



Codex 201 Dev

- 1 Days
- Lecture and Hands-on Labs

Course Overview

This course develops advanced ChatGPT Codex workflows for technical professionals who need to plan, guide, verify, and refine AI-assisted development work with greater control. You will use Codex across the full AI-native software development lifecycle while combining project planning, structured prompting, MCP documentation access, and durable project guidance.

The course begins with Codex orientation and MCP usage, then moves into the 7-phase software development workflow and code-oriented prompting. You will practice using AI to define project scope, requirements, user stories, implementation roadmaps, and review criteria before moving into guided code generation with `AGENTS.md` and prepared project context.

By the end of the course, you will be able to use Codex as a project-aware development partner across planning, implementation, review, testing, refinement, and handoff. You will have practiced building better AI-assisted workflows by combining MCP, structured prompts, project planning documents, `AGENTS.md` guidance, terminal verification, and iterative code refinement.

Review this course online at <https://www.alta3.com/courses/00-template>

Students are responsible for ensuring all required accounts, software, licenses, and online resources are accessible and functioning prior to class. See the prerequisites section for more details.

What You'll Learn

- Configure ChatGPT Codex for advanced project-based development workflows
- Explain how MCP extends Codex with external documentation and tool access
- Use the 7-phase AI-native SDLC to structure planning, implementation, review, testing, refinement, and handoff
- Apply code-oriented prompting techniques to produce scoped, verifiable coding results
- Develop project plans, scope documents, user stories, requirements, and implementation roadmaps with AI assistance
- Create and refine `AGENTS.md` guidance to control project behavior, boundaries, verification, and documentation expectations
- Use prepared project guidance and planning documents to generate more reliable Codex-assisted code
- Build, review, test, refine, and document a guided coding project through a complete AI-assisted development workflow

Outline

ChatGPT Codex: Session 201 Dev Workshop

- Lecture: Codex CLI Power User Setup & `config.toml`
- Lecture + Lab: Codex CLI Power User Setup & `config.toml`
- Lecture: `AGENTS.md`, `SPEC.md`, and Context Engineering

- Lecture + Lab: AGENTS.md, SPEC.md, and Context Engineering
- Lecture: Advanced Agentic Workflows & Multi-Step Execution
- Lecture + Lab: Advanced Agentic Workflows & Multi-Step Execution
- Lecture: Failure Modes, Drift, and Recovery Techniques
- Lecture + Lab: Failure Modes, Drift, and Recovery Techniques
- Lecture: AI-Safe Git Workflows & Reviewing AI Changes
- Lecture + Lab: AI-Safe Git Workflows & Reviewing AI Changes
- Lecture: How Expert Users Actually Use Codex
- Lecture + Lab: How Expert Users Actually Use Codex
- Lecture: MCP, Tool Integrations, and External Systems

Prerequisites

- Codex already installed
- Codex is licensed
- Students are not firewalled from GitHub and therefore able to download exercises