



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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# AI+ Prompt Engineer Level 1™

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|----------------|-----------------|---------------|
| <b>CODE:</b>   | <b>LENGTH:</b>  | <b>PRICE:</b> |
| EDU-AIC-AC-130 | 8 Hours (1 day) | \$195.00      |

## Description

Formerly known as AI+ Prompt Engineer Level 1™ Master AI Prompts: Elevate Your Engineering Skills Foundational Knowledge: Covers generative AI, ML, NLP, and neural networks essentials Hands-on Learning: Offers practical training in designing and optimizing prompts Industry-Relevant Skills: Prepares learners to build effective AI solutions across sectors Prompting Expertise: Certifies participants to craft impactful, domain-specific prompts

## Objectives

Comprehensive AI Knowledge: Understand AI fundamentals, including machine learning, deep learning, and natural language processing. Advanced Prompt Engineering: Master key principles and advanced techniques to craft effective prompts and troubleshoot issues. Practical AI Tools and Models: Gain hands-on experience with cutting-edge AI tools, text, and image generation models like GPT-4 and DALL-E 2. Ethical AI Practices: Learn about AI ethics, including data security, privacy, and regulatory compliance to ensure responsible AI use.

## Audience

Research Scientists: Advance your research with AI by creating and utilizing effective prompts to explore new scientific data and solve complex problems. Data Scientists & Analysts: Enhance your ability to optimize machine learning models by mastering prompt engineering for better data analysis and insights. Developers & Programmers: Learn to build, refine, and deploy AI-driven applications by creating efficient prompts for improved AI system performance. Business Leaders & Strategists: Gain the skills to incorporate AI solutions into business strategies, optimizing processes and decision-making. Machine Learning Engineers: Strengthen your expertise by learning how to fine-tune AI prompts to enhance the performance of machine learning models.

## Prerequisites

Understand AI basics and how AI is used – no technical skills required. Willingness to think creatively to generate ideas and use AI tools effectively

## Program

Course Overview Course Introduction Module 1: Foundations of Artificial Intelligence (AI) and Prompt Engineering 1.1 Introduction to Artificial Intelligence 1.2 History of AI 1.3 Machine Learning Basics 1.4 Deep Learning and Neural Networks 1.5 Natural Language Processing (NLP) 1.6 Prompt Engineering Fundamentals Module 2: Principles of Effective Prompting 2.1 Introduction to the Principles of Effective Prompting 2.2 Giving Directions 2.3 Formatting Responses 2.4 Providing Examples 2.5 Evaluating Response Quality 2.6 Dividing Labor 2.7 Applying The Five Principles 2.8 Fixing Failing Prompts Module 3: Introduction to AI Tools and Models 3.1 Understanding AI Tools and Models 3.2 Deep Dive into ChatGPT 3.3 Exploring GPT-4 3.4 Revolutionizing Art with DALL-E 2 3.5 Introduction to Emerging Tools using GPT 3.6 Specialized AI Models 3.7 Advanced AI Models 3.8 Google AI Innovations 3.9 Comparative Analysis of AI Tools 3.10 Practical Application Scenarios 3.11 Harnessing AI's Potential Module 4: Mastering Prompt Engineering Techniques 4.1 Zero-Shot Prompting 4.2 Few-Shot Prompting 4.3 Chain-of-Thought Prompting 4.4 Ensuring Self-Consistency in AI Responses 4.5 Generate Knowledge Prompting 4.6 Prompt Chaining 4.7 Tree of Thoughts: Exploring Multiple Solutions 4.8 Retrieval Augmented Generation 4.9 Graph Prompting and Advanced Data Interpretation 4.10 Application in Practice: Real-Life Scenarios 4.11 Practical Exercises Module 5: Mastering Image Model Techniques 5.1 Introduction to Image Models 5.2 Understanding Image Generation 5.3 Style Modifiers and Quality Boosters in Image Generation 5.4 Advanced Prompt Engineering in AI Image Generation 5.5 Prompt Rewriting for Image Models 5.6 Image Modification Techniques: Inpainting and Outpainting 5.7 Realistic Image Generation 5.8 Realistic Models and Consistent Characters 5.9 Practical Application of Image Model Techniques Module 6: Project-Based Learning Session 6.1 Introduction to Project-Based Learning in AI 6.2 Selecting a Project Theme 6.3 Project Planning and Design in AI 6.4 AI Implementation and Prompt Engineering 6.5 Integrating Text and Image Models 6.6 Evaluation and Integration in AI Projects 6.7 Engaging and Effective Project Presentation 6.8 Guided Project Example Module 7: Ethical Considerations and Future of AI 7.1 Introduction to AI Ethics 7.2 Bias and Fairness in AI Models 7.3 Privacy and

Data Security in AI 7.4 The Imperative for Transparency in AI Operations 7.5 Sustainable AI Development: An Imperative for the Future 7.6 Ethical Scenario Analysis in AI: Navigating the Complex Landscape 7.7 Navigating the Complex Landscape of AI Regulations and Governance 7.8 Navigating the Regulatory Landscape: A Guide for AI Practitioners 7.9 Ethical Frameworks and Guidelines in AI Development Optional Module: AI Agents for Prompt Engineering 1. What Are AI Agents 2. Applications and Trends of AI Agents for Prompt Engineers 3. How Does an AI Agent Work 4. Core Characteristics of AI Agents 5. Importance of AI Agents 6. Types of AI Agents

## **Session Dates**

On request. Please [Contact Us](#)

## **Additional Information**

[This training is also available as onsite training. Please contact us to find out more.](#)