COURSE SYLLABUS

AI Workflows for AEC Professionals (Self-Paced)

This course examines where artificial intelligence and the built environment meet, covering practical applications of AI across design, documentation, bidding, and construction management. You'll gain hands-on experience building automation tools and scripts tailored to real AEC workflows.

Group classes (Live Online) and onsite training are available for this course. For more information, email corporate@nobledesktop.com or visit: https://www.nobledesktop.com/classes/ai-workflows-for-aec-professionals-self-paced



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Course Outline

Lesson 1: Pre-Design & Programming

- Site Analysis & Zoning
- AI-Driven Building Programs
- Intro to Data Formatting
- Assignment: Graded Discussion Forum Post

Lesson 2: Schematic Design

- Iterative & Generative Design
- Real-time Cost Estimating
- Visual Concept Generation
- Assignment: Hands-On Quiz – Prompting Techniques

Lesson 3: Construction Documentation

- Scripting for CAD/BIM
- AI Code Studies
- Generating Sheet Lists & Notes
- Assignment: Midterm Submission – Spec Analysis & RFI Log

Lesson 4: Bidding & Proposals

- Bid Leveling with AI
- Writing Technical Proposals
- Qualification Evaluation
- Assignment: Hands-On Quiz – Predictive Analysis

Lesson 5: Construction Management

- AI Scheduling
- Field Report Analysis
- Real-time Budget Tracking
- Assignment: Hands-On Quiz – Pattern Techniques

Lesson 6: Finalizing the Project

- Commissioning Logs
- Post-Occupancy Scripts
- Deploying the App UI
- Assignment: Final Submission – Complete AI Web-App & Documentation