



# The IoT Masterclass

**A 6-Month Professional Certificate in IoT System  
Design & Development.**

Build the Connected World: From Sensor to Cloud





# UNLOCK THE POWER OF THE INTERNET OF THINGS.

IoT is transforming industries, homes, and cities, creating a future where devices communicate intelligently. But how do you go beyond simple smart gadgets to build robust, scalable, and secure connected systems?

This intensive 6-month (24-week) program provides a full-stack immersion into the world of IoT. You'll master everything from embedded hardware programming and sensor integration to cloud platforms, data analytics, and robust network communication.

**Become an IoT Architect and build the next generation of smart solutions.**



# FROM CONCEPT TO CONNECTED DEPLOYMENT: A COMPREHENSIVE CURRICULUM

Our hands-on, project-driven course takes you through every layer of an IoT system:

## **Part 1: Embedded Hardware & Sensors (Weeks 1-6)**

IoT Fundamentals  
Microcontrollers  
Sensor Integration.  
Actuators  
Custom PCB Design  
(Intro)

## **Part 2: Communication & Networking (Weeks 7-12)**

Wireless Protocols  
Networking Essentials  
IoT Protocols  
RESTful APIs  
Edge Computing

## **Part 3: Cloud Platforms & Data (Weeks 13-18)**

Cloud Architecture  
Data Ingestion &  
Storage  
Data Visualization  
Analytics & Machine  
Learning (Intro)  
Digital Twins

## **Part 4: Security, Deployment & Capstone (Weeks 19-24)**

IoT Security  
Firmware Over The Air  
(FOTA)  
Power Optimization  
Containerization (Intro)  
Capstone Project



# This certificate is ideal for:

- Software Developers eager to expand into hardware & embedded systems.
- Hardware Engineers looking to master connectivity & cloud integration.
- Data Scientists focusing on real-time data from connected devices.
- Solution Architects designing scalable IoT deployments.
- Entrepreneurs building innovative smart products.

## Key Skills You Will Master:

- Embedded C++ (ESP32/ESP8266)
- Sensor & Actuator Interfacing
- Wi-Fi, BLE, LoRa Communications
- MQTT & RESTful API Development
- Cloud IoT Platforms (AWS/Google)
- Data Storage & Visualization
- IoT Security Best Practices
- Low-Power Design
- System Integration & Deployment



# From Idea to Impact: Your IoT Journey Starts Here

*The demand for skilled IoT professionals is exploding. Gain the hands-on expertise to design, develop, and deploy innovative solutions that shape our connected future.*

## **Enroll Now – Connect Your Potential!**



TAKE YOUR DEVICE



SCAN THE QR



MAKE THE PAYMENT



GET THE SERVICE



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