

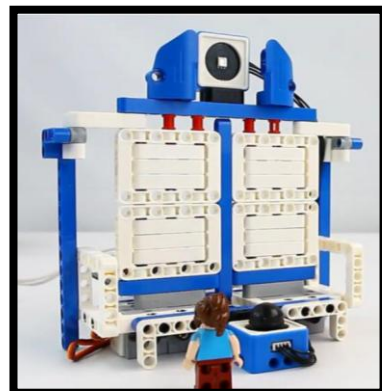
MICRO:BIT ROBOTICS COURSE

ADVANCED LEVEL

AGES 10-14

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. Students design, build, and control their own robotic devices.



10-14

AGE GROUP

24

SESSIONS

60

MINS / SESSION

3

MONTHS
DURATION

3

LEARNING
PATHWAYS

KIT

MICRO:BIT KIT

✓

CAPSTONE
PROJECTS

PROGRAM OVERVIEW

Discover the exciting world of **Servo Systems and Robotics** through hands-on mechanical builds with the micro:bit.

Students calibrate **Servos** and combine multiple **Sensors** into one reactive device while learning feedback loops and mechanical control.

3 MONTHS LEARNING PATHWAYS

- 1 Servo Fundamentals & Precision Sensing**
Introduce servo motor control paired with precision sensors, joystick, ultrasonic, infrared, for the first mechanical devices.
- 2 Multi-Sensor Devices**
Combine servos with two or more sensors to build interactive, reactive devices with feedback loops.
- 3 Independent Systems & Capstones**
Design complete, independently-controlled systems combining everything learned across the course.

SKILLS STUDENTS GAIN

- ✓ Digital Creativity
- ✓ Computational Thinking
- ✓ Servo Systems
- ✓ Problem Solving
- ✓ Collaboration
- ✓ MakeCode Fundamentals

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**

START NOW

ENROLL NOW FOR MICRO:BIT
ROBOTICS

+971 50 754 2891 / +971 4 229 6887
Academy@ascendesport.com
www.ascendesport.com