



<http://www.brainstemlearning.ca/>

Montroyal Elementary school's K-6 are invited to join our after school program at your school for 6 weeks, Jan. 13, 27, Feb. 10, 17, Mar. 3 & 10. Grades **K-1** is a one hr. of Aerospace Engineering from **3:15-4:15pm** and **grades 2-6** is a one and a half hour class of Specialists Robotics Engineering from **3:15-4:45pm** in the Gym. The maximum class size for K-1 group is 12 students and grades 2-6 maximum 24 students.

### **Aerospace Engineering K-1 (3:15-4:15pm): Cost: \$135-5% Montroyal Discount + GST**

- **Aerospace engineering involves the design and construction of planes and space shuttles. Aeronautical engineering covers craft that stay inside the Earth's atmosphere (such as commercial planes) while astronautical engineering covers craft that leave the Earth's atmosphere (such as space shuttles or rocket ships).**
- **In this program the little brains will learn about the fundamentals of aerospace engineering discovering about: aerodynamics; gravity; velocity; forces to lift; drag and thrust on objects; and the Bernoulli principle. The kids will use their creativity and curiosity to design and build their own flying machines while having fun.**

### **Robotics Engineering: Specialists grades 2-6(3:15-4:45pm): Cost: \$160 - 5% Montroyal discount + GST**

#### **\*Beginners Robotics Engineering pre-requisite.**

- **A robotics engineer is responsible for designing, creating, and programming robots. Robotic systems are able to perform duties that humans are either unable or prefer not to complete. They help make jobs safer, easier, and more efficient, particularly in the manufacturing industry.**
- **The specialist and managers will reinforces their robotic concepts from the beginner's course. They will work with the *sensor and advanced programming* to face a variety of challenge mixing mechanical design and programming design to solve problems. The *LEGO® Mindstorms EV3* materials and the software are also used in this course. The children will face different challenges having fun utilizing the STEM education model.**