



Prompt Engineering for ChatGPT & Bard

Duration: 4 Weeks | **Level:** Beginner to Intermediate

Format: Lectures + Hands-on Labs + Mini Projects

Tools: Open AI (Chat GPT API), Google Bard, Prompt Perfect, Playground

Week 1: Foundations of Prompt Engineering

- Introduction to Large Language Models (LLMs)
- How ChatGPT & Bard work (architecture, training, use cases)
- Types of prompting: Zero-shot, One-shot, Few-shot
- Basic prompt design techniques
- **Lab:** Try different prompt types using ChatGPT & Bard

Week 2: Advanced Prompt Strategies

- Role-based prompting & persona design
- Chain-of-thought prompting
- Prompt tuning vs fine-tuning
- Context length, token usage & optimization
- **Lab:** Build a “Study Assistant” using advanced prompts

Week 3: Domain-Specific Prompting

- Prompting for content creation (blogs, emails, summaries)
- Prompting for coding & debugging (Python, HTML, SQL)
- Prompting for data extraction & transformation
- Prompting for education, marketing, HR, legal, etc.
- **Project:** Multi-role chatbot (e.g., teacher + code helper)

Week 4: Tools, Ethics & Real-World Deployment

- OpenAI Playground & PromptPerfect tools
- Building prompt-based apps (Intro to API use)
- Prompt injection attacks & safety
- Best practices for ethical LLM use
- **Capstone Project:** Build a Prompt Library or Custom AI Chatbot

