THE LEARNING STAGE
WHERE YOUR SKILLS REALLY MATTER

PROGRAM CURRICULUM · 2 MONTHS

Embedded Systems & IoT

Get hands-on with the hardware-software boundary. Program microcontrollers, read real sensors, and connect a device to the cloud — walking away with a working IoT prototype and the confidence to build more.

DURATION
2 months · Training + Internship

FORMAT
Mentor-led + full LMS access

PROJECTS
5+ live, deployed projects

CERTIFICATE
Verifiable on completion

Program overview

Get hands-on with the hardware-software boundary. Program microcontrollers, read real sensors, and connect a device to the cloud — walking away with a working IoT prototype and the confidence to build more.

How the two months work

MONTH 1 · TRAINING

Learn by building

Hands-on, mentor-led sessions. You work through the curriculum and build the core project.

MONTH 2 · INTERNSHIP

Apply it on real work

You apply it on real work, reviewed by the same mentors, and finish with something you can show.

Who it's for & prerequisites

WHO SHOULD JOIN

- Students & early-career builders — any branch (ECE / EEE ideal)
- Microcontrollers, sensors and a working IoT prototype you build yourself.
- Anyone who wants job-ready, portfolio-backed skills

PREREQUISITES

- **Beginner-friendly** — starts from fundamentals
- No prior experience required; basic laptop comfort helps
- A laptop, internet, and time to practise between sessions

The skills you'll walk away with

Microcontrollers | Sensors & Signals | Connectivity | IoT Cloud

Exact libraries and tools are kept current and beginner-friendly; the concepts transfer across the field.

What you'll master

Microcontrollers	Program an MCU and control real hardware.
Sensors & Signals	Read the physical world reliably.
Connectivity	Wi-Fi, protocols and talking to a server.
IoT Cloud	Send data up and see it on a dashboard.

By the end, you will be able to

- **Microcontrollers** — Program an MCU and control real hardware.
- **Sensors & Signals** — Read the physical world reliably.
- **Connectivity** — Wi-Fi, protocols and talking to a server.
- **IoT Cloud** — Send data up and see it on a dashboard.
- Finish with **5+ portfolio projects** and a capstone you can show in interviews

Training curriculum — topics & what you'll do

Hands-on, mentor-led sessions. You work through the curriculum and build the core project. Lesson counts are shown per module; your mentor keeps the pace friendly for every level.

1 Embedded Foundations

6 lessons

- Microcontroller basics
- GPIO, timers and interrupts
- Reading digital & analog sensors
- First working circuit

2 Connectivity

6 lessons

- Wi-Fi & communication protocols
- Sending data to a server
- Handling unreliable connections
- Mini IoT build

3 IoT Dashboard & Capstone

5 lessons

- Cloud dashboards
- Alerts and automation
- Power and reliability
- Capstone prototype

Month 2 — the internship

Real work, same mentors, something to show

With the training behind you, month 2 puts your skills to work on real, scoped tasks. The same mentors who taught you now review your work — and you finish with a shippable project and a verifiable certificate tied to it.

YOU DO

Apply your skills on real, guided work.

MENTORS DO

Review your work regularly and unblock you.

YOU FINISH WITH

A project you can show and a certificate you can verify.

Projects you'll build

Hands-on builds across the program — each one portfolio-ready. Your capstone ties it all together.

Smart Environment Monitor

Wire up a small board to sense temperature and humidity, then send those readings to the cloud.

ESP32 · Sensors · Arduino IDE

Connected Alert System

Make a device that pings your phone when something happens in the real world.

Microcontroller · Wi-Fi · Cloud API

IoT Dashboard

Show your device's live readings on a clean web dashboard.

MQTT · Web · Broker

Gesture-Controlled Device

Control hardware with a wave of your hand using a motion sensor.

Microcontroller · Sensors · Arduino IDE

Home Automation Node

Switch and schedule an appliance right from your phone.

ESP32 · Wi-Fi · App

Your tools & tech

ESP32 · Sensors · Arduino IDE · Microcontroller · Wi-Fi · Cloud API · MQTT · Web · Broker · App

These are the core tools you'll use across the projects. Your mentor confirms the exact versions on day one.

What you'll need

BRING

- A laptop (4 GB RAM or more) and its charger
- A stable internet connection
- A few hours to practise between sessions

PROVIDED

- Full LMS access & starter files
- Mentor support throughout
- A verifiable certificate on completion

Getting set up

Everything you need is free or provided. Your mentor shares the exact tools to install and any starter files in your welcome email — so you're ready from day one, with nothing to buy.

Reserve your place

Confirm your seat today with the registration fee. It holds your place and counts towards your program fee.



Registration fee

reserves your seat

Pay the one-time **registration fee** to lock in your place. It counts towards your program fee — not an extra charge — and the balance is confirmed when you enrol. Payments are secure, and your seat is booked the moment it clears.

Choose your plan

Core

The full two months, training and internship.

- Month 1 — full training curriculum
- Month 2 — internship on real work
- Verifiable certificate

Pro POPULAR

The same two months, with more mentor time.

- Everything in Core
- Extended mentor sessions
- Project review before demo

Your certificate

A verifiable certificate of completion

Finish the program and you receive a certificate tied to the projects you built and their live links — independently checkable at **thelearningstage.in/verify**, so it holds up when a recruiter looks it up.

Enrol in five steps

1. Visit **thelearningstage.in** and open the **Embedded Systems & IoT** program.
2. Choose your plan — **Core** or **Pro**.
3. Confirm your seat with the **registration fee** — it counts towards your program fee.
4. Get your welcome email with **LMS access** and your start date.
5. Join Month 1 training, then move into your Month 2 internship.

Eligibility

OPEN TO

- Students & early-career builders — any branch (ECE / EEE ideal)
- No prior experience required

YOU'LL NEED

- A laptop and reliable internet
- A few hours to practise between sessions

Companies hiring for these skills

Bosch · Texas Instruments · TESSOLVE (A HERO ELECTRONIX VENTURE) · L&T Technology Services · wipro · HCLTech · Continental (The Future in Motion) · CYIENT

These employers actively hire for skills like the ones this program builds — a signal of demand, not partners of The Learning Stage and not a placement guarantee. The program gives you the shippable skills and portfolio that make you a stronger candidate.

Frequently asked questions

Is a hardware kit included?

Yes — the program is built around a hardware kit so you're working with real components, not just simulations.

Do I need electronics background?

Basic familiarity helps, but we start from fundamentals and build up carefully.

Will I receive a certificate?

Yes — a verifiable certificate tied to your prototype.

Which companies hire for this?

Embedded and IoT skills are actively recruited across semiconductor, automotive and product firms — the logos shown are examples.

Ready to start? 🚀

Two months from now, you could have real, shippable skills, a portfolio of projects, and a certificate to prove it. Come learn the way real teams work.

Enrol at thelearningstage.in · support@thelearningstage.in · +91 96527 16677

Curriculum is indicative and may be refined to suit the cohort. Fees and plans current at time of print. © 2026 The Learning Stage.