



WOMEN IN ENGINEERING

Wednesday, May 15th
9am - 1:15pm



**NEW
EVENTS!**

Sponsored by:



ARCONIC
Innovation, engineered.



Saint Lawrence County (NY) Branch



[www.canton.edu /csoet/](http://www.canton.edu/csoet/)

Automotive Technology

You AUTO Know

Participants will learn about auto engine oil maintenance, as well get tips on replacing air filters and checking transmission fluid.

Presenters: Brandon Baldwin and Jeff Stinson

Location: Nevaldine South 124

Civil and Environmental Engineering Technology

Drinking Water Treatment

One role of an environmental/civil engineer is to design and operate systems that will protect human health. Clean water is essential for healthy living. We are fortunate in the United States to have the technology and resources to treat drinking water for municipal supply. In this session you will learn how your drinking water is treated. Students will conduct a laboratory test that models part of a drinking water treatment plant and determine what chemical dose is needed to effectively treat water from a local source area. Come see how you can apply what you have and will learn in chemistry and biology to solve a real world problem – and get to wear a cool lab coat and purple gloves in the process!

Presenter: Dr. Adrienne Rygel

Location: Nevaldine South 135

Civil & Environmental Engineering Technology

Bridge Building!!

We will build a bridge using West Point Bridge Design software.

Presenter: Yilei Shi

Location: Nevaldine South 117

Civil & Environmental Engineering Technology

Hydraulics/Buoyancy/What floats your boat?!

Students will experiment with buoyancy and predict how many passengers their “boat” can hold without sinking. A concrete canoe will be on display and used to demonstrate how heavy objects actually float.

Presenter: Kasey Northrop

Location: Nevaldine South 110

Cybersecurity / Information Technology

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: Nevaldine North 128





Engineering Science

Laser/Light Communication System

Learn how to transmit an audio signal through air from a transmitter to a receiver via a laser beam.

Presenters: Dr Aidun, Feng Hong

Location: Nevaldine North 125

eSports

Playing Games

Join us in the esports arena to play some Overwatch, League and maybe even some Fortnite!

Presenter: Rob Snow

Location: Nevaldine South 133

Game Design & Development

Design, Develop, Play!!

All games, whether played in-person or over a screen, use a set of rule-sets and mechanics familiar to designers. In this workshop, you'll be looking to design and adapt your own mechanical systems for a high-concept board game."

Presenter: Ryan Hewer

Location: Nevaldine North 119

Graphic and Multimedia Design

Learn to Create Art with Code

Use processing, a free software to create shapes and drawings by using code.

Presenter: Kathleen Mahoney

Location: Nevaldine North 112

Graphic and Multimedia Design

3-D Scanning, Modeling and Printing

A quick introduction to Fused Filament Fabrication from digital models. Includes demo of modeling software, basic print process, and structured light scanning. Come and get your hands on "Rapidly" developing new technology!

Presenter: Matt Burnett

Location: Nevaldine South 106

Mechatronics

Stroke Research using an EEG

Read people's minds with an EEG machine!

Presenter: Dr. Joel Canino

Location: Nevaldine North 102

Powersports and Performance

ATV Power sports Scavenger Hunt

Learn the parts of all-terrain vehicles all while looking for hidden treasure!!

Presenter: Christopher Mayville

Location: Nevaldine South 136

Sustainable Energy Technology

Experiment with wind turbine and solar PV

Experiment with wind turbines and solar photovoltaics. Explore electricity generation from sustainable resources like the sun and wind and witness the power conversion processes that allow wind or sunlight to power a motor or a lightbulb.

Presenters: Kibria Roman

Location: Nevaldine South 101



➤ Guest Speakers

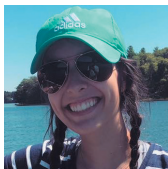


Ashley Livingston '19

Senior, Civil & Environmental Engineering Technology Program

Ashley J. Livingston of Lisbon started at SUNY Canton with the goal of becoming an architect and focused on the structural side of the Civil and Environmental Engineering Technology program. As she progressed, she developed a keen interest in the environmental side of her major. She currently has a continuing internship opportunity with the New York Power Authority and career prospects in fields related to her academic interests. Ms. Livingston has been a Public Health Inspector for the Department of Health and a Transportation Construction

Inspector for the Department of Transportation, in addition to serving as a certified peer tutor, family farm laborer and self-employed childcare provider. She has been affiliated with many clubs and organizations here at SUNY Canton; including Commuter Club, College Activities Board, American Society of Civil Engineers Canton Chapter, and founding member and officer of SUNY Canton Society of Women Engineers Student Chapter. As an avid volunteer, she's represented SUNY Canton and the organizations she's affiliated with at numerous events both on- and off-campus.



Isabela de Vasconcelos Spelta '20

Senior, Civil & Environmental Engineering Technology Program

Isabela Spelta from Vitoria, Brazil, decided to attend SUNY Canton because of the strong programs offered and the high rates of employment after graduation. She has finished an internship with the New York State Department of Transportation where she worked as an inspector and used her experience to manage bridge projects. Isabela is now heading into her second internship opportunity this summer with Barrett Paving. She decided to study Civil and Environmental Engineering because she wants to design and construct new buildings

while making sure the environment is being preserved. Isabela is a peer tutor for the engineering tutoring laboratory as well as a Student Ambassador. She is actively involved in many clubs and activities on campus such as being president of the Society of Women Engineers and being a part of Phi Theta Kappa Honor.



CANTON SCHOOL OF ENGINEERING TECHNOLOGY

➔ Guest Speakers



Maelea Mercado
Sophomore, Mechatronics Program

Maelea is currently working on a research project to develop a knee brace for people with joint instability. In the future she plans to contribute her education in the field and pursue other biomedical engineering projects.



Dr. Adrienne Rygel
*Associate Professor and Department Chair,
Civil & Environmental Engineering Technology Program*

Dr. Adrienne Rygel earned a B. S. in Geology from Bucknell University in Lewisburg, PA in 2000, a M.S. in Geology from Lehigh University in Bethlehem, PA in 2002, and a Ph.D. in Civil Engineering from Dalhousie University in Halifax, Nova Scotia in 2006. She worked as a Groundwater Geologist in the Remediation Section of the Waste Management Division at the Nebraska Department of Environmental Quality in Lincoln, Nebraska from 2005-2006. From 2006-2008 she was a Project Geologist/Engineer at Op-Tech Environmental Services, Inc. in Massena, NY conducting environmental assessment, monitoring, and remediation. In the fall of 2008 she started teaching at SUNY Canton. She is now a tenured Associate Professor and chair of the Civil and Construction Technology Department. She teaches environmental engineering and geotechnical classes and advises students in the ABET accredited 4-year Civil and Environmental Engineering Technology BTECH program, the ABET accredited 2-year Civil Engineering Technology AAS program, the 2-year Construction Technology Management program, and the Environmental Engineering Technology Minor. Dr. Rygel's primary area of interest and expertise is water quality, water/wastewater treatment, and soil/groundwater remediation. In 2013 she received a SUNY High Needs Grant to build a full environmental engineering technology and geotechnical laboratory and classroom. Her student driven research in iron acid mine contamination, nutrient and sediment loading of streams from agricultural land, and design of phosphorus removal systems has been presented at professional, technical conferences and to industry. She is very involved in campus activities, serves on numerous school and university committees, and is co-advisor for the campus student chapter of Society of Women Engineers. Dr. Rygel is also a wife and proud mother of two adorable little girls.

Support for the guest speaker is provided by:

Carl D. Perkins
Vocational and Technical Education Act of 2006