



Are you looking for a chance to join a team where your contribution positively impacts the lives and learning of future leaders in Science, Technology, Engineering and Math? STEM Innovation Academy is looking for exceptional professionals to join our team.

## About Us

STEM Innovation Academy is a public charter school in Calgary that opened in September 2021. Our junior high school currently serves over 470 students in grades 7-9. In September 2022, our high school campus opened a NW location located in the University Innovation Quarter with 115 Grade 10's; we have since grown and project 700 students in 2024-25 with a full-grown capacity of 1000 students. With a mission to inspire the next generation to be knowledgeable creators, innovators, and responsible leaders, we believe every student can be successful in STEM and should have the opportunity to learn about cutting-edge science and technology topics.

## Position Information

### High School STEM Options (CTS) Teacher

#### Education and Experience

- Valid Alberta Teaching Certificate
- Bachelor of Education Degree or equivalent recognized by Alberta Education

#### Demonstrated Skills and Competencies

- Collaboratively work with CTS team members and learning leader to support Grade 10-12 student learning in our STEM electives program.
- Ability to learn and develop as a professional – willingness to learn.
- High level of organization and efficient project management; flexibility and adaptability in managing multiple class projects.
- Student centered approach and a willingness to personalize learning to the needs of the student. Provide formative and summative assessment to students on identified learning outcomes throughout the term.
- Foster positive relationships with students to create an atmosphere of trust and encouragement in the classroom.
- Commit to ongoing curriculum enhancements and development.
- High school STEM Electives fall into 4 strands: Design and Engineering, Computational Thinking, New Media and Specializations. **A subject knowledge one or more would be required.**
  - **Design and Engineering**  
Courses in the Engineering and Design strand focus on utilizing the design process to create innovative solutions to real-world problems. Students learn a variety of hands-on and digital skills and gain valuable prototyping and fabrication experience in our MIT Fab

Lab, which connects students to their global peers via a network of 1750 labs in over 100 countries. Key features include:

- The design process/cycle and its application to student learning and problem solving.
- Basic fabrication skills
- Rapid prototyping 3d printing, CNC and laser cutting with (or willingness to learn)
- Software: Tinker CAD and Fusion 360

○ **Computational Thinking**

Is a systematic approach to solving complex problems by breaking them down into a series of distinct steps. Solutions are presented in a form that can be effectively carried out by people or computers. Courses in the Computational Thinking strand involve students undertaking hands-on learning in computer programming and electronics to create 'smart' design solutions.

- Computer science topics may include digital information, the internet, app design, variables, conditionals, functions, lists, loops, traversals, algorithms, parameters, return, libraries, data, cybersecurity and global awareness.
- Computational thinking concepts: abstraction, decomposition, pattern recognition, testing and debugging.
- Physical computing with Adafuit circuit playground, DJI Tello drones, Arduino and Raspberry Pi. (or willingness to learn)
- Programming – block based and script
- Robotics – design, build and program with either the VEX and or First Tech Challenge

○ **New Media**

Courses in the Media strand leverage digital technologies and the art of communication to connect with authentic audiences using persuasive storytelling (Software: Full Adobe suite). Topics include.

- Digital 2D and 3D Graphics
- Digital Image Manipulation
- Digital Video Composition and Editing
- Digital 2D and 3D Animation – modelling and sculpting
- Creating for Virtual Reality and Augmented Reality
- Game Design, App Design Web Design
- Digital Music and Sound Design
- Media Marketing and Design

- **Specializations**

STEM Innovation Academy Specialization courses allow students to pursue areas of interest related to STEM by providing students with focused and in-depth learning experiences in specific fields of study. Courses offered are:

- Biomedical Science
- Sport Science
- Art: Foundations + Tech
- Artificial Intelligence
- Space Science – Astronomy
- Personal and Experimental Psychology
- Entrepreneurship and Innovation
- Scientific Research

***Please visit our [website](#) for more information about each STEM options course***

### **Application Package Requirements**

- Cover Letter
- Resume/Curriculum Vitae
- Names and contact information of three references, two of which must be current or very recent supervisors.

### **To Apply:**

1. Create online portfolio with Apply to Education [HERE](#) .
2. Submit application for desired job in online portal.
3. Posting open until suitable candidates for Fall 2024 found.
4. Shortlisting and initial interviews scheduled for Spring 2024.

***While we appreciate all applications received, only people selected for an interview will be contacted.***