

AI Coding (15 + y/o)

AI Programming 401 – Prompting LLMs

Course Description

AI401 is designed to help students become skilled at prompting, the art of communicating with AI tools to get accurate, useful, and creative results. Building on AI400, this course focuses on how to write better instructions for large language models (LLMs), evaluate their responses, and adapt prompts to different contexts.

Through guided exercises, real-world examples, and project-based practice, students will learn to refine their interactions with AI while keeping safety and reliability in mind. No coding is required, but students should have experience using AI tools at a basic level (such as through AI400).

By the end of AI401, students will be able to:

- Write effective prompts that give clearer, more reliable outputs.
- Apply prompting strategies such as role framing and few-shot examples
- Adjust prompts for different tones, audiences, and domains (study, writing, coding, creative tasks).
- Test and compare prompts using simple evaluation methods.
- Recognize risks in prompting, including privacy concerns, bias, and prompt injection.
- Build a personal "Prompt Playbook" for real-life use cases.

Course Structure

AI401 runs over 12 modules, beginning with the fundamentals of what makes a good prompt and gradually layering in advanced techniques such as few-shot prompting, reflection scaffolds, multimodal prompts, and tool-aware formats. Students complete two mini-projects and a final applied project where they design and test their own prompt system for a personal task.

Who Should Enroll

This course is for students who already know how to use AI tools and want to get better results from them. It is a natural next step after AI400 and is open to middle and high school students who are curious about making AI more reliable, useful, and creative. No technical background required.

Curriculum Outline

Module 1: What is a Good Prompt?

Module 2: Instruction Prompts and Role Framing

Module 3: Few-Shot Examples and Patterning

Module 4: Structured Outputs (Tables, JSON, Checklists)

Module 5: Thinking Scaffolds (Step-by-Step, Reflect, Critique)

Module 6: Style, Tone, and Audience Control

Module 7: Safety Essentials (Privacy, Bias, Prompt Injection)

Module 8: Prompt Evaluation and Testing (A/B, Rubrics, Test Sets)

Module 9: Real-World Prompting Patterns (Study, Writing, STEM, Creativity)

Module 10: Multimodal Prompting (Text → Images/Media)

Module 11: Tool-Aware Prompting (Prepping for AI500)

Module 12: Final Project — Personal Prompt Playbook

About: https://school.thinkland.ai/about

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