ABOUT WORKSHOPS

Our workshops bring exciting demonstrations, engaging projects and real-world applications of science to your classroom. They are an excellent unit introduction or review and fit into your regular class block. We integrate interactive whiteboard technology when possible.

Our instructors are experienced and talented undergraduate students at the University of Alberta who are pursuing degrees in engineering, science, or education. They are great role models for your students and their energy and enthusiasm will keep students engaged throughout the workshop.

BOOKING INFORMATION

AVAILABILITY
- In-class workshops are available in Edmonton from September to June and in rural communities selected weeks during May & June.
- We offer video conferencing workshops from September to June.
- We offer a half-day booking of 2 workshops or a full-day booking of 4 workshops.
- Contact our office for more information.

IMPORTANT DETAILS
- We can accommodate classes of up to 32 students
- We prefer a classroom with an Interactive White Board and a table set up for demonstrations at the front
- We bring all of the supplies needed
- Parent volunteers are not required
- DiscoverE workshops generally run 75 minutes long
- Please allow ten minutes before and after for setup and clean-up
- We deliver some workshops in French

PRICE LIST
- Half-day (2 workshops) $150
- Full-day (4 workshops) $250
- Limited bursaries are available. Contact our office for more information.

HOW TO BOOK
Go to discovere.ualberta.ca and click on the Request a Workshop button to fill out a Workshop Booking Request Form.
GRADES 1-3

Tiny Tech
Students will dive into the exciting world of computer programming and learn the basics of coding! Binary code, logic, and parts of a computer will be learned through a variety of games and challenges. While this will introduce students to computer science and computer engineering, this workshop does not require a computer lab!

GRADE 1

Learning to Build
Students are given an interactive look into the shapes and components used in the construction of a variety of buildings and bridges. They will have the chance to learn about structures, support, and design through demonstrations and a hands-on building activity.

Needs of Animals & Plants
Students explore the needs of animals and plants through interactive games and are then given the opportunity to test their new knowledge by growing and caring for their own plant.

GRADE 2

Boats & Buoyancy
This hands-on workshop challenges students to build, and then modify, a boat to carry a specific load. Students learn buoyancy through hypothesizing and testing whether various objects will sink or float in water.

Small Crawling & Flying Animals
Students will learn about the exciting world of BUGS! Through interactive activities, games, and demonstrations, students will appreciate the amazing lives of insects. They will then create their own bug using materials provided.

GRADE 3

Sound
Students will experience and understand the nature of sound! They will explore the different qualities of sound, the movement of sound through different materials, the process of hearing, and finish off their learning by building a sound-making device.

Structures & Design
Through interactive activities and demonstrations, students will gain an insight into the shapes, materials and designs used in the construction of a variety of buildings and bridges. They will then be challenged to select materials, design, and test their own bridge.

GRADE 4

Light & Shadows
By working with mirrors, lasers, prisms and much more, students will experience light, shadows, and colors from a new and an exciting perspective! Following many interactive demonstrations, students will build their own fully functional periscope.

Simple Machines
From a pulley system to a giant lever, students see firsthand the types, forms and uses of simple machines.

GRADE 5

Chemistry
Students will see and participate in the exciting world of chemistry! They will discuss the importance of chemical safety, watch demonstrations of different physical and chemical reactions, and finish off the workshop by putting on the lab goggles themselves to complete a hands-on chemistry experiment!

Electricity
Through engaging demonstrations and discussions, students will see the power and possibilities of electricity. They will learn about the nature of electricity, simple circuits, and how to safely study these concepts. They will put their new knowledge to the test by building their own conductivity tester.

GRADE 6

Evidence & Investigation
Students will use their problem solving skills to interpret a crime scene and help solve the case of the DiscoverE theft. Fingerprint patterns, handwriting styles and shoe prints must all be carefully analyzed in order to solve this case!

Flight
By using a hovercraft to learn about air pressure, a small rocket to learn about Newton’s Third Law of Motion and much more, students learn about the forces and principles involved with the marvels of flight. They will apply their new knowledge by participating in a glider-building challenge.

Sky Science
Students will examine the apparent movement of the sky as related to the rotation of the Earth, the Earth’s tilted axis, and the phases of the moon. Hands-on demonstrations and games will build on both the curriculum and students’ personal observations of the night sky.

GRADE 7

Heat & Temperature
Through discussions and demonstrations, students will learn the difference between heat, temperature, and thermal energy. They will discuss the particle model of matter, thermal expansion, heat transfer and complete a thermos challenge.

Microelectronics
Students will see how science, engineering, and technology all come together in the world of electronics. Using soldering irons and electrical components, students will build their own electronic device and gain an insight into the science behind everyday electronics.
DiscoverE is a student-delivered initiative of the Faculty of Engineering with a focus on fun, accessibility and mentorship! We deliver high-impact classroom workshops, unique clubs and events, and engaging summer programs to over 27,000 youth every year.

DiscoverE reaches 80 communities across northern Alberta and the Northwest Territories. To learn more about our programs or to see when DiscoverE will be in your community, visit www.discovere.ualberta.ca.

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PLATINUM SUPPORTERS CONT’D

Actua provides training, resources and support to its national network of members located at universities and colleges across Canada in the delivery of science, technology, engineering and mathematics (STEM) education outreach programming. Each year, these members engage over 225,000 youth in 500 communities nationwide. Please visit Actua at www.actua.ca