Repair, (2021)

MR. CARSON SMITH Vice President, Administration (2000)

MR. ARNOLD STONE Director, Computer Center (1993)

MRS. COLLEEN STONE Instructional Support Associate, Electro-Mechanical (2009)

MR. DANIEL SWEENEY Vice President, Student Affairs/Dean of Students (2010)

MR. BRUCE TALLON Coach, Women's Basketball (2016)

MS. JOANNE THORNHILL Assistant Director, Community Relations (2010)

MS. ROBERTA THORNLEY Instructional Support Technician, Science (2007)

MS. PATRICIA TODD Director, Health Services (2018)

MR. MELVIN TOMALTY Professor, Mathematics (2002)

MS. MARGARET VINING Associate Dean, School of Health & Medical Technology (1996) MR. ERICH VON SCHILLER Professor, Physical Education (1995)

MR. BARRY WALCH Assistant Professor, Mortuary Science (2009)

MRS. TERRY WALDRUFF Senior Staff Assistant, Student Accounts (2017)

MR. BRIAN WASHBURN Professor, Science (2014)

MR. DOUGLAS WELCH Senior Staff Assistant, Physical Plant (2011)

DR. DAVID WELLS Dean, Canino School of Engineering Technology (2013)

MRS. FAYE WHITE Professor, Mathematics (2001)

MRS. DONNA WHITELAW Assistant Professor, Mortuary Science (2011)

MR. NOEL WHITMAN Instructional Support Technician, Information Technology (2002)

DR. SUSAN WILLETTE Professor, Dental Hygiene (2017)

MRS. JULIE WILLIAMS Business Advisor, Small Business Development Center (2011)

MR. THOMAS WINDT Professor, Humanities (2007)

MR. KENNETH WURSTER Assistant Professor, Automotive (2016)

MR. JACK WYLIE Professor, Electrical Construction (1995)

# Canton College Foundation, Inc.

Established in 1973, the Canton College Foundation, Inc., was founded for the purpose of soliciting and receiving gifts to support the College's mission by providing scholarships and promoting progress, encouraging professional growth, and cultivating a sense of community dedicated to the highest quality education.

The Canton College Foundation encourages alumni, friends, businesses and corporations as well as other foundations to make gifts to support SUNY Canton. Tuition does not cover the many costs of operating a growing college. In order to maintain our competitive standing, SUNY Canton relies on several funding sources to meet its priorities: advance academic quality, build stronger support for student excellence, cultivate innovative partnerships, develop and maintain cutting-edge technologies, and enhance campus life.

## BOARD OF DIRECTORS

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## HONORARY DIRECTORS

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# Consumer Complaint Procedure

## LOCAL PROCEDURE

Any person who believes he/she has been aggrieved by the College may file a complaint with the Dean of Students within ninety (90) days of the alleged occurrence or event giving rise to the grievance. Complaints may be made in person, by telephone or in writing. You will be asked to discuss your problem with a responsible college representative, one who may best be able to resolve your concerns. **Students are also reminded of specific procedures for filing academic complaints or allegations of sexual harassment found in the** *Student Handbook***.** 

In response to a written complaint, the College shall investigate the allegations and respond to the grievant in a timely manner. The College may contact the grievant for further information or clarification of the complaint should the need arise. The complaint may be referred to a responsible campus official for resolution; any final determination of a formal complaint will be made by an individual not directly involved in the alleged problem.

No adverse action will be taken by the College against the student or other complainant.

The College will maintain a written record of the complaint and its resolution or disposition, including appropriate documentation, for a period of six years. Such file shall be retained in the Office of the Dean of Students.

If a grievant wishes, he/she may file a formal written complaint with the State Education Department in accordance with their guidelines (see below). An official complaint form and guidelines are available in the Office of the Dean of Students.

## STATE EDUCATION DEPARTMENT PROCEDURES

Section 494C(j) of the Higher Education Act of 1965, as amended, provides that a

student, faculty member or any other person who believes he/she has been aggrieved by an institution of higher education has the right to file a written complaint.

In New York State, a complaint may be filed by any person with reason to believe that an institution has acted contrary to its published standards or that conditions at the institution appear to jeopardize the quality of the institution's instructional programs or the general welfare of its students. Any person who believes he/she has been aggrieved by an institution may file a written complaint with the Department within five years of the alleged incident.

## HOW TO FILE A COMPLAINT

For all types of complaints concerning colleges and universities in New York State, the first course of action must be to try to resolve the complaint directly with the administration of the college or university involved. The Office of College and University Evaluation will not review a complaint until all grievance procedures at the institution have been followed and all avenues of appeal exhausted and documentation provided that such procedures have been exhausted. Please note: Every New York State college and university is required to establish, publish, and enforce explicit policies related to redress of grievances.

Please do not send a complaint to the Office of College and University Evaluation until you have read all of the information below. This will assure that you are sending your complaint to the appropriate agency/ office.

The Office of College and University Evaluation handles only those complaints that concern educational programs or practices of degree-granting institutions subject to the Regulations of the Commissioner of Education, with the exceptions noted below.

- The Office does not handle anonymous complaints.
- The Office of College and University Evaluation does not intervene in mat-

ters concerning an individual's grades or examination results, as these are the prerogative of the college's faculty.

- The Office does not handle complaints concerning actions that occurred more than five years ago.
- The Office does not intervene in matters that are or have been in litigation.
- Complaints concerning programs in fields leading to professional licensure (e.g., nursing) should be directed to:

Office of the Professions Professional Educ. Program Review Education Building, 2 West Albany, NY 12234

- A complaint against a college in the State University system should be sent to: State University of New York Central Administration State University Plaza Albany, NY 12246
- A complaint involving discrimination against enrolled students on the part of an institution or faculty, or involving sexual harassment, should follow the process outlined in the SUNY Canton Discrimination Complaint Procedure (including Title IX) (https:// www.canton.edu/student-handbook/ section-30-student-life/ discrim\_harassment.html). For questions on the process, contact a Civil Rights Compliance Officer (https:// www.canton.edu/crc/officers/). Appeals can be made only after SUNY Canton has made a determination. Appeals should be directed to:
- Office for Civil Rights - New York State U.S. Department of Education 32 Old Slip, 26th Floor

New York, NY 10005-2500 Telephone: 646-428-3900 Fax: 646-428-3843 TDD: 877-521-2172 E-mail: OCR.NewYork@ed.gov

## **Consumer Complaint Procedure**

• A complaint of consumer fraud on the part of the institution should be directed to the Office of the New York State At-torney General, Justice Building, Empire State Plaza, Albany, NY 12223.

• For a complaint about state student financial aid matters, contact the Higher Education Services Corporation (HESC) Customer Communications Center at 1-888-NYS-HESC.

Complainants should be aware that the Office of College and University Evaluation does not conduct a judicial investigation and has no legal authority to require a college or university to comply with a complainant's request.

If your complaint does not fall into one of the exceptions noted above, you may obtain a complaint form at the follow-ing link (www.highered.nysed.gov/ complaintform.pdf) ocue/ or by contacting the Office of College and University Evaluation, New York State Education Department, Education 5 North Mezzanine, 89 Building, Washington Avenue, Albany, New York 12234. Official complaint forms and guide-lines are also available in the Office of the Dean of Students.

### COMPLAINT RESOLUTION

Some complaints may fall within the jurisdiction of an agency or organization other than the State Education Department. These complaints will be referred to the entity with appropriate jurisdiction. When a complaint concerns a matter that falls solely within the jurisdiction of the institution of higher education, the complainant will be notified and the Department will refer the complainant to the institution in question and request that the matter receive a review and response.

Upon conclusion of the Department's complaint review or upon a disposition of the complaint by referral to another agency or organization, or to the institution of higher education, the Department will issue a written notice to the complainant describing the resolution of the complaint. The complainant may contact the Department evaluator directly for follow-up information or for additional assistance.



## A.A. DEGREE

Associate in Arts degree. A transfer degree requiring at least 45 hours of liberal arts courses. Students in the Liberal Arts and Sciences: General Studies program have an option of enrolling in the A.A. or the A.S. degree program.

## A.A.S. DEGREE

Associate in Applied Science degree. A career degree preparing students for employment upon completion of the SUNY Canton program or enrollment in an applied baccalaureate degree. Requirements include at least 20 hours of liberal arts courses while the remaining courses provide the training needed for the student's chosen career field. Many four-year colleges accept graduates with A.A.S. degrees.

## ACADEMIC RECOVERY

A designation by the Dean of the appropriate School for a student with less than satisfactory academic progress. Students on academic recovery must follow a plan designed to improve their performance.

## APPLIED ELECTIVE

A college course outside of the liberal arts and sciences disciplines.

## ARTICULATION AGREEMENTS

Formal agreements between SUNY Canton and bachelor degree-granting colleges, community colleges, or high schools describing conditions for transfer such as GPA and program or course requirements.

## A.S. DEGREE

Associate in Science degree. A transfer degree requiring at least 30 credit hours of liberal arts courses. The remainder of the courses selected are based on the student's intended transfer major.

## **ASSOCIATE DEGREES**

Degrees which require a minimum of 60 credit hours (excluding physical education) and may be completed in two years of full-time study.

## BACCALAUREATE DEGREES

Degrees which are completed in approximately four years of full-time study, generally including 120 to 128 credit hours. They require two years of study at a transfer college after graduating from SUNY Canton or enrollment in one of SUNY Canton's baccalaureate degree programs, designed for graduates of an A.A.S. program or freshmen interested in an applied baccalaureate degree.

## CERTIFICATE PROGRAMS

Students completing an organized program of courses, approved by SUNY and registered by the State Education Department, are awarded certificate diplomas. These programs develop skills in a particular discipline or occupational specialty. Certificate programs have minimum credit hour and GPA requirements specific to each program. Certificate programs may require some course work in mathematics, humanities, and science.

Local Certificates: SUNY Canton may recognize students who successfully complete a specified sequence or cluster of approved, credit courses by awarding a local certificate of completion. Such awards of themselves are not registered, aid-eligible programs and are not transcripted. Local certificates shall be subject to review and approval by the established faculty governance process for curricular matters.

## COURSE OUTLINE

Detailed description and content of a course. Copies are housed in the School Deans' Offices.

## **CREDIT HOUR**

A semester credit hour is granted for satisfactory completion of one 50-minute session of classroom instruction per week for a semester of fifteen weeks. Semester credit hours are granted for various types of instruction as follows:

- 1. Lecture/Recitation—A semester credit hour is an academic unit earned for fifteen 50-minute sessions of classroom Instruction.
- Lab/Practicum Forty-five 50-minute sessions of such activity would also normally earn one semester credit hour. Where such activity involves substantial outside preparation by the student, the

equivalent of fifteen periods of 100 minutes duration each will earn one semester credit hour.

 Independent Study - One credit for independent study will be awarded for the equivalent of forty-five 50-minute sessions of student academic activity.

## CURRICULUM

## (also Program or Major)

All courses offered. Also refers to an academic program and the full scope of courses needed to complete it.

## DIRECTED STUDY

Constitutes an alternate delivery of a course to be used in the student's program of study when a particular course is not offered in the semester he/she wishes to take it. The material covered in a directed study course is essentially the same as that covered in the traditional course.

## EQUIVALENT CREDIT HOURS

When the content of a course is developmental and not considered college level, equivalent credit hours are earned and are not counted toward degree requirement. They may count toward certificate requirements.

## FRESHMAN

A student who has earned 0 - 29 credit hours, all of which must be a part of a degree program offered by the College.

## FULL-TIME STUDENT

Anyone enrolled for twelve or more credit hours or equivalent credit in a semester. A typical course load would be 15 credit hours per semester or approximately five courses.

## GENERAL EDUCATION REQUIREMENTS

The ten Knowledge and Skills Areas (GER 1-10) and the two Competencies designated by SUNY as required for graduation with a baccalaureate degree. Knowledge and Skill Areas: Mathematics; Natural Sciences; Social Sciences; American History; Western Civilization; Other World Civilizations; Humanities; The Arts; Foreign Language; Basic Communication. Competencies: Critical Thinking and Information Management.

## Glossary

## GENERAL ELECTIVE

Any college course may serve as a general elective if it meets the minimum requirements of a curriculum. Exceptions may include physical education courses, equivalent credit courses, or courses designated for a particular program only.

## GOOD STANDING

Students who meet the minimum requirements of the Student Academic Re-registration Policy are considered to be students in good standing.

### GPA (Grade Point Average)

For each credit hour, points are assigned based on the grade received. This average is calculated by dividing the total grade points earned by the number of credit hours taken.

### **HUMANITIES**

Art; music; foreign languages; philosophy; most 200-level English, media communication, speech, or theater courses; and courses with the prefix HUMA.

## **INDEPENDENT STUDY**

A planned educational process which is available to the student who wishes to broaden his/her educational experience beyond normal course structure and classroom and/or laboratory activity. Independent Study is intended to be an offshoot of an existing course. It provides the student with an opportunity to pursue/research a subject in more depth and in a more independent manner than would be possible in a traditional course. Independent study does not apply to past life/work experiences for satisfactory completion of proficiency or challenge examinations.

## JUNIOR

A student who has earned 60 - 89 credit hours, all of which must be a part of a degree program offered by the College.

## LABORATORY SCIENCE

Any science course which has a laboratory experience along with lectures. Examples include biology, chemistry, environmental science, and physics.

## LIBERAL ARTS ELECTIVE

Any course from the areas of humanities, sciences, mathematics, and social sciences.

## LOAD

The total number of credit and equivalent credit courses for which a student has registered. Example: a registration of 9 credit hours and 4 equivalent credit hours equals a load of 13 hours.

### MATRICULATION

This is a process that involves application to the College, admission to a specific academic program and enrollment in courses. An advantage of matriculation is that you officially come under the set of regulations described in the catalog in effect at the date of your matriculation. You must be matriculated to receive financial aid.

## OCCUPATIONAL

A.A.S. degrees are generally considered occupational degrees. Students in these programs are preparing for a career or job upon graduation from SUNY Canton or to continue in a bachelor's degree program.

## PART-TIME STUDENT

Anyone who is enrolled in fewer than twelve credit hours in a semester.

### PEDAGOGY

The science or art of teaching or education.

### PREREQUISITE

A requirement that must be met before a student may take a course. Each course description indicates whether there is a prerequisite.

### **PROGRAM ELECTIVE**

A course from a program-related discipline designated by that program. Each degree program specifies the disciplines applicable to that program.

## RECITATION

In addition to lectures and laboratories, some courses require a recitation, which is an individual or small group meeting with an instructor.

## SENIOR

A student who has earned 90+ credit hours, all of which must be part of a degree program offered by the College.

## **SOPHOMORE**

A student who has earned 30–59 credit hours, all of which must be a part of a degree program offered by the College.

## SOCIAL SCIENCES

Anthropology, economics, geography, government, history, psychology, sociology, or political science.

## **SUSPENSION**

Students who do not meet minimum academic requirements for returning and are dismissed from the College for at least one semester

## SUNY

All of the units of the State University of New York, including Canton.

## **SYLLABUS**

A statement of the requirements for a course and the course material to be covered. Each professor should distribute a syllabus in the first week of class.

## TRANSCRIPT

An official copy of the permanent record of every course taken and the resulting grades. This permanent record is maintained in the Registrar's Office.

## TRANSFER PROGRAM

Programs which are generally designed for students who want to continue their studies toward a baccalaureate degree. Programs which lead to the A.A. (Associate in Arts) and the A.S. (Associate in Science) degrees transfer easily into B.A. (Bachelor of Arts), B.S. (Bachelor of Science), or B.Tech. (Bachelor of Technology) degrees.

## WITHDRAWAL FROM THE COLLEGE

Official notification to the College that a student will not complete the semester. Students submit request to officially withdraw through their UCanWeb account. Grades of "W" are recorded for all courses in progress at the time of the withdrawal.



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