



To discuss this course and customizations:
Call: 434-509-5680 or Email: sales@cloudcontraptions.com

Building with Coding Agents: A Survey of Claude Code, Codex, Aider, and Devin

Class Duration

7 hours of live training delivered over 1-2 days to accommodate your scheduling needs.

Student Prerequisites

- Professional software development experience
- Command-line comfort
- Basic familiarity with at least one AI coding tool is helpful

Target Audience

Senior software engineers, engineering managers, and tech leads evaluating or about to deploy agentic coding tools beyond IDE-level assistants. Best taken as a decision-and-orientation course before committing to one of the dedicated deep-dive courses (Claude Code in Practice, OpenAI Codex in Practice) or building an internal pilot.

Description

This is a focused 1-day survey course, not a deep-dive. The agentic coding tool landscape has exploded, and each major platform takes a meaningfully different approach to autonomy, architecture, and integration. This course provides side-by-side decision-oriented coverage of Claude Code (terminal-based, highly configurable), OpenAI Codex (a multi-surface platform spanning CLI, IDE extension, desktop app, and cloud agents, powered by the current Codex model family), Aider (open-source, Git-native), and Devin (fully autonomous software engineering agent, now part of Cognition's combined Devin + Windsurf platform after the July 2025 acquisition). We run a single shared head-to-head task across the tools, examine their architecture and workflow models, and develop a principled framework for choosing and combining agentic tools in real engineering environments. The course addresses recent vendor consolidation—particularly Cognition's Devin/Windsurf integration via the Agent Command Center—and ends with explicit guidance on which deep-dive course to take next: Claude Code in



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Practice or OpenAI Codex in Practice for tool depth, or Designing Multi-Agent Systems for orchestration patterns.

Learning Outcomes

- Describe the architectural differences between Claude Code, Codex, Aider, and Devin at a level sufficient to make a tool selection.
- Understand how the Cognition + Windsurf consolidation reshapes the Devin offering and what it means for evaluating “fully autonomous” agents.
- Complete a single shared task using each tool and compare results.
- Evaluate each tool against dimensions of autonomy, configurability, cost, and integration.
- Apply appropriate safety boundaries, review gates, and audit trails for autonomous agents.
- Make an informed recommendation for which agentic tool to pilot in a given organizational context.
- Choose the appropriate follow-on deep-dive course for the selected tool or workflow.

Training Materials

Comprehensive courseware is distributed online at the start of class. All students receive a downloadable MP4 recording of the training.

Software Requirements

Claude Code CLI, Python (for Aider), API access for Codex/OpenAI, and a Devin account or demo environment.

Training Topics

Agentic Coding: A Framework

- What makes a tool “agentic” vs. an assistant
- Autonomy levels: suggestion, edit, multi-step, fully autonomous
- Safety considerations by autonomy level
- Evaluation criteria for agentic tools and how to score this course’s tools against them

Claude Code

- Architecture: terminal REPL with model-driven tool use



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- CLAUDE.md, slash commands, hooks, and subagents at a glance
- Best use cases, common pitfalls, and where Claude Code shines
- For depth, take **Claude Code in Practice** (14 hours)

OpenAI Codex

- Codex as a multi-surface platform: CLI, IDE extension, desktop app, web, and cloud agents
- GPT-5.x Codex model family and reasoning levels
- Cloud agents with parallel git worktrees, Skills, and Automations
- Best use cases, common pitfalls, and where Codex shines
- For depth, take **OpenAI Codex in Practice** (14 hours)

Aider

- Git-native, open-source architecture
- Repository map and context management
- Chat and commit-driven workflow
- Best use cases and limits

Devin (Cognition)

- Fully autonomous software engineer architecture
- SWE-1.5: Cognition's frontier coding model and the Cascade agent harness
- Task scoping, milestone tracking, and collaboration modes
- The Cognition + Windsurf consolidation: Devin via the Agent Command Center vs. standalone Devin
- ACU-based pricing and when to use Devin vs. lower-autonomy agents
- Cost, oversight, and organizational considerations

Shared Head-to-Head Task

- One identical task run across all four tools: implement a small feature with tests on a prepared codebase
- Side-by-side scoring against the framework
- Discussion of tradeoffs, surprises, and when each tool struggled

Choosing Your Tool and Next Course

- Decision matrix: tool fit by team size, autonomy comfort, and existing platform commitments
- Multi-tool patterns at a glance (deep coverage in **Designing Multi-Agent Systems**)



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- Spec-driven development as a tool-agnostic layer (deep coverage in the dedicated Spec Kit course)
- Recommended follow-on path:
 - Claude Code in Practice — for terminal-agent depth
 - OpenAI Codex in Practice — for the Codex multi-surface platform
 - Designing Multi-Agent Systems — for orchestration across tools
 - Building Custom Tools and Skills / MCP for Developers — for extending agents
- Q&A and decision worksheet