

Course : <https://enterpriseportals.co/ai-professional-program>

## AI Professional Program Course Content Outline

### [Introduction to AI](#)

### [Introduction to Python for AI](#)

- Understanding the role of Python in AI development.
- Setting up Python environment (Anaconda, Jupyter Notebooks, or VS Code).
- Overview of Python's flexibility and compatibility with AI libraries.

### **Installation of Python, AI Libraries, Parallel-Processing Libraries**

- Install Python
- Install Jupyter Notebooks
- Install AI Libraries
- Install CUDA, M2 Parallel Processing

### **Python Language Constructs**

- [Variables, data types](#)
- [Lists](#)
- [Sets](#)
- [Tuples](#)
- Basic operations.
- Control structures:
  - Loops and conditionals
- Functions and scope:
  - Defining and calling functions.
  - Lambda functions and list comprehensions.

- Object-Oriented Programming:
  - Classes, objects, inheritance, and encapsulation.
- File handling:
  - Reading and writing files for data processing.

## Introduction to Libraries for AI

- [NumPy](#):
  - Working with arrays and numerical computations.
- [Pandas](#):
  - Data manipulation and analysis using DataFrames.
- [Matplotlib](#) and [Seaborn](#):
  - Data visualisation and plotting tools.
- [Scikit-learn](#):
  - Basics of machine learning and built-in algorithms.
- [Keras API \(Tensorflow\)](#)
- [TensorFlow](#)
- [PyTorch](#)
  - Introduction to deep learning frameworks
- [tabpy](#)
  - Powerful library for financial visualisation and analysis
- [H2O](#)
  - Powerful library for Automatic Machine Learning

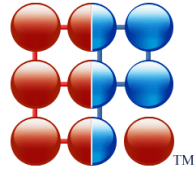
## Practical Projects

- Selection: 🎨 Creative Industry, 📁 Finance, 🎓 Education, 🛒 Retail, 🏥 Healthcare, 📺 Media & Entertainment, 🏛️ Legal, 🌱 Environmental

## AI Terminology

## AI Certifications Pointers

The above curriculum ensures a solid grounding in AI fundamentals while introducing the essential libraries and tools for AI development and practical usage in industry.



## Enterprise Portals™

### AI Professional Program Full One Week Schedule

#### Course Summary

**Total Duration:** 35 hours

#### Weekly Focus:

- **Monday:** Introduction to AI & Its Applications
- **Tuesday:** Python Fundamentals for AI Development
- **Wednesday:** Python Libraries & Data Visualization Techniques
- **Thursday:** Exploring AI Libraries (ML & Deep Learning Frameworks)
- **Friday:** Hands-on Industry Projects

#### Breaks:

- Two short breaks (15 minutes each)
- One 1-hour lunch break daily



#### Weekly Overview:

##### Monday: Introduction to AI

- **10:00 – 11:30** | *Introduction to AI*
  - **11:30 – 11:45** | Short Break
  - **11:45 – 13:00** | *AI Terminology*
  - **13:00 – 14:00** | Lunch Break
  - **14:00 – 15:30** | *Applications of AI in Industries*
  - **15:30 – 15:45** | Short Break
  - **15:45 – 18:00** | *Deep Dive into AI Applications*
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##### Tuesday: Python for AI

- **10:00 – 11:30** | *Introduction to Python for AI*
- **11:30 – 11:45** | Short Break
- **11:45 – 13:00** | *Setting up a Full Python Environment*

- **13:00 – 14:00** | Lunch Break
  - **14:00 – 15:30** | *Python Language Fundamentals*
  - **15:30 – 15:45** | Short Break
  - **15:45 – 18:00** | *Python and Object-Oriented Programming*
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### **Wednesday: Python & Libraries for AI**

- **10:00 – 11:30** | *Introduction to Libraries for AI*
  - **11:30 – 11:45** | Short Break
  - **11:45 – 13:00** | *Libraries for AI: Part 1*
  - **13:00 – 14:00** | Lunch Break
  - **14:00 – 16:00** | *Libraries for AI: Part 2*
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### **Thursday: Libraries for AI (Continued)**

- **10:00 – 11:30** | *Libraries for AI: Part 3*
  - **11:30 – 11:45** | Short Break
  - **11:45 – 13:00** | *Libraries for AI: Part 4*
  - **13:00 – 14:00** | Lunch Break
  - **14:00 – 16:00** | *Libraries for AI: Part 5*
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### **Friday: Practical Projects**

- **10:00 – 11:30** | *Project 1: Creative Industry – AI-Powered Art Generation*
  - **11:30 – 11:45** | Short Break
  - **11:45 – 13:00** | *Project 2: Finance – Fraud Detection System*
  - **13:00 – 14:00** | Lunch Break
  - **14:00 – 16:00** | *Project 3: Education – Personalized Learning Assistant*
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### **✨ Key Notes:**

- **Interactive Sessions:** Each day includes hands-on practical applications.
- **Real-World Projects:** Learn through AI-driven projects in various industries.
- **Expert Guidance:** Access mentorship from industry leaders.1