



Creative Computing & Robotics

Spring STEM Program

Scratch

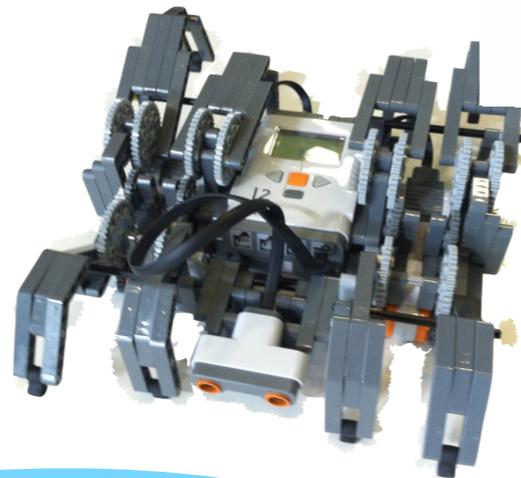


Learn to build, design and code!

- **Starting: Jan 16th** (9 Week Program)
- Grades 1-2
- Days and Times: **THURSDAYS** 2:45p - 3:45p
- Creative programming & robotics
- **Registration:** <http://www.roboticstem.com/sign-up/>

Math-Science-Technology Focused

- Parents invited to SHOWCASE on last day
- **Advanced lessons** for continuing students
- Robotics Competitions coming up
- STEM based curriculum

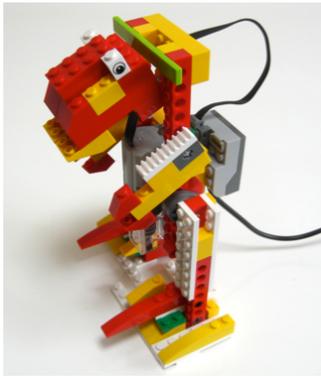


\$69 FOR THE ENTIRE PROGRAM



www.roboticstem.com

STEM Pathway



Age 6-7

Introductory

Introduction to STEM. Building models, Introduction to construction, colors, shapes, Wheels & motors. Environment, animals, technology and transport

Age 6-7

Advanced

Exposure to programming and engineering. Design and build. Distance and tilt sensors. Lessons include motion, gear, belts, spin and balance, beats and rhythm

Age 8-9

Introductory

Designs, Observations, and interpretations. Introduction to coding and programming. Design your own programs and configure its behavior using motors, sensors and other electronics

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when space key pressed
  forever
    if key a pressed?
      turn 15 degrees
      wait 0.5 secs
      move 25 steps
  ↻

when down arrow key pressed
  go to x: 0 y: 0
  point in direction 90
  stop all
  
```

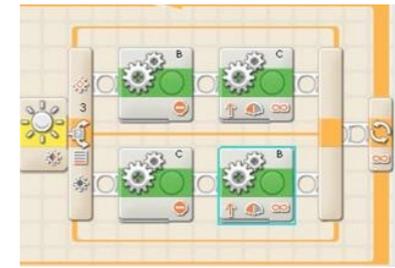
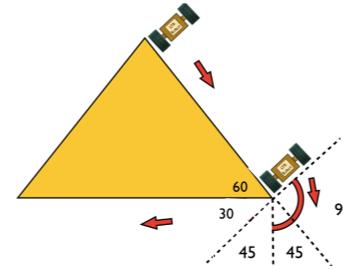
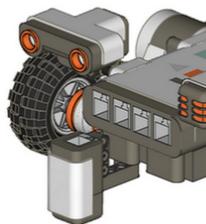
Age 8-9

Advanced

Engineering & technology. Building simple machines. Coding lessons include: direction, negatives, rotation, coordinates, shapes, animation costumes, switches, "logic" & sequences



STEM Pathway



Age 10-12

Advanced

Navigating autonomous robots with sensors (ultrasonic, sound, touch and light). Concepts include: making music with codes, light intensity, line counter and tracer, switches & loops, geometric shapes and programming on degrees, synchronizing multiple motors and fun obstacle courses

Age 10-11

Introductory

Introduction to Mindstorm robots and micro-controllers. Problem solving and "hands on" application. Product design, Observations, interpretations, ratios & proportions. Programming, random number concepts and variables, servo motors, multiple sensors and electronics.