

HMI - UX/UI: Google AI Studio / Claude Design

Total Duration: 40 Hours

Course Summary

This intensive 40-hour curriculum equips modern product designers, developers, and UX practitioners with cutting-edge workflows leveraging **Google AI Studio** and **Claude Design**. Participants will master prompt-driven user experience architecture, generative UI creation, multimodal prototyping, design token extraction, and programmatic design systems through structured hands-on labs.

Target Audience

- **UX/UI Designers:** Supercharge workflows with generative AI and rapid design variations.
- **Frontend Developers:** Bridge user intent, design systems, and production code.
- **Product Managers & Founders:** Accelerate MVP ideation, user flow testing, and prototyping.

Day 1: Foundations of Generative UI & AI-Driven UX Strategy

Module 1: Introduction to AI-Powered UX & Design Thinking

- Core concepts of generative interface design and agentic workflows.
- Translating user psychology and human-machine interaction (HMI) principles into AI prompts.
- **Hands-on Lab:** Writing structured design briefs and behavior-oriented system instructions for UI generation.

Module 2: Google AI Studio Fundamentals & Multimodal Prototyping

- Exploring Google AI Studio environment, model selection, and playground utilities.
- Harnessing multimodal inputs (text, image, audio) for contextual research.
- **Hands-on Lab:** Setting up a multimodal prompt pipeline to analyze feedback and synthesize personas.

Day 2: Advanced Layout Exploration & Vibe Design

Module 1: Design Variations & Rapid Layout Generation

- Utilizing layout automation and design variation features in Google AI Studio.
- **Hands-on Lab:** Generating and iterating across multiple dashboard layout options using parameter tuning.

Module 2: Vibe Design & Style Injection Workflows

- Scraping design aesthetics and injecting visual vibes into early-stage wireframes.
- **Hands-on Lab:** Transforming a basic wireframe into a branded interface concept.

Day 3: Design Systems & Token Architecture

Module 1: Establishing AI-Powered Design Systems

- Introduction to Claude Design artifacts and extracting foundational design tokens.
- **Hands-on Lab:** Building a custom design system and validating contrast tokens.

Module 2: Component Iteration & Micro-Interactions

- Crafting springy physics and responsive micro-interactions with Claude Design.
- **Hands-on Lab:** Building interactive card and button components with custom motion states.

Day 4: Full User Flows & Accessibility Auditing

Module 1: Designing Multi-Screen Journeys & Edge Cases

- Crafting complete end-to-end user flows and state transitions for onboarding.
- **Hands-on Lab:** Constructing a full mobile onboarding flow and linking interactive states.

Module 2: Accessibility (WCAG) & Quality Assurance

- Conducting self-audits for WCAG 2.1 compliance and touch target optimizations.
- **Hands-on Lab:** Running an automated accessibility audit and patching compliance gaps.

Day 5: Production Hand-off & Capstone

Module 1: Exporting Code, Design Tokens & Handoff Preparation

- Exporting clean Tailwind, React code, and design documentation (`DESIGN.md`).
- **Hands-on Lab:** Packaging assets and frontend code for engineering handoff.

Module 2: Capstone Project: End-to-End AI-Assisted HMI Product Prototype

- **Hands-on Lab (Capstone):** Design and prototype a complete multi-view application (smart vehicle dashboard or health assistant) using Google AI Studio and Claude Design.