

Industry Level Embedded Systems & IoT Engineering

Professional-grade IoT, cloud, and industrial automation training

Level: Advanced

Duration: 6 Months

Fee: LKR 45,000

Certificate: Included

About This Course

An industry-oriented program covering ESP32, IoT protocols, cloud integration, robotics, and industrial automation, culminating in a capstone project.

What You'll Learn

- Design production-grade ESP32-based IoT systems
- Implement MQTT and Firebase-powered cloud pipelines
- Build smart home and industrial automation solutions
- Deliver a complete, mentor-reviewed capstone project

Practical Projects

- Smart Home Automation Platform
- Cloud-Connected Weather Station
- Autonomous Robot with Sensor Fusion
- Industrial Automation Prototype

Weekly Syllabus Overview

W1. ESP32 Fundamentals

W2. IoT Foundations

W3. MQTT Protocol

W4. Firebase Integration

W5. Smart Home Systems

W6. Cloud Integration

W7. Robotics Engineering

W8. Industrial Automation I

W9. Industrial Automation II

W10. Security in IoT

W11. System Design

W12. Capstone Planning

W13. Capstone Development I

W14. Capstone Development II

W15. Capstone Refinement

W16. Capstone Development III

W17. Industry Mentorship Review

W18. Capstone Presentation

Requirements

- Completion of Arduino Pro Course or equivalent experience
- Laptop with USB port
- Basic programming knowledge