# Welcome to BOLT+ Fundamentals Self-Guided Course Syllabus

Learn BOLT+ fundamentals and integration all on your own time. In this self-guided online course, you will learn how to get started with BOLT+ in your classroom.

In this course, you will:

- understand your BOLT+ and how it can be used
- dive into Sphero Central to: set up an educator account, create classes, activities, and programs
- learn how to program BOLT+ using the app's Draw, Block, and Text programming canvases
- review BOLT+ activities and programs to understand how to find the right ones for you and your class
- understand how to use project and problem-based learning to enhance the learning experience with BOLT+
- discover ways to make it all work in any classroom environment

### Module 1: Get to Know BOLT+

In this module, meet your BOLT+ and learn how it works and how to take care of it.

- Under the Hood of BOLT+
- Care, Maintenance & Charging

## Module 2: The Sphero Edu App

Module 2 provides your introduction to Sphero Edu, your home for finding classroom content, organizing and managing your classroom, and connecting to and programming RVR+.

- Sphero Edu App Overview
- Connecting your BOLT+
- App Walk-through & Features
- Sphero Central Overview
- Creating Lessons
- Creating & Managing Classes
  - Sync with Google Classroom
  - Sync with Clever

### Module 3: Programming BOLT+

In module 3, you will learn about the Draw and Block programming Canvases, a programming environment designed to teach primary to intermediate (and many advanced) principles of programming.

- Introduction to Draw
- Draw Lesson 1
- Introduction to Blocks
- Blocks Lesson 1.1
- Blocks Lesson 1.2
- Blocks Lesson 1.3
- Blocks Lesson 1.4
- Blocks Lesson 2

#### Module 4: BOLT+ Sensors

BOLT+ is packed with sensors, including an imu, ambient light sensor, infrared communications, and more. Module 4 introduces you to all of BOLT+'s many sensors and how to build their data into programs.

- Introduction to Sensors
- Accelerometer
- Gyroscope
- Location
- Ambient Light
- Infrared

## Module 5: Using BOLT+ in Your Classroom

Module 5 discusses how to use BOLT+ in your classroom. What skills should students learn and experience exclusive content not found anywhere else.

- Computational Thinking Skills with Sphero in the Classroom
- Elementary (3rd 5th)
- Middle School (6th 8th)
- High School
- Exclusive Lesson Draw
- Exclusive Lesson Blocks
- Exclusive Lesson Text

### Module 6: BOLT+ & STEAM Education

Module 6 discusses how to use BOLT+ for STEAM Education. Explore different use cases and see examples of how to integrate BOLT+ into nearly any subject area.

- Introduction Sphero & STEAM Education
- Educator Use Case Scenarios
- Space, Equipment & Learning Experiences
- Play is a Powerful Teacher
- BOLT+ as a Physical Component in STEAM Education
- Sphero as a Discrete Instructional Tool
- Sphero as a Data Collection Tool

# Access your Continuing Education Certificate

Once educators complete each module, they will unlock the Continuing Education Certificate that they can print out to keep for their records.