



IBM - Generative Artificial Intelligence (AI) and Machine Learning (ML)





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About the Program

Welcome to our cutting-edge Generative Artificial Intelligence (AI) and Machine Learning (ML) program designed for aspiring data scientists, engineers, and tech enthusiasts, this program offers an in-depth exploration of the technologies driving the future of innovation. Whether you're a beginner eager to break into the field or a professional looking to expand your expertise, our comprehensive curriculum will equip you with the skills needed to excel in this dynamic and fast-growing industry.



This **IBM** - **Generative Artificial Intelligence (AI) and Machine Learning (ML)** covers self-paced e-learning materials including course content, Lab/Assignment, hands on experience and Certification of IBM after completing the exam by IBM.

Program Highlights

Comprehensive Curriculum: Our curriculum is meticulously crafted to cover the fundamental and advanced concepts of Generative AI and Machine Learning. You'll start with the basics of AI and ML, progressing to more complex topics such as neural networks, deep learning, and generative models. The program also includes specialized modules on natural language processing (NLP), computer vision, and reinforcement learning.

Hands-On Learning: We believe in learning by doing. Our program includes numerous practical exercises, coding assignments, and real-world projects. You'll work with popular AI and ML frameworks like TensorFlow, PyTorch, and Keras, gaining hands-on experience in building, training, and deploying machine learning models.

Expert Instructors: Learn from industry leaders and academic experts who bring their real-world experience into the classroom. Our instructors are dedicated to providing personalized guidance and mentorship, helping you navigate the complexities of AI and ML.

Flexible Learning: Our program offers flexibility to accommodate your schedule. Choose from live online classes, recorded sessions, and self-paced modules to learn at your convenience. We provide extensive resources, including video lectures, reading materials, and interactive quizzes, to reinforce your learning.

Community and Support: Join a vibrant community of learners, professionals, and AI enthusiasts. Participate in discussion forums, group projects, and networking events.



What You Will Learn

Python Training Module: Get introduced to programming with Python, one of the most popular and versatile languages. Develop applications ranging from web development to data analysis, and write clean, efficient code.

Machine Learning with Python: Explore machine learning using Python. Implement algorithms, preprocess data, and build predictive models. Cover supervised and unsupervised learning, model evaluation, and real-world applications.

Machine Learning with R: Learn to implement machine learning algorithms using R. Preprocess data, build and evaluate models, and apply techniques to solve real-world problems. Cover key topics like supervised and unsupervised learning.

Game-playing AI with Swift for TensorFlow (S4TF): Develop AI models to play and master games using Swift and TensorFlow. Learn reinforcement learning and neural networks, covering basics of S4TF and creating intelligent gaming agents.

Deep Learning Fundamentals: Understand the basics of deep learning, including neural networks, CNNs, and RNNs. Explore applications in image recognition and NLP, and gain hands-on experience with popular frameworks.

Build Your Own Chatbot: Learn to design and develop chatbots from scratch. Explore natural language processing, dialogue management, and integration with messaging platforms. Gain hands-on experience in building intelligent, interactive chatbots.

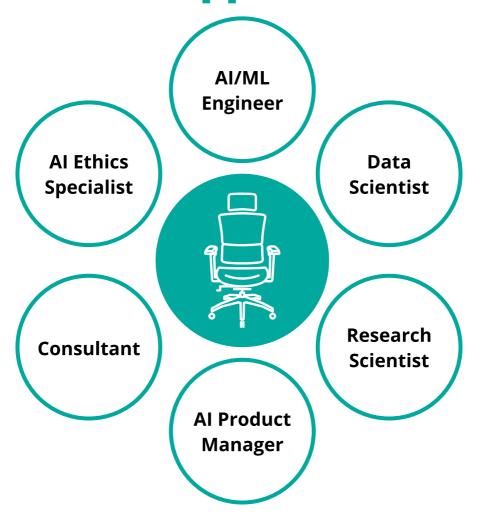
Deep Learning with TensorFlow : Learn to design and develop chatbots from scratch. Explore natural language processing, dialogue management, and integration with messaging platforms. Gain hands-on experience in building intelligent, interactive chatbots.

How to Build Watson A1 and Swift APIS and Make Money: Explore the fundamentals of creating Watson A1 and Swift APIs. Develop powerful AI interfaces with Watson A1 and utilize Swift's capabilities to build scalable APIs that can generate revenue. Perfect for developers and entrepreneurs aiming to leverage AI for profitable API development.





Career Opportunities



Course Benefits

• 1700+ • Enrolled • 4.8 / 5 Rating

Self Paced E-Learning Course Material

Lab/ Assignments Hands on Practice Test

60+ Hours

6 Months Dought Clearnace Session

IBM Certifications **100%**Job Assistance



About TheLearnAge

TheLearnAge is your ultimate online educational platform offering over 350+ online courses designed to upgrade your skills and keep you ahead in today's smart world. With industry-leading partners such as **IBM**, **Microsoft**, **Cisco**, **Tally**, **Adobe**, **Autodesk**, **Apple**, **PMI**, **Meta**, **and many more**, you can learn directly from the experts and get certified in the latest technologies and tools that drive innovation.

TheLearnAge provides certification programs to validate skills and boost career opportunities within a flexible and innovative learning setting. Students have the freedom to engage with state-of-the-art curriculum at their preferred speed, enhancing their market value and competitiveness. With a user-friendly interface and a dedication to excellence, the platform guarantees a top-notch educational journey for skill improvement and career progression.

Certified By

















APP DEVELOPMENT
WITH SWIFT
Associate



Master the future with TheLearnAge. Learn from the best, including IBM, Adobe, Autodesk, PMI, Cisco, Microsoft, Tally, Apple, Meta. Get certified in the latest technologies. Advance your career with flexible, expert-driven courses.





Why TheLearnAge



Extensive Course Selection

Offers over 350+ online courses covering a wide range of topics to upgrade skills and knowledge.



Industry-Leading Partners

Collaborates with top industry leaders like IBM, Microsoft, Cisco, Tally, Adobe, Autodesk, Apple, and PMI, Meta, providing expert-led courses and certifications.



Official Certification Program

Provides certification programs that validate learner's skills and credentials, enhancing their career prospects and competitiveness in the job market.



Placement Opportunities

Enables learners to receive placement offers from big companies, boosting their employment potential



Intuitive Interface

Features a user-friendly learning management system that makes course navigation and usage seamless.



Marketability and Career Enhancement

Equips learners with the skills and certifications needed to succeed and stay competitive in today's rapidly evolving job market.



Eligibility Criteria

For admission into this Full Stack Developer, candidates:

- ✓ 12th class or an 1 equivalent level.
- ✓ A degree/diploma in engineering
- A bachelor's or master's in computer science Working Professional
- ✓ Inclination towards Programming
 ✓ Any technical Degree



How It Works!!!



1. Sign up

Sign Up with Mobile Number / Email Id.

3. Add Courses to Cart

After you've found the courses/ programs that align with your learning goals, you can add them to your cart.

5. Confirmation Email

After successful payment, you will receive a confirmation email acknowledging your course/program enrollment within 24-48 Hours.

7. Certificate Eligibility

Complete your purchase course/ program within 6 months to be eligible for certifications.

2. Browse and Select

Once you have signed up and logged in, you can start exploring our wide range of specialized and job-ready elearning programs & certifications.

4. Make Payment

When you are ready to enroll in your selected courses/programs, you can proceed to make the payment securely on our platform.

6. Access Course Materials

Once you receive the email with course links, you can access the course materials and resources.

8. Completion

You will have to give an online exam conducted by IBM and on passing that exam, you will receive your IBM certificates.



Demand for Generative Al and ML

Generative Artificial Intelligence (AI) and Machine Learning (ML) are revolutionizing industries by enabling the creation of new content, enhancing decision-making processes, and automating complex tasks. The demand for professionals skilled in these technologies is rapidly increasing as organizations seek to harness their transformative potential.









Industry Applications

1. Healthcare

Generative AI is used to create synthetic medical data, design new drugs, and personalize treatment plans. ML algorithms improve diagnostic accuracy and predict patient outcomes.

2. Finance

Al models are essential for fraud detection, risk assessment, and algorithmic trading. ML helps in creating predictive models for market trends and customer behavior.

3. Entertainment

Generative AI produces music, art, and even scripts, enhancing creativity in media production. ML personalizes content recommendations and optimizes streaming services.

4. Manufacturing

Al-driven predictive maintenance minimizes downtime, while generative design optimizes product development. ML improves supply chain management and quality control.

5. Retail

Al enhances customer experiences through personalized recommendations, chatbots, and dynamic pricing. ML helps in demand forecasting and inventory management.



CAREER PATH WITH SALARY PACKAGES

Entry-Level / Junior Generative AI and ML Developer INR 6 LPA — INR 8 LPA per year

Mid-Level Generative AI and ML Developer INR 12 LPA — INR 15 LPA per year

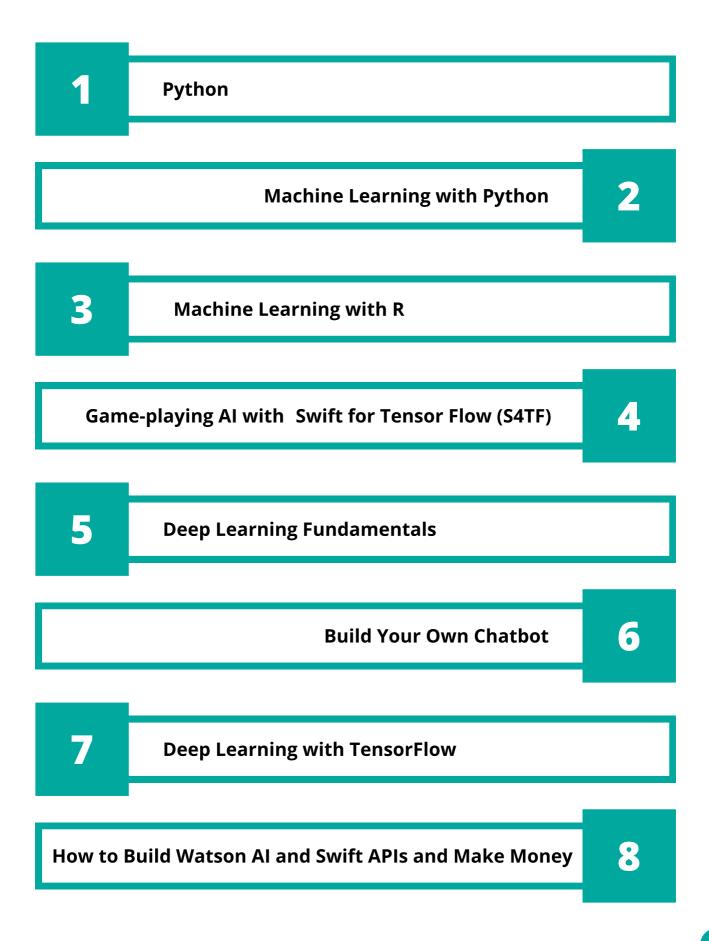
Senior Generative AI and ML Developer INR 18 LPA — INR 22 LPA per year

Principal Generative AI and ML Developer INR 25 LPA — INR 30 LPA per year

Director
INR 35 LPA — INR 40 LPA per year



Learning Path Structure





Course 1: Python

Module 1: Introduction to PYTHON

Module 2: Deep dive into PYTHON

Module 3: Python Libraries

Module 4: Error Handling

Module 5: Other Topics

Module 6: Regression (Use case study)

Module 7: Other Regression related topics

Module 8: Advance

Course 2 : Machine Learning with Python



Module 1: Supervised vs Unsupervised Learning

Module 2: Supervised Learning I

Module 3: Supervised Learning II

Module 4: Unsupervised Learning

Module 5: Dimensionality Reduction & Collaborative Filtering



Course 3 : Machine Learning With R



Module 1: Machine Learning vs Statistical Modeling & Supervised

VS Unsupervised Learning

Module 2: Supervised Learning I

Module 3: Supervised Learning II

Module 4: Unsupervised Learning

Module 5: Dimensionality Reduction & Collaborative Filtering

Course 4: Game-playing Al with Swift for Tensor Flow (S4TF)



Module 1: Set up your environment

Module 2: Understanding Swift's basics

Module 3: Tic Tac Toe (Minimax)

Module 4: Cartpole (Reinforcement Learning)

Module 5: 2048 (Monte Carlo Tree Search)



Course 5 : Deep Learning Fundamentals

Module 1: Deep Learning Concepts

Module 2: Deep Learning Concepts Continued

Module 3: Platforms for Deep Learning

Module 4: Deep Learning Software Libraries

Course 6 : Build Your Own Chatbot



Module 1: Introduction to Chatbots

Module 2: Working with Intents

Module 3: Working with Entities

Module 4: Defining the Dialog

Module 5: Deploying your Chatbot

Module 5: Advanced concepts — Part 1

Module 5: Advanced concepts — Part 2



Course 7 : Deep Learning with TensorFlow

Module 1: Introduction to TensorFlow

Module 2: Convolutional Neural Networks (CNN)

Module 3: Recurrent Neural Networks (RNN)

Module 4: Unsupervised Learning

Module 5: Autoencoders

Course 8: How to Build Watson AI and Swift APIs and Make Money



Module 1: Run server-side Swift locally and on the cloud, Incomplete section

Module 2: Build an iOS app to consume server-side Swift based on IBM Kitura, Incomplete section

Module 3: Monetize your app with IBM API Connect, Incomplete section



Course Inclusions











Certification

Upon completion of this Self-paced E-Learning course and passing the online examination taken by IBM, you will receive an official IBM certificate to your registered Email ID.

You will receive 8 certifications from IBM for each of the courses in the learning path. These certificates will testify to your skills as an expert Generative AI and ML Developer. These Certificates are recognized across the world.



So be a part of the IBM Certified online courses program today and begin your journey towards a brighter future!



Job Placement Opportunities

All these following Companies are waiting for you:



































































Talk to Admissions Counselor

Our admissions counselors are prepared to address your questions or concerns about this program.

Our team is available to:

- > Answer your questions about the admission process.
- Provide insight into the curriculum, program outcomes, and related information.
- Sive any other queries.
- > Call Us: +91-75728 45000

Contact Us



info@thelearnage.com

+91-75728 45000

thelearnageofficial

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- https://www.thelearnage.com/
- **TheLearnAge**