



EDUBLENDS

Fuel Your Future.

Fuel your **Future**

Dive into Edublends Academy's world of opportunities with industry internships, specialized training, and globally recognized certifications



AI Developer & Data Scientist

Level 3 to Level 5 · 270 Hours Total

At EduBlends, we don't just train—we create future industry leaders!

Program Summary



Program Duration

270 hours across 3 levels
(approx. 20 weeks)



Weekly effort

12-15 hours a week



Learning Mode: Online and Offline Classes, including Pre-Recorded Videos, Live Sessions, and Interactive Q&A Sessions.



Cloud Lab Integration with every module and full lab access for learners



Industry-Sponsored Internship Facilitation



Certificate Upon successful completion of each level, participants will be awarded a verified digital certificate by EduBlends and Industry

A Progressive Learning Pathway from Foundation to Deployment

At EduBlends Academy, we provide a structured learning pathway that allows students to build their expertise in artificial intelligence, machine learning and data science across their graduation journey.

1. **Start with Level 3 — AI Assistant:** Students in the initial phase of their graduation begin here, building foundational AI concepts and tools — Python programming, data handling with NumPy and Pandas, SQL, and the core machine learning workflow.
2. **Progress to Level 4 — AI Associate:** As they advance, learners move into intermediate modeling and data analysis — statistics, exploratory analysis and visualisation, supervised and unsupervised algorithms with Scikit-Learn, and model evaluation and tuning.
3. **Advance to Level 5 — AI/ML Innovative Analyst:** In the final phase, students take on advanced ML, strategy and deployment — deep learning with TensorFlow, Keras and PyTorch, business intelligence with Tableau, model serving, and a panel-assessed capstone project.

By following this structured pathway, students complete the full track within their graduation period, emerging as industry-ready professionals with a deployed, portfolio-grade AI project to their name.

Track 1 – AI Developer & Data Scientist

Level 3 → Level 5 · 270 hours total · 28 practical lab sessions and one panel-assessed capstone

Program Levels

Level	Title	Hours	Focus
Level 3	AI Assistant	90 hrs	Foundational AI concepts and tools
Level 4	AI Associate	90 hrs	Intermediate modeling and data analysis
Level 5	AI/ML Innovative Analyst	90 hrs	Advanced ML, strategy, and deployment

Job Roles

Progression Path	Roles
Data & Analysis	Data Annotator → Data Analyst → Senior Data Scientist
Engineering & Development	AI Assistant → AI/ML Engineer → AI Developer
Leadership & Advisory	ML Lead · AI Strategy Consultant

Top Recruiters

TCS · Infosys · Wipro · Cognizant · Genpact · Global Audit & SaaS Firms

Certifications

Microsoft AI Engineer · AWS · Google ML Engineer · Databricks · NIELIT

Vendor certification examinations are sat separately and are not included in programme fees. Recruiter names indicate the sectors and employers our graduates target; they do not constitute a placement guarantee or a formal hiring partnership.

Entry Requirements

Level 3 is open entry; no prior programming experience is assumed. Level 4 requires completion of Level 3 or demonstrable competence in Python, Pandas and SQL. Level 5 requires completion of Level 4 or equivalent applied machine learning experience.

Program Frameworks – Level 3: AI Assistant

90 hours · Foundational AI concepts and tools · 10 practical lab sessions

M1 | Programming with Python 20 hrs

Module / Topic

- Variables, control flow, functions, OOP, file handling, virtual environments

Practical Lab Sessions

- Lab 1:** Write Python scripts for data input/output and OOP class design.
Lab 2: Set up a virtual environment and package a reusable Python module

M2 | Data Handling with NumPy & Pandas 20 hrs

Module / Topic

- Arrays, vectorised operations, DataFrames, indexing, merging, data cleaning, exploratory analysis

Practical Lab Sessions

- Lab 3:** Load a real CSV dataset; treat null values, cast types and compute descriptive statistics.
Lab 4: Merge three related datasets and profile the combined result

M3 | SQL for Data Access 15 hrs

Module / Topic

- Relational data modelling, SELECT, JOIN, GROUP BY, subqueries, window functions

Practical Lab Sessions

- Lab 5:** Query a sample sales database using joins, aggregates and filters.
Lab 6: Write window-function queries for running totals and rankings; export results into Pandas

M4 | Foundations of AI & Machine Learning 20 hrs

Module / Topic

- The AI landscape, supervised and unsupervised concepts, the ML workflow, bias-variance tradeoff, evaluation metrics

Practical Lab Sessions

- Lab 7:** Build a first end-to-end machine learning workflow on a prepared dataset.
Lab 8: Compute and interpret accuracy, precision, recall and F1 for a classifier

M5 | Developer Tooling — Jupyter, VS Code & Git 15 hrs

Module / Topic

- Notebook workflows, VS Code setup and debugging, version control, branching, pull requests

Practical Lab Sessions

- Lab 9:** Configure VS Code and Jupyter; debug a failing data script.
Lab 10: Create a GitHub repository, commit work, raise and review a pull request

Program Frameworks – Level 4: AI Associate

90 hours · Intermediate modeling and data analysis · 10 practical lab sessions

M1 | Statistics & Probability for Data Analysis 20 hrs

Module / Topic

- Distributions, sampling, confidence intervals, hypothesis testing, correlation, A/B testing

Practical Lab Sessions

Lab 1: Run t-tests and chi-square tests on a business dataset; interpret p-values.

Lab 2: Design and analyse a simulated A/B test and report the decision

M2 | Exploratory Data Analysis & Visualization 18 hrs

Module / Topic

- Matplotlib, Seaborn, chart selection, distributions, correlation heatmaps, storytelling with data

Practical Lab Sessions

Lab 3: Build a five-chart exploratory story (bar, line, scatter, heatmap, box plot).

Lab 4: Produce an annotated EDA report for a stakeholder audience

M3 | Supervised Learning with Scikit-Learn 22 hrs

Module / Topic

- Linear and logistic regression, decision trees, random forests, SVM, ensemble methods

Practical Lab Sessions

Lab 5: Regression challenge — predict house prices and interpret coefficients.

Lab 6: Classification benchmark — compare LR, DT, RF and SVM on one dataset

M4 | Unsupervised Learning & Dimensionality Reduction 15 hrs

Module / Topic

- K-Means, DBSCAN, hierarchical clustering, PCA, anomaly detection

Practical Lab Sessions

Lab 7: Segment a customer dataset with K-Means; profile and name the clusters.

Lab 8: Reduce a 20-feature dataset with PCA and visualise it in two dimensions

M5 | Model Evaluation, Tuning & Pipelines 15 hrs

Module / Topic

- Train/test strategy, cross-validation, hyperparameter search, preprocessing pipelines, controlling overfitting

Practical Lab Sessions

Lab 9: Build a Scikit-Learn Pipeline combining preprocessing and model in one object.

Lab 10: Tune hyperparameters with GridSearchCV and cross-validation; report the gain

Program Frameworks – Level 5: AI/ML Innovative Analyst

90 hours · Advanced ML, strategy, and deployment · 8 lab sessions and a panel-assessed capstone

M1 | Deep Learning Foundations with TensorFlow & Keras 22 hrs

Module / Topic

- Perceptrons, activation functions, backpropagation, loss functions and optimisers, training loops, regularisation

Practical Lab Sessions

Lab 1: Build and train a feed-forward neural network in Keras; tune epochs and learning rate.

Lab 2: Apply dropout and early stopping; compare training and validation curves

M2 | Neural Network Architectures with PyTorch 20 hrs

Module / Topic

- PyTorch tensors and autograd, convolutional networks, sequence models, transfer learning

Practical Lab Sessions

Lab 3: Build a CNN image classifier in PyTorch and evaluate on a held-out set.

Lab 4: Fine-tune a pre-trained model using transfer learning

M3 | Business Intelligence & Tableau 14 hrs

Module / Topic

- Tableau dashboards, calculated fields, filters and parameters, reporting model output to business users

Practical Lab Sessions

Lab 5: Build a Tableau dashboard with three views and an interactive filter.

Lab 6: Publish model predictions to Tableau and present findings to a peer panel

M4 | AI Strategy & Model Deployment 16 hrs

Module / Topic

- AI ROI and use-case selection, model packaging, serving a model as an API, monitoring, responsible AI

Practical Lab Sessions

Lab 7: Package a trained model and expose it as a REST endpoint.

Lab 8: AI ROI case study — build the cost-benefit case for a proposed AI initiative

M5 | Capstone: End-to-End AI Project 18 hrs

Module / Topic

- Build, evaluate, deploy and present a complete AI solution

Capstone Lab: Full project

Select a dataset, engineer features, train and tune a deep learning model, serve it through an API, build a Tableau dashboard, write technical documentation and present to panel

Track 1 Toolkit – Core Tools & Technologies

Students graduate fluent in the full modern AI/ML stack — from data wrangling to model deployment and visualization.

Category	Tools / Platforms
Data Science	Python · NumPy · Pandas · SQL · Jupyter · VS Code
ML & Deep Learning	Scikit-Learn · TensorFlow · Keras · PyTorch
Visualization	Matplotlib · Seaborn · Tableau

Where Each Tool Is Taught

Level	Tools Introduced	Modules
Level 3 — AI Assistant	Python, NumPy, Pandas, SQL, Jupyter, VS Code, Git	M1 Programming with Python; M2 Data Handling; M3 SQL for Data Access; M5 Developer Tooling
Level 4 — AI Associate	Scikit-Learn, Matplotlib, Seaborn	M2 EDA & Visualization; M3 Supervised Learning; M4 Unsupervised Learning; M5 Evaluation & Pipelines
Level 5 — AI/ML Innovative Analyst	TensorFlow, Keras, PyTorch, Tableau	M1 Deep Learning Foundations; M2 Neural Network Architectures; M3 Business Intelligence & Tableau; M4 AI Strategy & Deployment

Lab Environments

All practical sessions run in EduBlends cloud lab environments with GPU-backed instances provisioned for the Level 5 deep learning modules. Learners also work locally in VS Code and Jupyter so that the workflow matches industry practice.

Program Experience



Data Science Foundations

Python · NumPy · Pandas · SQL



Machine Learning

Scikit-Learn · Regression · Clustering ·
PCA



Statistics & Evaluation

Hypothesis Testing · Cross-Validation



Deep Learning

TensorFlow · Keras · PyTorch · CNNs



Deployment & Strategy

Model Serving · REST APIs · AI ROI



Visualization & BI

Matplotlib · Seaborn · Tableau

Job Assistant
Upskilling and the Re-skilling
Entrepreneurship transition

The AI Developer & Data Scientist track spans three levels and 270 hours, delivered through 28 structured virtual lab sessions and a panel-assessed capstone project. Learners progress from Python, SQL and data handling at Level 3, through statistics, visualisation and applied machine learning at Level 4, to deep learning with TensorFlow, Keras and PyTorch, business intelligence with Tableau and model deployment at Level 5. Every topic is reinforced with real datasets, guided exercises and defined practical activities that mirror live industry workflows, so that graduates leave with a deployed, documented AI project and a portfolio-grade, role-aligned skill set.

Expected outcomes



Advanced Industrial Internship Certifications

Differentiate yourself from your peers by earning the industrially recognized Advanced industrial internship Certification



Students Blending Team

EduBlends blends the students for the industry-ready



For the Industrial, By the Industry

Learn and apply concepts on industry projects from industry, along with personalized industry mentorship



Industry Integration Layer

This program is designed with integrated industry collaboration, where enterprise partners contribute to curriculum alignment, real-world problem statements, and internship pathways.



Cloud Lab Facilities

Cloud lab hours for industrial problems, with GPU-backed environments for the Level 5 deep learning modules



360 Degree Career Support — Entrepreneurial Program

Idea-to-Enterprise Catalyst by EduBlends Academy is a structured entrepreneurial program that guides innovators from ideation to execution, helping them build and scale tech-driven businesses such as AI products, data platforms and SaaS solutions.



Personalized Mentorship

Get unparalleled personalized mentorship and doubt resolution from industrialists and academicians.

Sample Weekly Program Planner



4–5 hours

Live interaction with the programme learning facilitator



1–2 hours

Recorded video lecture with faculty



1 hour

Group discussion with industrial mentor and academic instructor



4–5 hours

Cloud lab practice exercises



2 hours

Rigorous, graded assignments to apply and reinforce the material

12–15 hours

Total weekly effort

Who Is This Program For?

Career Launchers

Level 3 is designed for students and early-career professionals with no prior programming background who want a structured entry into artificial intelligence and data science, and a foundation they can build a career on.

Career Builders

Level 4 suits working analysts, reporting professionals and software engineers who can already handle data in Python and SQL, and want to move into applied machine learning and stakeholder-facing analysis.

Career Switchers

Level 4 also serves mid-career professionals currently working outside data roles who want to add credible, hands-on machine learning capability to their profile before making a career change.

Specialists & Founders

Level 5 is for learners who have completed Levels 3 and 4, or who bring equivalent applied ML experience, and want to move into deep learning, deployment and AI strategy — or to launch an AI-driven venture through the entrepreneurial programme.

Progressive Learning Pathway: Our curriculum is structured to provide a seamless learning experience, starting from foundational concepts at Level 3 through to advanced deep learning, deployment and strategy at Level 5.

- **Level 3 — AI Assistant** for 2nd-year graduate students, providing the essential Python, SQL, data and machine learning foundations to begin the journey
- **Level 4 — AI Associate** for 3rd-year students who have completed Level 3, and for individuals looking to upskill and advance their careers into applied modelling roles
- **Level 5 — AI/ML Innovative Analyst** for students who have finished Levels 3 and 4, and experienced individuals transitioning into specialist roles or entrepreneurship

Programs Key Features

Why Choose Our Courses?

Cutting-Edge Cloud Lab: Gain hands-on experience with our cloud lab, offering GPU-backed computational power for real-world, industry-level projects including neural network training at Level 5.

Industrial Internships & Expert Mentorship: Work on live industry projects, receive guidance from practising professionals, and get the support you need for your career or entrepreneurial journey.

Personalized Instructor Support: Learn from experienced instructors committed to your growth, whether you're a beginner at Level 3 or deploying trained models at Level 5.

	Cloud Lab Access	Industry-Integrated Internship	Live Mentorship by Industry Experts	Entrepreneurship Support
Coursera				
Udemy				
UpGrad Online				
Scaler Academy				
Simplilearn				
Unacademy				
EduBlends Academy	✓	✓	✓	✓

Comparison rows left intentionally blank pending verification. Competitor feature claims must be sourced, dated and evidenced before publication.