Artificial Intelligence

AI for Everyone

🕐 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
- Quiz

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
- Assignment

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?
- Quiz

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

March
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
02	03	04	05	06 ● Live Session 🕐 10:30 PM	07 ● Live Session 🕐 10:30 PM	08
09 ● Assignment	10	11 ● Assignment	12	13 ● Live Session 🕐 10:30 PM	14 ● Live Session 🕐 10:30 PM	15 ● Quiz
16	17 ● Assignment	18	19	20 ● Live Session 🕐 10:30 PM	21 ● Live Session 🕐 10:30 PM	22
23 ● Assignment	24	25 ● Assignment	26	27 🦥 Holiday	28 🦥 Holiday	29
30	31					

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."

LEARNING & ACTIVITY CALENDAR

April
2025

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	02	03	04	05
				🌙 Holiday	🌙 Holiday	
06	07	08	09	10	11	12
				● Live Session	● Live Session	
🔵				🕐 08:00 PM	🕐 8:00 PM	🔵 Quiz
13	14	15	16	17	18	19
	● Mini Project			● Live Session	● Live Session	
				🕐 08:00 PM	🕐 08:00 PM	
20	21	22	23	24	25	26
				● Live Session	● Live Session	
🟠 Assignment		🟠 Assignment		🕐 08:00 PM	🕐 08:00 PM	
27	28	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."

LEARNING & ACTIVITY CALENDAR

May
2025

Your Learning Path

Live Sessions
Assigments
Quiz
Project

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 🔵 Quiz
04	05	06	07	08 🔴 Live Session 🕐 08:00 PM	09 🔴 Live Session 🕐 08:00 PM	10 🟢 Final Project
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

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."