

# AI Course in Noida

**Course Duration : 40 Hours**

**Course code : AI-NOI-101**

## 1. Course Overview

The AI Course in Noida is designed to help learners build a strong foundation in Artificial Intelligence and its real-world applications. This course covers essential concepts such as machine learning, deep learning, natural language processing, and computer vision. Students will gain hands-on experience with tools like Python, TensorFlow, and popular AI frameworks used in the industry.

## 2. What you'll learn?

- Students and fresh graduates interested in AI careers
- Working professionals looking to upgrade their skills
- Data analysts and software developers
- IT professionals exploring AI/ML roles
- Entrepreneurs wanting to implement AI solutions

## 3. Target Audience

- Students and fresh graduates interested in AI careers
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## 4. Pre-Requisites

- Basic knowledge of programming (preferably Python)
- Understanding of mathematics (statistics & algebra basics)
- Familiarity with computers and logical thinking
- No prior AI experience required (beginners welcome)

## 5. Course Content (Modules)

### Module 1: Introduction to Artificial Intelligence

- What is Artificial Intelligence
- Types of AI (Narrow, General, Super AI)
- AI vs Machine Learning vs Deep Learning
- Real-world applications of AI

### Module 2: Python for AI

- Python basics (variables, loops, functions)
- Data structures (lists, tuples, dictionaries)
- Libraries: NumPy, Pandas, Matplotlib
- Data handling and preprocessing

### Module 3: Mathematics for AI

- Linear Algebra fundamentals
- Probability and Statistics
- Calculus basics for machine learning
- Data interpretation techniques

### Module 4: Machine Learning Fundamentals

- Supervised vs Unsupervised Learning
- Regression and Classification algorithms
- Model training and evaluation
- Overfitting and underfitting

### Module 5: Advanced Machine Learning

- Decision Trees and Random Forest
- Support Vector Machines (SVM)
- K-Means Clustering
- Feature engineering and selection