

# Masters in Artificial Intelligence Certification Program

We offer a comprehensive Master's program in Artificial Intelligence to become a certified Artificial Intelligence Engineer. This Artificial Intelligence certification program gives training on the skills required to become a successful Artificial Intelligence Engineer. Throughout this exclusive AI online course, you'll master Deep Learning, Machine Learning, and the programming languages required to excel in this domain which will be very helpful for you to kick-start your career in Artificial Intelligence.



## Artificial Intelligence Certification program Course Overview

This is an Artificial Intelligence training program that is a comprehensive learning approach for mastering the domains of Artificial Intelligence, Data Science, Business Analytics, Business

Intelligence, Python coding and Deep Learning. This training program enables you to take on challenging roles in the Artificial Intelligence domain.

The AI courses will make students industry-ready for Artificial Intelligence and Data Science job roles. Upon completion of this AI Engineer Program, you will receive the certificate from our side in the Artificial Intelligence courses on the learning path\*. This certificate will testify to your skills as an expert in Artificial Intelligence.

### **Learning Objectives in Artificial Intelligence training program:-**

This Artificial Intelligence Engineer Master's Program is a blend of Artificial Intelligence, Data Science, Machine Learning, and Deep Learning, enabling you to the real-world implementation of advanced tools and models. The way our course is designed, to give you in-depth knowledge of Artificial Intelligence concepts including the essentials of statistics required for Data Science, Python programming, and Machine Learning. Through these AI courses, you will learn how to use Python libraries like NumPy, SciPy, Scikit, and essential Machine Learning techniques.

### **Why Become an Artificial Intelligence expert:-**

The current and future demand is stumbling. According to the New York Times reports candidate shortage for certified AI Engineers, with fewer than 10,000 qualified people in the world to fill these jobs, and earn an average salary of \$172,000 per year in the U.S. (or Rs.17 lakhs to Rs. 25 lakhs in India) for AI Engineers with the required skills.

### **Skills to be covered in Artificial Intelligence training courses:-**

you will be able to accomplish the following by the end of this AI training

- Well Understanding of the meaning, purpose, scope, stages, applications, and effects of Artificial Intelligence.
- Build and design your own intelligent agents, applying them to create practical Artificial Intelligence projects, including games, machine learning models, logic constraint satisfaction problems, knowledge-based systems, probabilistic models, and agent decision-making functions.
- Skills to master the essential concepts of Python programming, including data types, tuples, lists, dicts, basic operators, and also functions.

- How to write your own Python scripts and perform basic hands-on data analysis using Jupyter notebook.
- In-depth understanding of Data Science processes: data wrangling, data exploration, data visualization, hypothesis building, and testing.
- Perform high-level mathematical and technical computing using the NumPy and SciPy packages and data analysis with the Pandas package.
- Master the skill to understand the concepts of supervised and unsupervised learning models, including linear regression, logistic regression, clustering, dimensionality reduction, K-NN and pipeline, recommendation engine, and time series modeling.
- Master your skills on advanced topics in Artificial Intelligence, like convolutional neural networks, recurrent neural networks, training deep networks, and high-level interfaces.

### **Projects of Artificial Intelligence :-**

This Artificial Intelligence program includes real-life projects in different domains. These projects are designed to help you master the key concepts of Artificial Intelligence like supervised and unsupervised learning, reinforcement learning, support vector machines, Deep Learning, neural networks, convolutional neural networks, and recurrent neural networks.

You will go through devoted and exclusive mentored classes in order to create a high-quality industry project, solving a real-world problem. You will have projects that can be showcased to potential employers as a testament to your learning.

Project 1: Fare Prediction for Uber | Domain: Delivery (Commerce)

Project 2: Test bench time reduction for Mercedes-Benz | Domain: Automobile

Project 3: Products rating prediction for Amazon | Domain: E-commerce

Project 4: Demand Forecasting for Walmart | Domain: Sales

Project 5: Improving customer experience for Comcast | Domain: Telecom

Project 6: NYC 311 Service Request Analysis | Domain: Telecommunication

Project 7: MovieLens Dataset Analysis | Domain: Engineering

Project 8: Stock Market Data Analysis | Domain: Stock Market

**Who should be enrolled in this program:-**

With the demand for AI in a broad range of industries, Our AI course is well suited for a variety of roles and disciplines, including:

- Developers who are aspiring to be an Artificial Intelligence Engineer or Machine Learning Engineer
- Analytics Managers who are leading a team of analysts
- Information Architects who want to gain expertise in Artificial Intelligence algorithms
- Analytics professionals who want to work in machine learning or artificial intelligence
- Freshers and Graduates looking to build a career in Artificial Intelligence and machine learning

- Professionals who would like to tackle Artificial Intelligence in their fields to get more insight

### **Prerequisites for Artificial Intelligence Program:-**

Participants in this course should have:

- Understanding of the fundamentals of Python programming
- Basic knowledge of statistics

### **Job Opportunities in Artificial Intelligence Program:-**

you will have the skills required to help you to land a dream job. Jobs that are ideal for Artificial

Intelligence trained professionals include:

- Artificial Intelligence Engineer
- Data Scientist
- Analytics Manager/Lead
- Machine Learning Engineer
- Statistical Programming Specialist

## **Artificial Intelligence Certification program Course Curriculum:-**

### **Introduction of Artificial Intelligence:-**

The way this introduction to Artificial Intelligence is designed to help learners decode the mystery of AI and the business applications. This introduction provides an overview of AI concept and workflow, machine learning, deep learning and performance metrics

## 1. Decoding Artificial Intelligence

- 01 Meaning, Scope, and Stages Of Artificial Intelligence
- 02 Three Stages of Artificial Intelligence
- 03 Applications of Artificial Intelligence
- 04 Image Recognition
- 05 Applications of Artificial Intelligence - Examples
- 06 Effects of Artificial Intelligence on Society
- 07 Supervises Learning for Telemedicine
- 08 Solves Complex Social Problems
- 9 Benefits Multiple Industries
- 10 Key Takeaways

## 2. Fundamentals of Machine Learning and Deep Learning

- 01 Fundamentals Of Machine Learning and Deep Learning
- 02 Meaning of Machine Learning
- 03 Relationship between Machine Learning and Statistical Analysis
- 04 Process of Machine Learning
- 05 Types of Machine Learning
- 06 Meaning of Unsupervised Learning
- 07 Meaning of Semi-supervised Learning
- 08 Algorithms of Machine Learning
- 09 Regression
- 10 Naive Bayes
- 11 Naive Bayes Classification
- 12 Machine Learning Algorithms
- 13 Deep Learning

- 14 Artificial Neural Network Definition
- 15 Definition of Perceptron
- 16 Online and Batch Learning
- 17 Key Takeaways

### 3. Machine Learning Workflow

- 01 Learning Objective
- 02 Machine Learning Workflow
- 03 Get more data
- 04 Ask a Sharp Question
- 05 Add Data to the Table
- 06 Check for Quality
- 07 Transform Features
- 08 Answer the Questions
- 09 Use the Answer
- 11 Key takeaways

### 4. Performance Metrics

- 01 Performance Metrics
- 02 Need For Performance Metrics
- 03 Key Methods Of Performance Metrics
- 04 Confusion Matrix Example
- 05 Terms Of Confusion Matrix
- 06 Minimize False Cases
- 07 Minimize False Positive Example
- 08 Accuracy
- 09 Precision
- 10 Recall Or Sensitivity
- 11 Specificity
- 12 F1 Score
- 13 Key takeaways
- Knowledge Check

**Data Science & Python:-** Python & The Data Science provides a complete overview of Data Analytics tools and all the techniques of using Python. Learning Python is not easy or mostly crucial for many Data Science roles. Gaining the knowledge in Python will become the key to unlocking your career opportunities as a Data Scientist.

- 01 - Data Science Overview
- 02 - Data Analytics Overview
- 03 - Statistical Analysis and Business Applications
- 04 - Python Environment Setup and Essentials
- 05 - Mathematical Computing with Python (NumPy)
- 06 - Scientific computing with Python (Scipy)
- 07 - Data Manipulation with Pandas
- 08 - Machine Learning with Scikit-Learn
- 09 - Natural Language Processing with Scikit Learn
- 10 - Data Visualization in Python using matplotlib
- 11 - Web Scraping with BeautifulSoup
- 12 - Python integration with Hadoop MapReduce and Spark
- Practice Projects
- Math Refresher
- Data Science in Real life
- Python for Data Science
- Statistics Essential for Data Science

**Machine Learning :-** You will understand the concept of Machine Learning and also how it's transforming the digital world. It's a very exciting branch of AI , This Machine Learning certification online course will enable you to become a ML Engineer.

- 01 Course Introduction
- 02 Introduction to AI and Machine Learning
- 03 Data Preprocessing
- 04 Supervised Learning



- 05 Feature Engineering
- 06 Supervised Learning Classification
- 07 Unsupervised Learning
- 08 Time Series Modeling
- 09 Ensemble Learning
- 10 Recommender Systems
- 11 Text Mining
- 12 Project Highlights
- Math Refresher
- Statistics Essential for Data Science

**Deep Learning :-** Deep Learning is developed by the industry leaders and aligned with the best practices. You will master deep learning concepts and models and implementing deep learning algorithms will enable you to become a Deep Learning Engineer.

- 1 - Deep Learning with Keras and TensorFlow (Live Classes)
- 2 - Practice Projects
- 3 - Math Refresher
- 4 - Deep Learning Fundamentals

**Advance deep Learning with computer vision :-**

- 01 - Self-paced Learning Curriculum
- DL Overview and Denoising Images with Autoencoders
- 2 Image Classification with Keras
- Construct a GAN with Keras
- Object Detection with YOLO
- - Generating Images with Neural Style
- 02 - Live Class Curriculum
- Course Introduction

- Prerequisites for the Course
- RBM and DBNs
- Variational AutoEncoder
- Working with Deep Generative Models
- Applications: Neural Style transfer and Object Detection
- Distributed & Parallel Computing for Deep Learning Models
- Reinforcement Learning
- Deploying Deep Learning Models and Beyond

**Natural Language processing(NLP) :-** You will get a detailed look at the science of applying machine learning algorithms in Natural Language Processing(NLP) which will enable you to process the large amount of natural language data. Growth of the AI market is being driven by NLP. This course helps you to develop the skills required to become an NLP Engineer.

- Section 01 - NLP Overview
  - Lesson 1 Working with Text Corpus
  - Lesson 2 Processing Raw Text with NLTK
  - Lesson 3 A Practical Real World Example of Text Classification
  - Lesson 4 Finding Useful Information from Piles of Text
  - Lesson 5 Developing a Speech to Text Application Using Python
- Section 02 -NLP
  - Lesson 1 - Introduction to NLP
  - Lesson 2 - Feature Engineering on text data
  - Lesson 3 - Natural Language Understanding techniques
  - Lesson 4 - Natural Language Generation
  - Lesson 5 - NLP Libraries
  - Lesson 6 - NLP with Machine Learning and Deep Learning
  - Lesson 7 - Speech recognition techniques
- Natural Language Processing
  - Section 03 - Practice Projects
    - Twitter Hate
    - Zomato Rating

# FAQs

## **Who are the Instructors and how are they selected:-**

All of our trainers are industry experts with years of relevant experience in the industry. All of them have gone through a scrupulous selection process that includes profile screening, technical evaluation, and a training demo before they are certified to train for us. We also ensure that only those trainers with a high alumni rating remain on our faculty.

## **Why Should I Learn an Artificial Intelligence Course from you ?**

We provide the best Artificial Intelligence training course that gives you all the skills needed to work in the domains of AI, Machine Learning, Deep Learning, Data Science with R Statistical computing and Python to give the professionals an added advantage. After the completion of the training, you will be awarded the Artificial Intelligence certification.

You will be working on real-time projects and step-by-step assignments which have high relevance in the corporate world, and the curriculum is designed by industry experts. Upon the completion of the training course, you can apply for some of the best dream jobs in top MNCs around the world and can get top salaries. We offer lifetime access to videos, course materials, at no extra fee. Hence, it is clearly a one-time investment.

We can Add more FAQs like payments related and refund related as you guys prefer.