

micro:bit Pathway · Capstone Course

Advanced Robotics with micro:bit

Advanced Level

Ages 11+

Servo Robotics

Explore the micro:bit Robotics Capstone and take the final step in the micro:bit STEM pathway, moving into mechanical builds and servo-driven systems.



11+

AGE GROUP

24

SESSIONS

60 min

PER SESSION

3

MONTHS

3

PATHWAYS

micro:bit Kit
EQUIPMENT

Capstone
ASSESSMENT

Programme Overview

Discover the exciting world of servo systems and robotics through hands-on mechanical builds with the micro:bit.

Skills Students Gain

Digital Creativity

Computational Thinking

Servo Systems

Problem Solving

Collaboration

MakeCode Fundamentals

3-Month Learning Pathway

Students design, build, and control their own robotic devices, calibrating servos and combining multiple sensors into one reactive device while learning feedback loops and mechanical control.

1 Servo Fundamentals & Precision Sensing

Servo motor control paired with joystick, ultrasonic and infrared sensors for the first mechanical devices.

2 Multi-Sensor Devices

Combining servos with two or more sensors to build interactive, reactive devices with feedback loops.

3 Independent Systems & Capstones

Designing complete, independently-controlled systems that bring everything learned together.

Programme Details

Level
Advanced

Duration
3 Months

Schedule
24 sessions · 60 min each

Location
Sport Society, Mirdif

Kit
micro:bit + boards + servos + sensors

Includes
Capstone project + assessments

Build Real Projects · Learn by Doing · Think Like an Engineer

Start Building Today

Enroll Now

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