

# HUMMINGBIRD ROBOTICS KIT

Kit Sponsor: Chris Mayfield, Ph.D., Computer Science Departments

**STEM**

## Objectives:

This kit allows students to engage in technology and content by understanding robotics. Students are able to design prototypes and bring them to life, using a variety of software.

## Overview:

The kit contains all the electronics you need for a class + curriculum, glossary, USB flash bands, and other helpful tools and materials. Just add 8-12 students and craft materials and watch the robots fly! This robotics kit encompasses the more evident topics of science, technology, and engineering in the STEM curriculum but also includes the math concentration! For example, math teachers could use it to gather data from the sensors, perform calculations and/or apply models, and graph/interpret the results.

*To replenish any materials used, lost, or broken during classroom use, or to purchase this kit, visit [www.birdbraintechnologies.com](http://www.birdbraintechnologies.com)*



## MATERIALS

- Four Hummingbird Duo controllers
- Power supply, USB cable, terminal tool, snap-in stand-offs for each controller
- Three each of red, orange, yellow, and green single-color LEDs
- Eight tri-color LEDs
- Ten hobby servos
- Six servo extension cables
- Four gear motors with wheels
- Plastic block adapters
- Four vibration motors
- Four each of light and temperature sensors
- Two each of distance, sound, and rotary sensors
- Packaged in reusable plastic tray organizer Program in everything from Scratch to Java!