

OVERVIEW

LEVEL A: BUILDING CIRCUITS AND BEGINNING PROGRAMMING

Level A is the first in a four-part series making up our Intro to Robotics course. In this level, your student will start at the beginning and learn to build electrical circuits using common components, learn to write simple programs in Python, and finally pull those two skills together to learn to control the circuits he or she builds with the computer code he or she writes.

This level lays the ground work for Levels B-C which move on to adding more complex components including sensors as well as input/output devices such as sound and video, all while continuing to build their Python coding skills. In Level D, all these components and coding skills come together allowing the student to build a mobile robot they will program to gather data, make decisions, perform tasks, etc.

Our goal in the end, is that your student not only have a fully functional robot but that they have a full understanding of every component and every line of code. This is powerful knowledge! The collection of components they will have amassed along with the knowledge they will have built, will allow them total flexibility to modify the robot, build other robotic devices they dream up, or take on entirely new projects they may find online.

Intro to Robotics Course of Study:

Level A: Building Circuits and Beginning Programming

Level B: Working with Sensors and Intermediate Programming

Level C: Incorporating Video and Advanced Programming

Level D: Working with Motors and Taking It Mobile

