

The programs we deliver to students foster deeper understanding of STEM curriculum and the development of innovative thinking, creativity, and reasoned judgment. Through hands-on assignments, students are emotionally and intellectually invested in the work and can gain the understanding of practical, real world application of their studies.

At Roots 2 STEM, we follow the Engineering Design Process in challenging students to look at problems and work through a systematic approach to solutions:

- 1. Question: Ask questions to help understand the problem.
- 2. Imagine: Imagine and brainstorm solutions.
- 3. Plan: Plan and draw a design.
- 4. Build: Create and construct a working model.
- 5. Test: Experiment with models controlling one variable
- test, measure, & record.
- 6. Improve: Improve and revise the model.

Visit our website for more info:

roots2stem.ca

Value for Teachers

As professionals in engineering and the sciences, we assist teachers in designing learning opportunities and activities that stimulate the imagination of students, and engage them in projects that require a higher level of thinking in the STEM disciplines. We provide teachers the access to equipment and tools that

would normally be cost prohibitive for most schools.
This is all under the guidance and mentorship of our professionals that work with the teachers to create appropriate STEM programs that fit their curriculum.

Our facility and equipment can enhance the science and engineering projects that you have always wanted to try with your class. Discover the possibilities.

Call 403.257.4200 or Email: info@roots2stem.ca







HOW DO YOU INSPIRE STEM?



roots2stem.ca



Discover Your Inner Engineer

This program provides an introduction to engineering with thought provoking projects. Within a 3 hour period, students will visit 15 workstations and work on several projects. From electronics and robotics to solar power and fiber optics students will enjoy working in a functioning lab. Students use the electronic or computer workstations, project tables, workshop, CNC machines, 3D printers and a wealth of other tools and technology.

Programs

Facility

At Our

Critical Design Thinking

Roots 2 STEM offers an important Critical Design Thinking program that introduces the Engineering Design Process to your class. Students will be given a Research, Design and Build challenge and will be instructed on the background and several designs that allow

Programs At Your School

them to make choices in the engineering process. Students receive supporting instruction with their projects from an Engineer.

Engineering Academy

Roots 2 STEM offers an Engineering program that introduces new technologies to your students and provides training with tools that will support them in the next step in their education. We can design a program that fits your school and your students. Students will receive laboratory instruction, project builds and complete challenges that ensures their future growth. Each student will receive certification upon completion of the course. Lessons can be held at our 4,000 sq.ft. lab of discovery or at your school

Contact us for more information. Email: info@roots2stem or call 403.257.4200

Collaborate with STEM Mentors and **Engineering Professionals**

Get assistance delivering STEM programs in your classroom in the following:

Computer Aided Drafting Renewable Resources Mechanical Systems Engineering **Programming Electrical Circuits** Microprocessors Electronics **Control Systems** Power Systems Fluid Mechanics Thermodynamics Aerospace Robotics and much more.

Call us today to



