AI

Artificial Intelligence

🕐 2+ Months

📹 16+ Hours

📝 Assignments

👥 100+

COURSE OUTLINE

Lecture-1

Introduction to Artificial Intelligence:

- What is AI?
- Where we used?
- Importance and Application of AI
- Examples of AI in daily life

Lecture-2

Introduction to Prompt Engineering:

- What is Prompt Engineering?
- Importance of prompts in AI models
- AI Tools

Practical:

- How to use these tools.

Lecture-3

Basics of Python:

- What Programming is?
- Introduction of Python
- Basic syntax and data types

Practical:

- Writing your first Python program to print "Hello, World!"

Lecture-4

Python:

- Master conditional statements (if, else)
- Basic syntax and data types

Practical:

- Writing a program to use conditional statements.

Lecture-5

Python:

- Loops (for, while)
- Basic syntax and data types

Practical:

- Writing a program to use loops.

Lecture-6

Python:

- Functions and Modular Programming

Practical:

- Create simple functions.

COURSE OUTLINE

Lecture-7

Basics of Data:

- What is Data?
- Why is AI needed?
- Overview of Datasets

Practical:

- Learn to get data from websites for projects.

Lecture-8

Basics of Exploratory Data Analysis (EDA):

- Visualization Techniques for EDA
- Detecting and Handling Outliers
- Mini Project

Practical:

- Explore how EDA works.

Lecture-9

Basics of Machine Learning:

- What is Machine Learning?
- Where is it used?
- Types of Machine Learning: Supervised vs. Unsupervised

Practical:

- Explore how machines learn with guidance (Supervised) or on their own (Unsupervised).

Lecture-10

Basics of Machine Learning:

- What are ML Models?
- Importance of ML Models

Practical:

- Exploring the world of machine learning models and understanding their vital role in solving problems.

Lecture-11

Machine Learning:

- ML models (Classification vs Regression)
- Presentation

Practical:

- Exploring how machines make decisions (Classification) and predictions (Regression)

Lecture-12

Machine Learning:

- ML models (Training ML Regression model)
- ML models (Training ML Classification model)

Practical:

- Discovering how machines predict numbers and solve real-world problems with models

COURSE OUTLINE

Lecture-13

Deep Learning:

- Introduction to Deep Learning
- Why Deep Learning
- Difference between ML and Deep Learning
- Applications of Deep Learning

Practical:

- Exploring how Deep Learning (DL) works and its real-life applications

Lecture-14

Deep Learning:

- Overview of Neural Networks
- What is an Artificial Neuron?

Practical:

- Writing a program to use PyTorch and create a simple Neural Network (NN)

Lecture-15

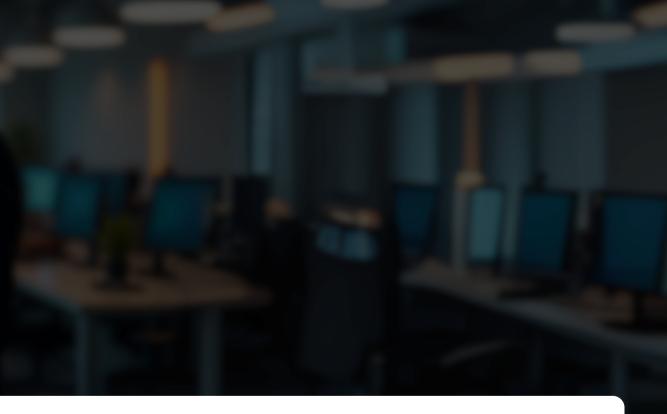- **Final Project** with Presentation

Objective:

- Implement all the concepts studied during the course.

Lecture-16

- **Final Project** with Presentation

Note: This outline is not 100% final, as the IT sector evolves continuously with frequent updates. Therefore, the outline may be revised and improved over time. However, no content will be reduced—only enhanced and updated as needed.

Apart from the Artificial Intelligence course, you will also get free access to the Canva Designing Advanced Course for Quick Skill development. This will help you gain an extra, essential skill that will be valuable for your future success.

May
2025

LEARNING & ACTIVITY CALENDAR

Your Learning Path

- Live Sessions
- Assigments
- Quiz
- Project

AI INSTITUTE
OF PAKISTAN
lms.aiinstituteofpakistan.com

Google Meet
meet.google.com

SUN	MON	TUE	WED	THU	FRI	SAT
				01 🔴 Live Session 🕐 08:00 PM	02 🔴 Live Session 🕐 08:00 PM	03
04 🟡 Assignment	05	06 🟡 Assignment	07	08 🔴 Live Session 🕐 08:00 PM	09 🔴 Live Session 🕐 08:00 PM	10
11 🟡 Assignment	12	13 🟡 Assignment	14	15 🔴 Live Session 🕐 08:00 PM	16 🔴 Live Session 🕐 08:00 PM	17 🔵 Quiz
18 🟡 Assignment	19	20 🟡 Assignment	21	22 🔴 Live Session 🕐 08:00 PM	23 🔴 Live Session 🕐 08:00 PM	24
25	26 🟢 Mini Project	27	28	29 🔴 Live Session 🕐 08:00 PM	30 🔴 Live Session 🕐 08:00 PM	31

LEARNING & ACTIVITY CALENDAR

June
2025

Your Learning Path

- Live Sessions
- Assigments
- Quiz
- Project

SUN	MON	TUE	WED	THU	FRI	SAT
01	02	03	04	05	06	07
● Assignment		● Assignment		● Live Session / 🕐 08:00 PM	● Live Session / 🕐 08:00 PM	
08	19	10	11	12	13	14
● Assignment		● Assignment		● Live Session / 🕐 08:00 PM	● Live Session / 🕐 08:00 PM	
15	16	17	18	19	20	21
● Assignment		● Assignment		● Live Session / 🕐 08:00 PM	● Live Session / 🕐 08:00 PM	● Quiz
22	23	24	25	26	27	28
● Final Project						
29	30					

Note: "The dates and times of the classes and assignments mentioned in this timetable are subject to rescheduling in case of emergencies or unforeseen circumstances."