

# **AI Essentials for Industry Professionals**

**Duration: 8 Hours (1 Day)**

## **Course Overview**

AI Essentials for Industry Professionals course at Koenig Solutions is designed to equip you with foundational AI knowledge and practical skills. The course covers AI Fundamentals and various types of AI, including Machine Learning and Deep Learning, to understand AI's applications across different industries. You'll master Prompt Engineering to effectively fine-tune language models, and use ChatGPT and Copilot for daily communication, automating tasks in Excel and generating interactive reports. Additionally, the course emphasizes Analytical Thinking to improve decision-making with AI tools. By the end of this course, you'll be able to apply AI concepts in real-world scenarios and enhance your professional skills. Enroll today to stay ahead in the rapidly evolving tech landscape.

## **Audience Profile**

AI Essentials for Industry Professionals is designed to provide a comprehensive foundation in artificial intelligence and its applications across industries. It is suitable for professionals seeking to enhance their AI knowledge and skills.

- Data Scientists
- Machine Learning Engineers
- Business Analysts
- IT Managers
- Software Developers
- Data Analysts
- AI Researchers
- Product Managers
- Technology Consultants
- Business Intelligence Professionals
- Financial Analysts
- HR Professionals focused on data-driven decisions
- Operations Managers
- Marketing Analysts
- Academic Researchers in AI
- Entrepreneurs and Start-up Founders in Tech
- Management Consultants
- R&D Specialists
- Digital Transformation Leaders
- IT Trainers and Educators

## **Course Syllabus**

### **Module 1: AI Fundamentals**

#### **1.1 Introduction to Artificial Intelligence**

- Definition and scope
- History and evolution

## **1.2 Types of AI: From Narrow to General Intelligence**

- Narrow AI
- General AI
- Superintelligent AI

## **1.3 Machine Learning Basics: Supervised, Unsupervised, and Reinforcement Learning**

- Supervised learning
- Unsupervised learning
- Reinforcement learning

## **1.4 Deep Learning Fundamentals: Neural Networks, CNNs, RNNs**

- Neural networks
- Convolutional Neural Networks (CNNs)
- Recurrent Neural Networks (RNNs)

## **1.5 AI Applications Across Industries**

- Healthcare
- Finance
- Retail
- Manufacturing

# **Module 2: Prompt Engineering Mastery**

## **2.1 Understanding Prompt Engineering: Basics and Importance**

- Definition and significance
- Key principles

## **2.2 Crafting Effective Prompts for AI Models**

- Techniques for prompt formulation
- Examples and best practices

## **2.3 Fine-tuning Language Models with Prompts**

- Methods for fine-tuning
- Practical examples

## **2.4 Leveraging Prompt Engineering for Specific Tasks**

- Use cases in different domains
- Problem-solving with prompts

## **2.5 Case Studies on Prompt Engineering Successes**

- Real-world examples
- Lessons learned

# **Module 3: ChatGPT and Copilot for Daily Communication**

## **3.1 Introduction to AI Integration with Excel and Communication Tools**

- Overview of integration techniques

- Benefits and use cases

### **3.2 Using ChatGPT for Basic Data Analysis and Visualization in Excel**

- Data analysis techniques
- Visualization tools in Excel

### **3.3 Incorporating ChatGPT for AI-driven Insights in Daily Conversations**

- Practical examples
- Using ChatGPT for communications

### **3.4 Building Interactive Reports with ChatGPT-Generated Insights in Excel**

- Best practices
- Creating dynamic reports

### **3.5 Automation Techniques for Streamlined Communication Processes**

- Automation tools and techniques
- Examples and case studies

## **Module 4: Importance of Analytical Thinking with AI Tools**

### **4.1 Understanding Analytical Thinking in the Context of AI**

- Definition and significance
- Key principles

### **4.2 Enhancing Decision-Making Skills with Analytical Thinking**

- Techniques for critical analysis
- Practical exercises

### **4.3 Applying Analytical Thinking to AI Tools**

- Use cases and applications
- Problem-solving strategies

### **4.4 Case Studies on Analytical Thinking in AI Projects**

- Real-world examples