THE LEARNING STAGE
WHERE YOUR SKILLS REALLY MATTER

PROGRAM CURRICULUM · 2 MONTHS

Machine Learning Engineering

Go beyond notebooks. Build ML systems the way engineers do — clean data pipelines, models trained in PyTorch, honest evaluation, and a trained model served behind an API. You'll finish with a deployed model and the judgement to know when it's actually working.

DURATION
2 months · Training + Internship

FORMAT
Mentor-led + full LMS access

PROJECTS
6+ live, deployed projects

CERTIFICATE
Verifiable on completion

Program overview

Go beyond notebooks. Build ML systems the way engineers do — clean data pipelines, models trained in PyTorch, honest evaluation, and a trained model served behind an API. You'll finish with a deployed model and the judgement to know when it's actually working.

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 (CSE / IT ideal)
- Train, evaluate and deploy real ML models — from classic algorithms to deep learning.
- 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

ML Foundations | Deep Learning | Feature & Data Pipelines | Serving & MLOps

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

What you'll master

ML Foundations	The workflow, metrics and honest evaluation.
Deep Learning	Neural nets in PyTorch, trained by you.
Feature & Data Pipelines	Clean, reproducible data for real models.
Serving & MLOps	Ship a model behind an API and monitor it.

By the end, you will be able to

- **ML Foundations** — The workflow, metrics and honest evaluation.
- **Deep Learning** — Neural nets in PyTorch, trained by you.
- **Feature & Data Pipelines** — Clean, reproducible data for real models.
- **Serving & MLOps** — Ship a model behind an API and monitor it.
- Finish with **6+ 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 The ML Workflow

7 lessons

- Framing a problem as supervised / unsupervised
- **Train/validation/test and leakage —** done right
- **Classic models.** linear, trees, gradient boosting
- Metrics that match the business goal

2 Deep Learning with PyTorch

9 lessons

- Tensors, autograd and training loops from scratch
- CNNs for images, embeddings for text
- Transfer learning with pre-trained models
- Regularisation and fighting overfitting

3 Evaluation & Tuning

6 lessons

- Honest metrics for real problems
- Hyperparameter tuning
- Cross-validation & avoiding leakage
- Diagnosing under/overfitting

4 MLOps Foundations

6 lessons

- Experiment tracking (MLflow)
- Versioning data & models
- Packaging a model for serving
- Reproducible training runs

5 Ship & Operate

8 lessons

- Packaging a model and serving it via an API
- Experiment tracking and versioning (MLflow)
- Monitoring drift and retraining triggers
- **Capstone.** a deployed, monitored model

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.

Image Classifier

Teach a model to recognise what's in a photo by fine-tuning a pre-trained network.

PyTorch · CNN · Colab · MLflow

Fraud Detector

Spot the rare suspicious transaction hiding in a sea of normal ones.

scikit-learn · XGBoost · Jupyter

Model-as-an-API

Take a trained model and put it behind a simple web endpoint others can call.

FastAPI · Docker · GitHub

Recommendation System

Suggest what a user might want next from their past behaviour.

PyTorch · Embeddings · Colab

Sentiment Analyzer

Build a model that reads text and judges whether it's positive or negative.

PyTorch · Transformers · Colab

Model Monitoring

Watch a running model and catch it when its accuracy quietly slips.

Python · MLflow · Dashboard

Your tools & tech

PyTorch · CNN · Colab · MLflow · scikit-learn · XGBoost · Jupyter · FastAPI · Docker · GitHub · Embeddings · Transformers · Python · Dashboard

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 **Machine Learning Engineering** 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 (CSE / IT 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

Google · Microsoft · fractal · NVIDIA · Flipkart · SWIGGY · PhonePe · sprinklr

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

Do I need strong maths?

You need comfort with basics; we build intuition for the rest as you go. The focus is engineering working models, not proofs.

Which framework will I learn?

PyTorch for deep learning, plus scikit-learn and XGBoost for classic models — the current industry standard.

Will I deploy a model?

Yes — your capstone is a trained model served behind an API and monitored, not just a notebook.

Which companies hire for this?

ML engineering is among the most in-demand roles in tech. The logos shown are examples of employers actively recruiting for these skills.

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.