DISCOVER ENGINEERING

Sponsored by the Lola and George Aiken Fund



Discover Engineering is a **FREE** annual event for **youth in grades 5-12** who want to learn about engineering, build skills and network with engineering students, faculty and professionals.

This hallmark event of UVM's College of Engineering and Mathematical Sciences (CEMS) and Vermont 4-H will happen on **Saturday**, **February 18**, **2023** at the University of Vermont.

The day will have two distinct parts:

- In the morning participants will engage in an **Engineering Scavenger Hunt**. We are going to fill the room with exhibit tables hosted by engineering businesses and CEMS student groups. Each exhibitor will submit a question to include in the scavenger hunt; the answer to the questions can be discovered by visiting the exhibit tables. Collectively, this will allow participants to learn about different kinds of engineering and career pathways.
- In the afternoon participants will continue to connect with engineering professionals and UVM engineering students through **hands-on skill-building workshops**.

Discover Engineering will include:

- Inspiring and engaging skill-building workshops.
- Informative **exhibit tables** from engineering businesses, organizations and student groups.
- ROBOTS!
- Connection with engineering professionals from across Vermont.
- Morning coffee and refreshments, lunch and snacks will be provided.
- And more!

Check out the list of workshops on the back and register by February 8!

Learn more at www.uvm.edu/extension/youth/announcements

To request a disability-related accommodation to participate in this program, please contact Lauren Traister, 4-H Teen & Leadership Program Coordinator, at 802-888-4972 by January 27, 2023 so we may assist you.



Tenative Schedule

9:15 Arrive & Check In

9:30 Welcome

9:45 Engineering Scavenger Hunt

11:15 Lunch

11:45 Travel to Workshop Room

12:00 Workshop 1 / BSA STEM Merit Badges

1:00 Snack Break

1:30 Workshop 2 / BSA STEM Merit Badges continue

2:30 General Departure

4:30 BSA Departure



Workshops Offered

For Everyone

- Beam Deflection Study and Relationship to Motor and Pump Design
- Learn to Code: Python
- Step into a New Dimension! Using 2D materials to create 3D objects (double session)
- What is Nanotechnology: Getting Patients the Medicine They Need
- · Let's Make Robots Go!
- Build a Car with UVM's AERO!
- Ship the Chip! An Engineering Design Challenge with GlobalFoundries
- Aerodynamics 101: How to Design an Efficient Aircraft
- Water Rocket Propulsion (double session)
- Designing Bridges
- Precision Measurement

Scouts BSA STEM Merit Badges

This year's Scouts BSA STEM Merit Badge Day will take place as part of the Aiken Discover Engineering. The Merit Badge opportunities are for registered Scouts BSA and Venturers (Not Cub Scouts), ages 11-17. Badges which can be earned are: Composite Materials, Digital Technology, Communications, Electricity, Engineering, Railroading, Astronomy, Graphic Arts, Music, Oceanography, Robotics, and Soil & Water Conservation.

Discover Engineering is a program of:



At the end of February is the National Engineering Week (Feb 19-25, 2023). UVM Extension 4-H and the UVM College of Engineering and Mathematical Sciences have teamed up to host a variety of programs all month long to promote the field of engineering and help youth understand different pathways they can take to pursue a future as an engineer. Program details will be posted in early January at: www.uvm.edu/extension/youth/announcements