

Introduction to Generative AI & Prompt Engineering

Expanded Student Practice & Worksheet Guide

COURSE
Prompt Engineering

DURATION
2-Hour Session

FOCUS
AI Fundamentals & Practice

INSTRUCTOR
Course Instructor

Learning Outcomes

- **Explain** generative AI and large language models (LLMs) in plain business terms.
- **Describe** what a prompt is and why prompt engineering is a core business competency.
- **Identify** common beginner mistakes and apply corrective structural techniques.
- **Compare** AI's strengths and boundaries to set realistic workplace expectations.

1. Core Concepts Briefing

What is Generative AI?

A generative AI model analyzes text patterns to predict the most likely next word. It does not "think" like a human—it generates plausible language based on probability.

What is a Prompt?

Your instruction, context, or question. It is your only lever for controlling output—the AI has no memory of unstated intent.

Why Wording Matters

Specifying tone, audience, role, or formatting produces far higher quality responses than simply typing longer instructions.

Capabilities vs. Limits

Strong: Drafting, summarizing, tone adjustment, brainstorming.

Weak: Live data, verified absolute facts, complex math.

2. Core Slide Exercises

Exercise 1: Explain It Simply

AUDIENCE & ROLE

"Explain what a [your industry] business does, to a 10-year-old, in 3 sentences."

OBSERVATIONS

Exercise 2: Compare Phrasings

PROMPT VARIATIONS

Run Version A: "What is inflation?", Version B: "Explain inflation to a small business owner.", and Version C: "You are an economics teacher. Explain inflation using a market-stall example."

DIFFERENCES

Exercise 3: Spot the Mistakes

DIAGNOSTIC

"List 5 mistakes small business owners commonly make when writing prompts for AI tools, and how to fix each one."

KEY MISTAKES

Exercise 4: Know the Limits

BOUNDARIES

"What kinds of questions should I NOT trust you to answer accurately, and why?"

VERIFICATION PLAN

3. Additional Practical Worksheets

Exercise 5: Business Analogy & Audience

EXECUTIVE COMMUNICATION

"Explain what generative AI is to a non-technical company director in two short paragraphs, using an analogy from everyday business life."

ANALOGY EFFECTIVENESS

Exercise 6: Tone & Persona Modulation

ROLE PLAY

"Write a short 2-sentence announcement about our new office policy on using AI tools. Write Version A in a strict formal tone, and Version B in an encouraging, friendly tone."

TONE COMPARISON NOTES

Exercise 7: Strict Structural Constraints

OUTPUT FORMATTING

"Summarize why prompt engineering is an essential skill for modern business employees. Limit your answer to exactly 3 bullet points, with each bullet point being under 15 words."

CONSTRAINT COMPLIANCE

Exercise 8: Fact & Math Verification Challenge

BOUNDARY TESTING

"Calculate the total cost of purchasing 14 software licenses at \$87.50 each with a 12.5% volume discount, and explain your step-by-step math."

MANUAL CALCULATION CHECK (DID AI GET IT RIGHT?)

Exercise 9: Rewriting Weak Prompts

PROMPT REFINEMENT

"I will give you a poor prompt: 'Write me an email about our project.' Rewrite this into a high-quality, structured prompt that includes role, context, objective, audience, and formatting requirements."

IMPROVED PROMPT STRUCTURE

Key Takeaways & Wrap-Up

- **Predictive Language:** AI predicts likely text patterns based on statistical models—it does not possess human reasoning.
- **Precision Control:** Precision in yields precision out. Constrain role, audience, tone, and formatting.
- **Verification Required:** Always independently verify critical math, factual claims, and live dates.

UP NEXT: Day 2 — Understanding the Structure of a Good Prompt