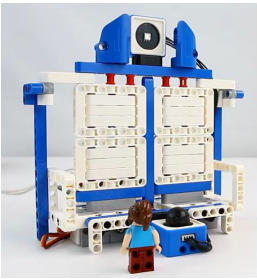




MICRO:BIT ROBOTICS & STEM COURSE

SIX-MONTH COMPLETE PATHWAY

From First Build to Full Robotics



YOUNG INNOVATORS

BEGINNER TO ADVANCED

LEARN. BUILD.
CODE. CREATE.

A hands-on, project-based journey for young learners moving from first curiosity to confident robotics builders. Learners progress through block-based coding, external sensor modules, servo mechanisms, and independent robotics builds — building a portfolio of real devices along the way.

6	24	6	2	2	IN-PERSON	✓
MONTHS DURATION	WEEKS	LEARNING PHASES	SESSIONS / WEEK	CAPSTONE PROJECTS	AT DUBAI	CERTIFICATE

PROGRAM OVERVIEW

Ascend's flagship micro:bit pathway for young learners — two levels moving from block-based foundations into servo-driven robotics and independent capstones.

PORTFOLIO PROJECTS INCLUDE:

- ✓ Heart, Animated Animals & First LED Builds
- ✓ Capstone 1: Creative Coding Showcase
- ✓ Sensor Builds: Nightlight, Jukebox & Rangefinder
- ✓ Servo-Driven Mechanism: Smart Wiper
- ✓ Capstone 2: Independent Robotic Goalkeeper

SIX-MONTH LEARNING ROADMAP

- Digital Foundations & First Builds**
Month 1 — micro:bit hardware, MakeCode & coding basics.
- Sensors, Sound & Wireless Play**
Month 2 — Temperature, sound, radio & timing in every build.
- Rhythm, Data & Creative Coding**
Month 3 — Combine every skill into expressive, creative builds.
- Servo Fundamentals & Precision Sensing**
Month 4 — Servo control with joystick, ultrasonic & infrared.
- Multi-Sensor Devices**
Month 5 — Combine servos with sensors for feedback loops.
- Independent Systems & Capstones**
Month 6 — Independently-controlled robotic systems.

SKILLS YOUR CHILD GAINS

- ✓ Block-Based Coding (MakeCode)
- ✓ Digital Logic & Circuits
- ✓ Built-in Sensors & Inputs
- ✓ Wiring & Circuit Assembly
- ✓ WOM Sensor Kit Modules
- ✓ Servo Motor Control
- ✓ Multi-Sensor Integration
- ✓ Problem Solving
- ✓ Computational Thinking
- ✓ Collaboration
- ✓ Creative & Independent Design
- ✓ Feedback Loops & Automation
- ✓ Public Presentation
- ✓ Portfolio Building

PROGRAMME DETAILS

Audience: Young Innovators (Ages 8–14)
Level: Beginner to Advanced
Duration: 6 Months · 24 Weeks
Schedule: 2 Sessions/Week
Format: In-Person · 60 Mins/Session
Language: English / Arabic
Approach: Hands-On · Project-Based
Includes: 6 Monthly Builds + Capstone + Showcase

READY TO
BUILD?

GIVE YOUR CHILD REAL ROBOTICS
SKILLS FOR THE FUTURE

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

LIVE CLASSES · EXPERT INSTRUCTORS · PORTFOLIO-READY

LEARN. BUILD. CODE.
CREATE.