

UNIMY ROBO INNOVATORS

AI ROBOTICS BOOTCAMP



UNIMY offers the **Robo-Innovators Bootcamp**, a 3-Day hands-on program where SPM leavers will learn to design, build, and program their own AI-powered robots. Using the Micro:bit platform, this bootcamp bridges the gap between software and the physical world.

WHO SHOULD JOIN?

SPM Leavers, Aspiring Engineers & Programmers, Tech Enthusiasts (16-21), Students with a strong interest in STEAM – **Participants keep their robotics kit.**

CERTIFICATION

Participants will receive a UNIMY Certificate of Completion

KEY TAKEAWAYS

- **Build & Program Robots:** Gain hands-on experience in electronics, coding, and robotics.
- **Hardware / Software Integration:** Understand how code controls physical hardware.
- **Project-Based Learning:** Develop a tangible project for your personal portfolio.
- **AI in the Real World:** See how AI and sensors work together to make decisions.
- **Career Inspiration:** Explore exciting career paths in engineering, mechatronics, and AI.

PROGRAM SCHEDULE

DAY 1 : Foundations of Robotics

- Intro to Robotics, AI, and Mechatronics.
- Understanding Your Kit: Intro to the Micro:bit platform.
- Basic Coding for Hardware: Making LEDs blink and motors run.
- Understanding Sensors: How robots "see" and "feel".
- Hands-on Lab: Assembling your robot chassis and core components.

DAY 2 : Intermediate Coding & Project Build

- Intermediate Coding: Loops, variables, and functions.
- Programming for Control: Making your robot move and turn.
- Integrating Sensors: Programming your robot to avoid obstacles.
- Hands-on Lab: Building and testing a line-following robot.

DAY 3 : Project Showcase & Next Steps

- Intro to AI for Robotics: Simple decision-making.
- Advanced Challenge: "Robo-Soccer" or "Maze Solver".
- Capstone: Teams compete and present their robot's capabilities.
- Reflection and Feedback.
- Closing Ceremony and Certificate Presentation..

Include Micro:Bit Smart Cutebot (RM500.00)

