Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå oss här

Kronborgsgränd 7, 164 46 Kista

Email: edu.ecs.se@arrow.com
Phone: +46 8 555 188 00

AI+ Prompt Engineer Level 1™

CODE:	LENGTH:	PRICE:
AIC_AC-130	8 Hours	kr1,950.00

Description

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

Why AI Prompt Engineer Level 1™? 10X AI Innovation Impact

- **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.

At a Glance: Course + Exam Overview:

- Included: Self-paced course + Official exam + Digital badge
- Delivery: Projects & case studies
- Outcome: Industry-recognized credential + hands-on experience

The following tools will be explored in this course:

- LangChain
- OpenAI's GPT-4

What's Included (One-Year Subscription + All Updates):

- High-Quality Videos, E-book (PDF & Audio), and Podcasts
- AI Mentor for Personalized Guidance
- Quizzes, Assessments, and Course Resources
- Online Proctored Exam with One Free Retake
- Comprehensive Exam Study Guide
- Access for Tablet & Phone

Objectives

- Familiarity with Neural Networks

- Basics of Natural Language Processing (NLP)
- History and Concepts of AI
- Designing Effective AI Prompts
- Practical Application of Prompt Engineering
- Project-Based Learning in AI Prompting

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.

Programme

What You'll Learn

Course Overview

1. Course Introduction

Module 1: Foundations of Artificial Intelligence (AI) and Prompt Engineering

1. 1.1 Introduction to Artificial Intelligence
2. 1.2 History of AI
3. 1.3 Machine Learning Basics
4. 1.4 Deep Learning and Neural Networks
5. 1.5 Natural Language Processing (NLP)
6. 1.6 Prompt Engineering Fundamentals

Module 2: Principles of Effective Prompting

1. 2.1 Introduction to the Principles of Effective Prompting
2. 2.2 Giving Directions
3. 2.3 Formatting Responses
4. 2.4 Providing Examples
5. 2.5 Evaluating Response Quality
6. 2.6 Dividing Labor
7. 2.7 Applying The Five Principles
8. 2.8 Fixing Failing Prompts

Module 3: Introduction to AI Tools and Models

1. 3.1 Understanding AI Tools and Models
2. 3.2 Deep Dive into ChatGPT
3. 3.3 Exploring GPT-4
4. 3.4 Revolutionizing Art with DALL-E 2
5. 3.5 Introduction to Emerging Tools using GPT
6. 3.6 Specialized AI Models
7. 3.7 Advanced AI Models
8. 3.8 Google AI Innovations
9. 3.9 Comparative Analysis of AI Tools
10. 3.10 Practical Application Scenarios
11. 3.11 Harnessing AI's Potential

Module 4: Mastering Prompt Engineering Techniques

1. 4.1 Zero-Shot Prompting
2. 4.2 Few-Shot Prompting
3. 4.3 Chain-of-Thought Prompting
4. 4.4 Ensuring Self-Consistency in AI Responses
5. 4.5 Generate Knowledge Prompting
6. 4.6 Prompt Chaining
7. 4.7 Tree of Thoughts: Exploring Multiple Solutions
8. 4.8 Retrieval Augmented Generation
9. 4.9 Graph Prompting and Advanced Data Interpretation
10. 4.10 Application in Practice: Real-Life Scenarios
11. 4.11 Practical Exercises

Module 5: Mastering Image Model Techniques

1. 5.1 Introduction to Image Models
2. 5.2 Understanding Image Generation
3. 5.3 Style Modifiers and Quality Boosters in Image Generation
4. 5.4 Advanced Prompt Engineering in AI Image Generation
5. 5.5 Prompt Rewriting for Image Models
6. 5.6 Image Modification Techniques: Inpainting and Outpainting
7. 5.7 Realistic Image Generation
8. 5.8 Realistic Models and Consistent Characters
9. 5.9 Practical Application of Image Model Techniques

Module 6: Project-Based Learning Session

1. 6.1 Introduction to Project-Based Learning in AI
2. 6.2 Selecting a Project Theme
3. 6.3 Project Planning and Design in AI
4. 6.4 AI Implementation and Prompt Engineering
5. 6.5 Integrating Text and Image Models
6. 6.6 Evaluation and Integration in AI Projects
7. 6.7 Engaging and Effective Project Presentation
8. 6.8 Guided Project Example

Module 7: Ethical Considerations and Future of AI

1. 7.1 Introduction to AI Ethics
2. 7.2 Bias and Fairness in AI Models
3. 7.3 Privacy and Data Security in AI
4. 7.4 The Imperative for Transparency in AI Operations
5. 7.5 Sustainable AI Development: An Imperative for the Future
6. 7.6 Ethical Scenario Analysis in AI: Navigating the Complex Landscape
7. 7.7 Navigating the Complex Landscape of AI Regulations and Governance

8. 7.8 Navigating the Regulatory Landscape: A Guide for AI Practitioners
9. 7.9 Ethical Frameworks and Guidelines in AI Development

Optional Module: AI Agents for Prompt Engineering

1. 1. What Are AI Agents
2. 2. Applications and Trends of AI Agents for Prompt Engineers
3. 3. How Does an AI Agent Work
4. 4. Core Characteristics of AI Agents
5. 5. Importance of AI Agents
6. 6. Types of AI Agents

Follow on courses

- AI+ Everyone™
- AI+ Executive™
- AI+ Foundation™

Test and Certification

Exam Details

- Duration: 90 minutes
- Passing Score: 70% (35/50)
- Format: 50 multiple-choice/multiple-response questions
- Delivery Method: Online via proctored exam platform (flexible scheduling)

Exam Blueprint:

- Foundations of Artificial Intelligence (AI) and Prompt Engineering – 11%
- Principles of Effective Prompting – 15%
- Introduction to AI Tools and Models – 15%
- Mastering Prompt Engineering Techniques – 20%
- Mastering Image Model Techniques – 15%
- Project-Based Learning Session – 12%
- Ethical Considerations and Future of AI – 12%

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
01 Jan 0001			English	Self Paced Training		kr1,950.00

Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.