



Machine Learning Curriculum

From core concepts to generative AI and LLMs — a comprehensive, project-driven program built for the real world.



35+

Industry Certifications

6+

Live projects

13.6k+

Students Trained

WHO WE ARE

Our Mission & Vision

Skillumni is a leading edtech platform focused on transforming careers through high-quality upskilling and training across diverse industries. We connect learners with cutting-edge courses, expert mentors, and practical projects to bridge the gap between education and real-world careers.



Our Vision

To empower every learner through accessible, inclusive, and impactful education — creating equal opportunities for all, regardless of background or geography.



Our Mission

To deliver quality education through career-driven courses that empower success — equipping learners with the skills, tools, and confidence to thrive in today's job market.

WHY CHOOSE US

Why Choose Skillumni for Smarter Learning?

Participate in Skillumni's comprehensive training program designed to elevate your skill set and equip you with practical tools to effectively solve real-world problems.



Industry-Driven Learning Paths

Curriculum built around what employers actually need — not textbooks.



Lifetime LMS Portal Access

Revisit lessons, access new content, and keep growing at your own pace.



Hands-On Domain Based Projects

Build real projects that showcase your skills to future employers.



Earn 2+ Industry Certifications

Globally recognized certificates to validate your expertise.

Your Learning Journey with Skillumni

1

Enrol

Pick your domain — no prior experience needed.

2

Learn

Access recorded sessions & lifetime LMS portal.

3

Build Projects

Complete 1 minor & 1 major industry project.

4

Get Certified

Earn course & internship completion certificates.

5

Launch Career

Resume help, mock interviews & placement support.

Training Spotlight

- Content developed by experienced industry mentors for real-world application.
- 35+ Hours of Learning, Comprehensive video lessons, exercises, and guided modules.
- Lifetime LMS Access to Revisit all learning materials, updates, and resources—forever.
- Access the program anytime, anywhere through our online platform.
- Build practical skills with real-world project work.
- Certification Showcase your achievement and boost your career profile.
- Regular Assessments to Evaluate your progress and strengthen your understanding.

Curriculum:

Module 1: Intro to ML

- What is ML — machines learning from data
- Supervised, Unsupervised & Reinforcement
- Real-world applications & industry impact
- Key terminology and concepts

Module 2: ML Workflow & Tools

- End-to-end ML pipeline overview
- Python, Jupyter, Google Colab setup
- Scikit-learn, Pandas, NumPy
- Build, train & evaluate first models

Curriculum:

Module 3: Data Preprocessing

- Handling missing & incomplete data
- Categorical encoding techniques
- Data splitting — train/test/validation
- Building clean, reliable datasets

Module 4: Feature Engineering CNNs & Vision

- Feature scaling — normalize & standardize
- Outlier detection & treatment
- Feature selection methods
- PCA & t-SNE dimensionality reduction

Curriculum:

Module 5: Regression

- Simple & Multiple Linear Regression
- Polynomial Regression
- Ridge, Lasso regularization
- Metrics — MSE, RMSE, R^2

Module 6: Classification

- Logistic Regression & KNN
- Decision Trees & Naive Bayes
- Random Forest & Gradient Boosting
- SVM — complex boundary classification

Curriculum:

Module 7: Clustering

- K-Means clustering algorithm
- Hierarchical clustering
- DBSCAN for density-based grouping
- Finding hidden patterns in unlabeled data

Module 8: Anomaly Detection

- Isolation Forest & One-Class SVM
- Autoencoders for neural anomaly detection
- Fraud & defect detection use cases
- Evaluating anomaly detection models

Curriculum:

Module 9: Hyperparameter Tuning

- GridSearchCV & RandomizedSearchCV
- Bayesian Optimization
- Cross-validation strategies
- Model selection & comparison

Module 10: Time Series Forecasting

- Time series components & patterns
- ARIMA modeling for forecasting
- SARIMA for seasonal data
- Evaluation & prediction intervals

Curriculum:

Module 11: Deep Learning Basics

- ANN architecture & neurons
- Layers, weights & backpropagation
- Activation functions & optimizers
- Intro to TensorFlow/PyTorch

Module 12 : Model Deployment

- Deploy with Flask & FastAPI
- Django for ML-powered web apps
- REST API endpoints for ML models
- Docker basics for containerization

Curriculum:

Module 13: MLOps Pipelines

- MLflow for experiment tracking
- Model versioning & registry
- CI/CD for ML — automated pipelines
- Monitoring models in production

Module 14: AutoML & Capstone

- AutoML tools — H2O, AutoSklearn
- End-to-end capstone ML project
- Portfolio presentation & review
- Career paths in ML engineering

Skills You Get:

- ML Fundamentals & Types
- Data Preprocessing & Feature Engineering
- Algorithms & Ensemble Methods
- Clustering & Anomaly Detection
- Deep Learning & Time Series
- MLOps & Deployment

Training Program Outline



Before Training

- No prior experience required
- Beginner friendly — any domain
- Start fresh, choose your specialization



Training

- Recorded sessions + study materials
- Lifetime LMS access
- Flexible, self-paced learning



Industrial Projects

- Complete 1 Minor Project
- Complete 1 Major Project
- Real-world business problems



Certification

- Course Completion Certificate
- Internship Completion Certificate
- Letter of Recommendation (optional)



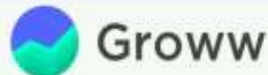
Placement Support

- Resume Building Assistance
- Mock Interview Preparation
- Dedicated Placement Assistance

OUR EXPERTS

Our Mentors Are From:

Learn directly from working professionals at India's top companies — real experience, real insights.



Earn 2+ Industry-Led Certifications

Upon successful completion, receive industry-recognized certificates that validate your skills and boost your career

prospects — whether you're aiming for a new job or a promotion.



Course Completion Certificate

Awarded upon finishing all course modules and assessments successfully.



Internship Completion Certificate

Issued after completing both the minor and major industry projects.



Letter of Recommendation

Optional — for outstanding performers, signed by Skillumni co-founder.



Outstanding Performance Certificate

Optional — recognises exceptional dedication and achievement.

Accreditations & Recognitions

Skillumni is proudly recognized under key Government of India initiatives — reflecting our compliance, credibility, and commitment to student success.



Startup India (DPIIT)

Dept. for Promotion of Industry &
Internal Trade, Govt. of India



MSME Certified

Ministry of Micro, Small & Medium
Enterprises, Govt. of India



Ministry of Corporate Affairs

Registered Private Limited Company,
Govt. of India

Hear It From Our Students



"Skillumni's AI internship was engaging and informative. Quality content and a smooth learning experience."

Roshini S

AI with Python



"Mentors are supportive and track progress. The doubt-clearing sessions are very helpful and effective."

Agnus Anna

Data Science



"Solid foundation in AI concepts with a strong focus on practical skills. Instructors made complex topics easy."

Ashwini Mahantesh

Artificial Intelligence



"Real-world projects boosted my confidence. Highly recommend for anyone looking to grow or switch careers."

Nikhil Arora

Career Switch



"Excellent platform with well-structured courses and knowledgeable instructors. Highly recommend to upskill."

Monika Moni

Web Development



"Great platform to focus on learning. Sessions were clearly thought out and covered the core concepts."

Sachetan Hallur

Finance

THANK YOU

We'd love to be part of your learning journey.

Need more insights? Our counsellors are here to guide you through every step.



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