

COURSE SYLLABUS

AI Essentials

COURSE NUMBER

AIE-001

DURATION

1 day · 5 modules

AUDIENCE LEVEL

Beginner

FORMAT

Instructor-Led / Self-Paced

Course syllabus

COURSE OVERVIEW

This comprehensive one-day course introduces participants to fundamental AI capabilities in modern work environments. Students will master prompt engineering techniques, image generation, document processing, and spreadsheet automation while learning critical information security, safety protocols, and legal compliance requirements. The platform-neutral curriculum uses multiple AI tools to provide practical, hands-on experience in responsible AI implementation.

AT COURSE COMPLETION

After completing this course, you will be able to:

- Master prompt engineering techniques to effectively communicate with AI systems and achieve desired outcomes
 - Generate and manipulate images using AI tools for practical business applications across marketing and communications
 - Automate document processing and data extraction workflows to reduce manual effort and improve accuracy
 - Implement spreadsheet automation to enhance productivity through AI-powered data transformation and analysis
 - Apply information security, safety protocols, and legal compliance requirements throughout AI implementation initiatives
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PREREQUISITES

- Basic computer literacy and web browser navigation
 - Familiarity with common office productivity tools
 - Understanding of basic business workflows and processes
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COURSE OUTLINE

MODULE 1 Prompt Engineering Fundamentals

90 min

Explore core techniques for crafting effective prompts that guide AI systems to produce accurate, relevant, and useful outputs. Learn strategies for context setting, role assignment, and iterative refinement.

LESSONS

Introduction to Prompt Engineering

LAB EXERCISES

Hands-On Lab: Building Effective Prompts

AFTER COMPLETING THIS MODULE, YOU WILL BE ABLE TO

- Construct clear and specific prompts using context, instructions, and constraints
- Apply role-based prompting techniques to improve response quality and relevance
- Implement iterative refinement strategies to optimize AI outputs
- Evaluate prompt effectiveness using measurable criteria and testing frameworks

MODULE 2 AI-Powered Image Generation and Editing

85 min

Master techniques for creating, modifying, and refining images using AI tools. Understand parameters that control style, composition, and quality while learning practical applications for business communications and marketing.

LESSONS

Image Generation Technologies and Applications

LAB EXERCISES

Hands-On Lab: Creating and Editing Visual Content

AFTER COMPLETING THIS MODULE, YOU WILL BE ABLE TO

- Generate custom images from text descriptions using style parameters and composition guidelines
- Modify existing images through inpainting, outpainting, and variation techniques
- Apply quality control criteria to evaluate AI-generated visual content
- Implement image generation workflows for specific business use cases

MODULE 3 Automated Document Processing and Data Extraction 85 min

Learn to leverage AI for document understanding, content extraction, and workflow automation. Develop skills in processing unstructured content and transforming it into actionable structured data.

LESSONS

Document Processing Fundamentals

LAB EXERCISES

Hands-On Lab: Building Document Processing Workflows

AFTER COMPLETING THIS MODULE, YOU WILL BE ABLE TO

- Extract structured data from unstructured documents using AI parsing techniques
- Implement document classification and routing workflows based on content analysis
- Validate and clean extracted data to ensure accuracy and completeness
- Design end-to-end document processing pipelines for business automation

MODULE 4 Spreadsheet Automation and Data Intelligence 80 min

Harness AI capabilities to automate spreadsheet tasks, generate complex formulas, and transform raw data into actionable insights. Learn techniques for data cleaning, enrichment, and advanced analysis.

LESSONS

Spreadsheet Automation Strategies

LAB EXERCISES

Hands-On Lab: Automating Spreadsheet Workflows

AFTER COMPLETING THIS MODULE, YOU WILL BE ABLE TO

- Automate data cleaning and normalization tasks using AI-powered tools
- Generate complex formulas and calculations through natural language instructions
- Implement data enrichment workflows that augment existing datasets with external information
- Create automated reporting and visualization pipelines for business intelligence

MODULE 5 Information Security, Safety, and Legal Compliance

80 min

Understand critical security considerations, safety protocols, and legal requirements for responsible AI implementation. Learn to identify risks, apply mitigation strategies, and ensure compliance with regulations.

LESSONS

Security, Safety, and Compliance
Fundamentals

LAB EXERCISES

Hands-On Lab: Security and Compliance
Evaluation

AFTER COMPLETING THIS MODULE, YOU WILL BE ABLE TO

Identify information security risks in AI workflows including data leakage and unauthorized access

Apply safety protocols to prevent harmful outputs and ensure responsible AI usage

Evaluate AI systems for bias, fairness, and ethical considerations

Implement compliance measures for data protection regulations and industry standards