ARDUINO® ROBOT KIT
Robotics System Starter Kit

MINDS-i

MINDS-i STEM INTEGRATED ROBOTICS: ARDUINO® ROBOT KIT

Sample the MINDS-i Robotics system and introduce students to the basics of programming, robotics, and engineering. Students construct two robots and experiment with various sensors, actuators, and mechanical elements to perform multiple autonomous tasks. The set includes easy to use visual instructions for building and programming.

SPARK AND SUSTAIN STUDENTS' INTEREST IN STEM

MINDS-i Robotics engages students in an energizing STEM learning environment with easy to build, program, and modify robots. Technologically advanced rovers and drones perform impressive real-world tasks that build excitement for STEM careers. The curriculum encourages collaborative problem-solving and the open-source Arduino® C++ programming language fosters endless creativity. With outstanding technical support, teachers are empowered and students are inspired to build whatever they envision in their "mind's eye."

KIT DESIGN

This kit is designed for 2-3 students and requires about 3 hours to build and program each robot style. The Arduino® Robot Kit does not include a curriculum. See the MINDS-i Foundations Lab and Drones Lab for the curriculum.
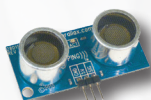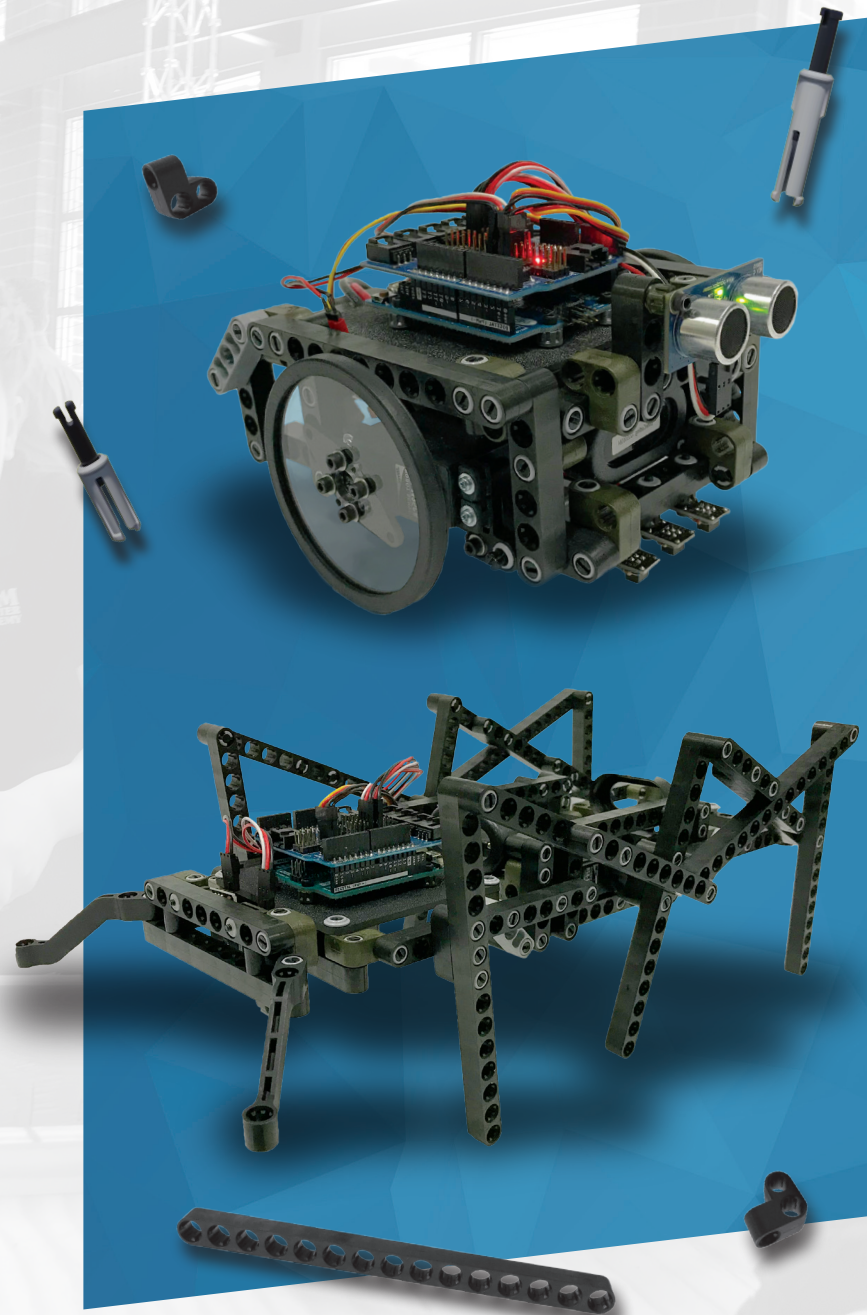
| BUTTONS | IR LIGHT SENSOR | ULTRASONIC SENSOR | ARDUINO® | SERVOS | RECHARGEABLE BATTERY | QUICK LOCKS |

FIND YOUR MINDS-i SALES REPRESENTATIVE AT:

mindsieducation.com »   info@mymindsi.com »

2-IN-1 ARDUINO® ROBOT KIT: HOW MINDS-i CAN HELP YOU TEACH PROGRAMMING

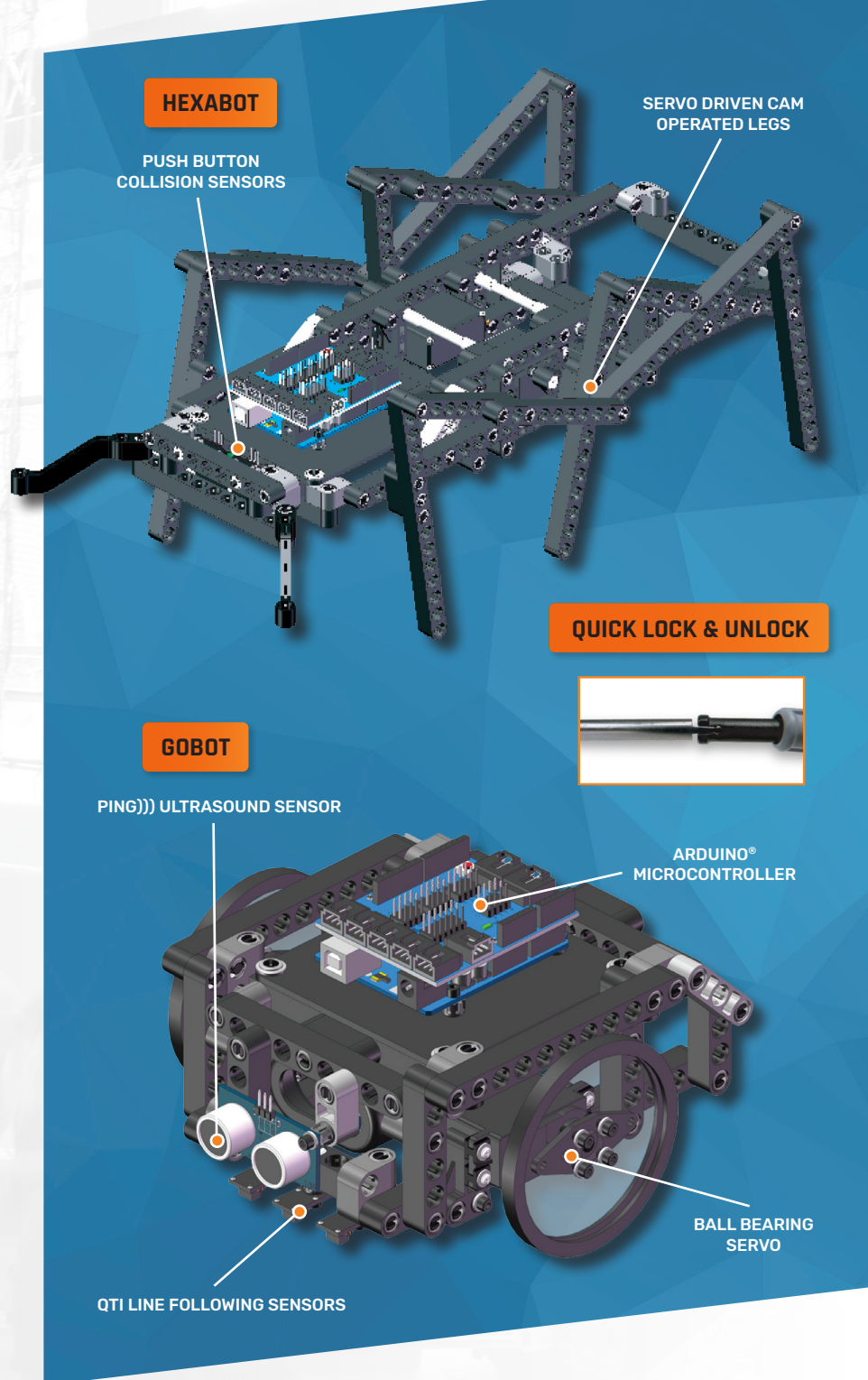1. **Quick entry into programming with our full library of sample programs**
   a. Calibration: Get a reading from individual sensors or control servos and motors
   b. Application: Utilize one sensor and one servo or motor to perform a simple task
   c. Projects: Bring together multiple sensor inputs and servo/motor outputs to perform a complex task

2. **Programming Tasks**
   a. The supplied chassis designs allow the instructor and students to focus on the programming tasks, as well as giving them the ability to quickly modify the chassis when needed

3. **Arduino® User Guide**
   a. We provide a step by step walk through of all of the sample code, including descriptions of the complete code and notes for the different sections of the code

HEXABOT

SERVO DRIVEN CAM OPERATED LEGS

PUSH BUTTON COLLISION SENSORS

QUICK LOCK & UNLOCK

GOBOT

PING))) ULTRASOUND SENSOR

ARDUINO® MICROCONTROLLER

BALL BEARING SERVO

QTI LINE FOLLOWING SENSORS

ARDUINO® PROGRAMMING SOFTWARE & LEONARDO HARDWARE

» 20 Digital I/O Pins

» 7 PWM Channels

» 12 Analog Input Channels (with ADC)

» Serial & I2C Communication Ports

» 32 KB Flash Memory & 16 MHz

» Full Set of Sample Code in Library

» Windows 10, OS X & Linux Ready

» Digital Ports can Operate Servos, Motors and Sensors