

Introduction to Mouse Coding

Suitable for: G1 - G3

Prerequisite: None

Duration: 25 Weeks

Classes per Week: 1 class (45 minutes each)

Course Overview:

This course introduces young learners to the basics of coding and sequencing through a hands-on experience with a mouse robot. Students will learn fundamental coding concepts by using directional commands to guide the mouse robot through various activities, enhancing their problem-solving skills and spatial awareness.

Covered Topics

Unit 1: Introduction to Coding and Mouse Robot Basics

- Introduction to coding concepts for young learners
- Overview of the mouse robot and its functions
- Basic movements: forward, backward, turning right and left

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Unit 2: Operating the Mouse Robot

- How to operate and control the mouse robot effectively
- Introduction to sequences and directional commands
- Practice navigating simple paths with the mouse robot

Unit 3: Activity Cards and Problem Solving

- Simple paths with forward and backward commands
- Incorporating turns and multiple steps
- More complex paths, requiring multiple commands and problem-solving

Unit 4: Final Projects and Review

- Applying coding sequences to navigate a maze
- Creating a path for the mouse robot through an obstacle course
- Review of coding concepts learned throughout the course

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Materials Needed:

- Code & Go Mouse Robot kit with activity cards and maze mat

Assessment

At the end of each lesson, learners will be assessed on their understanding of sequences and their ability to use directional commands. The assessments focus on accuracy in programming the robot and the ability to troubleshoot errors.

Certification

A certificate of completion will be awarded to students who successfully complete the course, recognizing their foundational skills in sequencing and problem-solving with the mouse robot.