IRIS
INSTITUTE OF ROBOTICS & INTELLIGENT SYSTEMS INC.
EDUCATION | TECHNOLOGY | RESEARCH

Dear Parents/Guardians,

IRIS Lego Robotics S.T.E.A.M based Program

At the Institute of Robotics and Intelligent Systems (IRIS) we provide **STEAM-based Toronto District School Board (TDSB)** approved learning programs that utilize robot technology. Through our hands-on approach, students have the **opportunity to explore science, technology, engineering, art and mathematics concepts in an interactive and enjoyable learning environment**. We encourage students to appreciate the significance of robotic systems, the growing number of uses and the potential that it holds.

Our key programs include Lego WEDO Robotics (ages 4-8), Lego Mindstorms EV3 (ages 9-17), and Arduino (ages 9 and up). However, we are able to offer a variety of programs based on your request. In a group setting, students will build a robot and program it to control its behavior. Students will understand the various parts necessary to create the robot, follow a step-by-step process to build the robot from the designs provided, and finally program the robot's behavior. During our workshops, students go beyond the classroom and exercise their skill set in an atmosphere creativity and teamwork.

LEGO WEDO ROBOTICS (AGES 4-8)

The LEGO WEDO Robotics program is specifically designed as an intermediate step between the more fully featured robotics platform and regular, non-robotic LEGO. Students will be working with gears, pulleys, motors and sensors to construct, program and control robots.

LEGO MINDSTORMS EV3 (AGES 9-17)

LEGO Mindstorms EV3 is designed for those with no programming background and introduces students to concepts such as coding, looping, decision making and flow control as they utilize the visual drag and drop programming interface.

ARDUINO (AGES 9-16)

Arduino is an open-source prototyping platform which can read inputs and turn the inputs into outputs. Students will have access to everything required to complete 16 circuits which will teach students to read sensors, display information on an LCD, drive motors and more. Students will learn how to connect each circuit with the included parts.

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All our programs offer a unique platform for STEAM-based concepts such as:

SCIENCE	TECHNOLOGY	ENGINEERING	ART	MATHEMATICS
Learning targets: Working with simple machines, gears, levers, pulleys and exploring various science topics	Learning targets: Using software media; designing and creating a working model; using digital technology in a meaningful way; documenting, structuring, explaining ideas using digital technology.	Learning targets: Brainstorming, selecting, building, testing, and evaluating a solution and results.	Learning targets: ideas, drawing, design principles, creativity, artistic skills, innovation	Learning targets: Measuring time and distance; adding, subtracting, multiplying, dividing, decimals, estimating, ratios, randomness; using variables.

The cost for all the 08 classes is $250. There is a minimum of students required to run the program

No. of Classes: 08
Duration: 01 hour 30 mins
Cost Per child: $250 for 08 classes (all inclusive, no tax)

If there is enough interest, the program will take place after school, at Burlington Christian Academy (should be 1 hour and 30 minutes).

If you would like your child to participate, please fill in the student registration form and submit by **January 17, 2019 (Thursday)** along with the payment

Class Start Date/ Schedule:

Date	Time
January 31, 2019 (Thursday) February 07, 2019 (Thursday) February 14, 2019 (Thursday) February 21, 2019 (Thursday) February 28, 2019 (Thursday) March 07, 2019 (Thursday) March 28, 2019 (Thursday) April 04, 2019 (Thursday)	03:30 PM to 05:00 PM (for all 08 classes)


LEGO
education
LEARNING PROGRAMS