■ Prompt Engineering 4-Week Study Plan

Personalized for Adyasha Priyadarshini

This 4-week plan will help you master Prompt Engineering step-by-step — from foundations to real-world projects. Each day includes a topic, practice task, and small project. You can study 1 hour daily or adjust pace as needed.

WEEK 1 — Foundations of Prompt Engineering

- Understand LLMs, tokens, and parameters (temperature, top-p).
- Learn clarity, context, and instruction in prompts.
- Experiment with zero-shot and few-shot prompting.
- Try role-based prompts ('Act as a cybersecurity professor...').
- Mini Project: Create a ‘Cybersecurity Tutor’ prompt that teaches a beginner concept step-by-step.

WEEK 2 — Prompt Patterns and Structures

- Practice chain-of-thought and instruction-based prompting.
- Design multi-turn conversations and structured outputs (tables, JSON).
- Learn delimiter usage and control over tone or style.
- Mini Project: Build an ‘Incident Report Generator’ prompt that outputs formatted cybersecurity reports.

WEEK 3 — Advanced Prompting Techniques

- Use self-consistency, prompt chaining, and error-handling.
- Inject context and evaluate different prompt versions.
- Apply system messages to customize model behavior.
- Mini Project: Create an ‘Email Threat Analyzer’ prompt that classifies phishing emails.

WEEK 4 — Real-World Applications & Automation

- Build prompt templates and learn automation using APIs (Python + OpenAI).
- Explore dynamic prompting, LangChain, and RAG concepts.
- Create and refine your own chatbot idea (‘CyberSec Helper’).

- Final Project: Build and test your ‘CyberSec Helper’ chatbot prompt system.

■ After 4 weeks, you’ll have a solid foundation in Prompt Engineering — capable of crafting advanced prompts, building prompt-driven applications, and even automating AI workflows. Continue with the optional Advanced Phase (RAG, LangChain, AI Agents) to deepen your mastery.