



WOMEN IN ENGINEERING



SCIENCE



TECHNOLOGY



ENGINEERING



ARTS



MATH

Wed., May 14th
8:30am - 1:30pm



www.canton.edu/engineers/women.html

**EVERYONE IS
WELCOME HERE**



Automotive Technology

Valve Cover Races

Students will change the amount of weight, weight placement, aerodynamics, and contact patch to see who will win either distance or speed.

Presenters: Brandon Baldwin

Location: NS 124

Applied Physics

Materials Analysis and Microscopy

Microscopy is the technical field of using microscopes to view samples and materials that cannot be seen with unaided eye. Materials analysis is the process by which a material's structure and properties are probed and measured. In this session, you will analyze our common materials like aluminum, copper and iron, and design and build their crystal structures. Students will examine their real structure using metallurgical microscope; and learn how processing, structure, properties and performance of these materials are inter-related.

Presenter: Dr. Lawretta Ononye

Location: NN 125

Chemistry

The Chemistry of Soap Making

Learn the chemistry of soap making, known as saponification, where fats and oils are converted to a substance that we use every day to keep clean. Soap made using cold processing involves reacting a specific blend of fats and oils with a strong base to create a neutral soap. However, this process can take several weeks for the chemical reaction to complete. In this workshop, the cold processing technique will be demonstrated. Then you can try your hand at crafting a bar of soap from a neutral melt-and-pour soap base and get creative with fragrances and colors.

Presenter: Nicole Heldt

Location: Cook Hall 207

Civil & Environmental Engineering Technology

Float or Sink? The Science of Buoyancy!

Ever wondered how giant ships stay afloat or why you can paddle a canoe without sinking? Buoyancy is the secret! It's what keeps boats on the water, lets bridges stand strong, and helps engineers design everything from floating cities to submarines. In this hands-on activity, we'll dive into the science of buoyancy with fun experiments that test what floats, what sinks, and why! You'll get to design and test floating structures, explore how weight and water displacement affect stability, and maybe even see how much cargo a mini barge can hold before it sinks. Get ready to experiment and discover the power of buoyancy!

Presenter: Dr. Adrienne C. Rygel

Location: NS 135

Micro Solar Cars

Visit this workshop for an introduction to solar energy and build a small but speedy vehicle powered solely by the strength of the sun.

Presenter: Rebecca Snyder

Location: NN 115

PolyForce Bridge Challenge

Participants will have the opportunity to construct robust bridges using lightweight plastic members. The challenge is to design a bridge that is both strong and lightweight, with the ultimate goal of achieving the perfect balance. The winner will be recognized for creating the strongest and lightest bridge, showcasing the prowess of women in engineering. We can't wait to see you there!

Presenter: Dr. Saeid Haji Ghasemali

Location: NS 110

Wind Energy

Get blown away by this wind energy workshop, where teams of students will design and build their own wind turbines using provided materials and test their creations. Students will learn the basics of wind energy design and apply these guidelines to create powerful wind turbines.

Presenter: Jessica Fischer

Location: NS 138





Cybersecurity

Password Games

If you are interested in computer related programs, stop by the Computer Networking Lab to play the password games. You can enter the provided URLs on any web browser to play them. Each game has five levels, and you need to find or guess the password at each level successfully to complete it.

Presenter: Minhua Wang

Location: NN 124

Electrical Engineering Technology

RGB LED Ball Holiday Kit

Visit the Electrical Engineering lab to make a unique LED ball that flashes in the dark.

Presenters: Stephen Frempong

Location: NN 118



Game Design & Development

3D Animation of Game Characters

In this class we'll learn the maya interface and take premade character rigs to learn how to animate them in ways that would be used in video game production.

Presenter: Morgan Hastings

Location: NN 119

HVAC

Ping Pong Air Hockey

A thrilling 3v3, 3D air hockey game using a ping pong ball and air blasters! Compete for a prize and bragging rights while learning about common equipment used in the HVAC industry.

Presenters: Paul Todd

Location: NS 101

Information Technology

Binary Code Birthday Bracelets

Visit the computer lab to learn what binary code is, how computers use binary numbers, and how to convert from the decimal number system to the binary number system. Attendees can then use this knowledge to make friendship bracelets that have their birthday spelled out in binary code.

Presenter: Stacia Smith

Location: NN 128

Mechanical Engineering Technology

Air Dragsters

Build an air-powered dragster your way and race to the stars!

Presenters: Dr. Lucas Craig & Cullen Haskins

Location: NS 111

Mechanical Engineering Technology

Design, manufacturing, and machine shop, come and see some of the machine elements manufactured and 3D model of mechanical parts and a typical machine shop lab.

Presenter: Dr. P.S. Dhanasekaran

Location: NS 106

Drones in Motion: Fly, Explore, and Discover

Have you ever wanted to fly a drone or get better at flying? In this hands-on session, you'll learn how to control a drone, understand flight terminology, and explore how drones can fly on their own. No experience needed. Whether you're curious about technology or just love hands-on activities, this session will give you a glimpse into the fascinating world of drones.

Presenter: Michelle Burk

Location: NN 102

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