

# POWER BI FOR AI ENABLED BUSINESS INTELLIGENCE WITH PYTHON

**Duration: 3 days; Instructor-led | Virtual Instructor-led**

## WHAT WILL YOU LEARN

This three-days course is designed to equip participants with the skills to leverage Python and Power BI for practical AI applications. Attendees will learn to implement AI techniques using Python and visualize their data-driven insights using Power BI, enabling them to transform data into actionable intelligence.

The course aims to provide a comprehensive foundation in artificial intelligence using Python and to enhance participants' ability to visualize AI-driven analytics using Power BI. By the end of this course, attendees will be equipped to design, implement, and integrate AI solutions with powerful visualizations to support data-driven decision making in their organizations.

This detailed and interactive course includes theoretical instruction, practical exercises, and a capstone project to ensure that participants leave with actionable skills that can be applied immediately in professional settings

## COURSE OBJECTIVES

- Grasp the Basics of Python for AI: Understand Python programming fundamentals and libraries essential for AI.
- Explore AI Concepts: Learn the fundamentals of artificial intelligence, including machine learning models and neural networks.
- Data Manipulation and Analysis: Master data handling techniques using Python for effective data analysis.
- Visualization with Power BI: Develop skills to create interactive reports and dashboards in Power BI to represent AI insights visually.
- Hands-On AI Project: Apply learned skills to a real-world AI project integrating Python coding and Power BI visualization.

## LEARNING OUTCOMES

Participants will:

- Acquire foundational Python programming skills and learn to use key AI libraries.
- Understand how to construct and apply various machine learning models.

- Gain proficiency in using Power BI for advanced data visualization and reporting.
- Complete a capstone project that uses AI models and visualization tools to solve a real-world problem.

## PREREQUISITE

No prerequisites. Applicable for learners who are fresh to the topics

## AUDIENCE

- Professionals looking to integrate AI capabilities into their business processes.
- Data analysts and aspiring data scientists seeking to enhance their skill set with AI and data visualization tools.
- IT professionals and software developers interested in AI implementations.

## METHODOLOGY

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises.

## COURSE CONTENTS

### Day 1: Python for AI

- Introduction to Python and the AI Ecosystem
- Python Programming Essentials
- Introduction to AI with Python: Understanding Machine Learning Libraries
- Practical Exercises: Setting Up Your AI Environment

### Day 2: AI Modelling and Analysis

- Building Machine Learning Models
- Data Cleaning and Preparation Techniques
- Deep Dive into Neural Networks and Their Applications
- Case Studies: Real-World AI Solutions

### Day 3: Power BI Visualization

- Introduction to Power BI and Its Integration with Python
- Creating Reports and Dashboards in Power BI
- Advanced Data Visualization Techniques
- Final Project: Integrating AI Models with Power BI Dashboards