STEM MINDS & ST MARY CES LEGO ROBOTICS



WINTER 2019

Location: St Mary CES **When:** Tuesdays

Start Date: Tuesday January 22 End Date: Tuesday April 16 Time: 12:00 — 1:00 pm Cost: \$190 + HST

Grades: 3-8

*No class March 12

Maximum class size: 24 students (first come first served registration)

*please note that a minimum of 10 students is required to run the program. STEM MINDS reserves the right to cancel a program and provide a full refund to registrants in the event of insufficient enrolment.

STEM MINDS™ is pleased to propose a 12 WEEK LEGO ROBOTICS PROGRAM every

TUESDAY from 12:00 – 1:00 from JANUARY 22 to APRIL 16 at ST MARY CES

The LEGO Robotics Club will provide participants the opportunity to learn coding in an exciting, hands-on, challenge-based environment using the LEGO® EV3 Mindstorm® Robots. Each week will focus on a new programming fundamental where participants will code and run missions that solve real-world problems. As part of the program, participants will have access to a LEGO EV3 Robot and a laptop and will learn concepts of design thinking and strategy to rationalize their programs and improve their skills!

To register, please visit

Session Overview - Beginner	
Session 1	Introduction to LEGO EV ₃ & Moving Straight
Session 2	Moving Straight Part 2
Session 3	Turning
Session 4	Turning Part 2
Session 5	Medium Motor/Arm
Session 6	Loops
Session 7	Wait
Session 8	Multitasking & Comments
Session 9	Touch Sensor Part 1
Session 10	Touch Sensor Part 2
Session 11	Ultrasonic Sensor
Session 12	Final Challenge

Session Overview - Intermediate	
Session 1	LEGO Ev ₃ Basics & Sensors Review
Session 2	Ultrasonic Sensor
Session 3	Colour Sensor
Session 4	Gyro Sensor
Session 5	Ultimate Sensor Challenge!
Session 6	Switch Statements Part 1
Session 7	Switch Statements Part 2
Session 8	Line Following Part 1
Session 9	Line Following Part 2
Session 10	Gyro Sensor Calibration Part 1
Session 11	Gyro Sensor Calibration Part 2
Session 12	Final Challenge