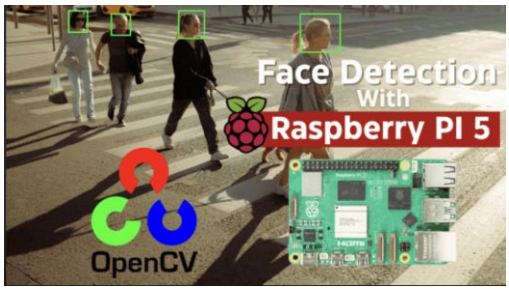
ASCEND EDTECH

ROBOTICS and AI
ADVANCE LEVEL



AGES 16+ | **ARDUINO & PYTHON ROBOTICS**

A hands-on engineering track for students ready to think like makers. Students move from core electronics and coding into real AI fundamentals — building circuits, writing Python and C++, and training their first computer vision system on a working robot.

BUILD.
CODE.
TRAIN.
DETECT.

16+	24	60	3	3	KIT	✓
AGE GROUP	SESSIONS	MINS / SESSION	MONTHS DURATION	LEARNING PATHWAYS	ARDUINO + RPi	CAPSTONE PROJECT

PROGRAM OVERVIEW

Discover the fundamentals of Electronics, Coding, and **Artificial Intelligence** through hands-on engineering with Arduino and **Python**.

Students build circuits, write real Python and C++ code, and train an AI vision system to detect faces and people in real time — laying the groundwork for advanced robotics.

3 MONTHS LEARNING PATHWAYS

1. **Electronics, Coding & AI Fundamentals**
   Core electronics, microcontroller basics, and Python/C++ . microcontroller integration projects.
2. **Intelligent Robotics & ML Foundations**
   Introduction to planning and classification concepts in machine learning, applied through the build robot.
3. **Computer Vision in Action**
   Students implement real-time face and person detection on a live camera feed.

SKILLS STUDENTS GAIN

- ✓ Electronics & Circuit Design
- ✓ Python & C++ Programming
- ✓ Microcontroller Integration
- ✓ Machine Learning Foundations
- ✓ Computer Vision
- ✓ Problem Solving & Collaboration

PROGRAMME DETAILS

Level: Advance
Duration: 3 Months
Schedule: 24 Sessions · 60 min each
Location: Sport Society, Mirdiff
Kit: Arduino + Raspberry Pi
Includes: Real-time Face Dection Project

START NOW | **ENROLL NOW FOR ROBOTICS & AI**

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