

Introduction to Makey-Makey

Suitable for: G4 - G7

Prerequisite: Basics Of Scratch

Duration: 24 Weeks

Classes per Week: 1 class (45 minutes each)

Course Overview:

This course introduces students to the concept of circuits and interactive technology through the Makey-Makey kit. Students will explore basic electronics by creating circuits to interact with computer-based projects, enhancing their creativity, problem-solving skills, and understanding of how everyday objects can be transformed into interactive devices.

Covered Topics

Unit 1: Introduction to Circuits and Makey-Makey

- What is an electric circuit?
- Introduction to Makey-Makey and its components
- Setting up the Makey-Makey kit with a computer

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Unit 2: Hands-On Activities with Makey-Makey

- Creating a circuit to control a simple traffic simulation
- Using Makey-Makey to control magical effects on screen
- Building an interactive game controller for a ball game

Unit 3: Music and Art with Makey-Makey

- Playing simple tunes by connecting Makey-Makey to conductive materials
- Creating a virtual guitar by completing circuits
- Using Makey-Makey to create a color selection tool
- Simulating a DJ experience with Makey-Makey buttons

Unit 4: Games and Final Projects

- Designing a controller for a maze game
- Interactive project to simulate launching a rocket
- Experimenting with different objects to make sounds

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Materials Needed:

- Makey-Makey kit
- Conductive materials (aluminum foil, playdough, fruits, etc.)
- Computer or Tablet
- Internet connection
- Chrome Browser

Assessment

At the end of each unit, learners will be assessed on their understanding of circuits and how well they can apply the Makey-Makey to create interactive projects. The assessments focus on creativity, circuit accuracy, and effective project design.

Certification

A certificate of completion will be awarded to students who successfully complete the course, recognizing their foundational skills in electronics and interactive project creation with Makey-Makey.