

# AI Fundamentals Course Objectives

## **Explain foundational concepts and terminology of modern AI and generative AI.**

- Define AI, machine learning, and generative AI.
- Distinguish generative AI from traditional software and search.
- Identify major AI tools and models.

## **Identify and classify appropriate AI use cases for common academic, personal, and workplace tasks, including when AI should not be used.**

- Classify common tasks as good or poor candidates for AI support.
- Distinguish lower-risk and higher-risk ways of using AI.
- Demonstrate cumulative understanding of AI concepts and skills.

## **Apply responsible, ethical, and secure AI practices, including awareness of risks such as bias, privacy, intellectual property concerns, hallucinations, and misuse.**

- Identify key AI risks (bias, hallucinations, privacy, IP).
- Analyze the potential impact of ethical concerns in AI use on individuals, communities, and the broader world.
- Apply basic privacy and security concepts to AI use.
- Recognize when disclosure and caution are required.
- Identify safe and ethical uses of AI-generated media.
- Evaluate AI-suggested options for plausibility and risk.

## **Design effective AI prompts using clear role–task–context–format structures.**

- Identify components of an effective prompt.
- Define and recognize context files.
- Select safe, relevant context sources.
- Configure simple context-aware AI interactions.

## **Conduct multi-turn, conversational interactions with AI, using iterative refinement strategies to progressively improve outputs.**

- Construct basic role–task–context–format prompts.
- Treat AI interactions as conversations.
- Use follow-up prompts to refine, correct, and deepen outputs.

**Evaluate AI-generated content for accuracy, quality, bias, and fitness for purpose.**

- Compare weak and strong prompts by output quality.
- Identify common AI errors and hallucinations.
- Detect bias and low-quality content.
- Maintain focus during multi-turn AI sessions.
- Select prompts for different audiences, tones, and formats.

**Use AI tools to support common professional communication and content tasks while maintaining human accountability.**

- Use AI to overcome creative blocks, generate initial ideas, and draft and revise communications.
- Apply multiple course skills to integrated AI use scenarios.

**Leverage AI as a tutor, explainer, and study partner to generate practice materials and clarify concepts while maintaining academic integrity.**

- Use AI to explain concepts at appropriate levels.
- Generate practice materials and study aids with AI templates.
- Recognize acceptable vs. misconduct in AI-supported studying.

**Use AI as a thought partner and decision aide to analyze scenarios, surface options, and combine AI suggestions with human judgment for simple decisions.**

- Use AI as a thought partner in simple decision scenarios.

**Identify everyday tasks suitable for basic AI-enabled automation.**

- Identify tasks suitable for AI-enabled automation.

**Define common AI-supported workflow patterns and the role of human-in-the-loop oversight.**

- Describe common AI-supported workflow patterns.
- Explain human-in-the-loop oversight for AI agents and automation.

**Communicate transparently about AI use in academic and professional work, including how AI contributed to outputs and how it was verified.**

- Select appropriate methods to verify AI outputs.
- Explain decisions for combining AI output with human judgment.
- Identify when and how to disclose AI use.
- Select clear, nontechnical explanations of AI use and limitations.

**Recognize how AI and related technologies are reshaping work and skill demands across industries.**

- Identify how AI is used in everyday tools and workplaces.
- Recognize how AI is changing work across industries and common patterns in how roles, skills, and tasks are shifting.
- Recognize roles in AI-augmented workflows (prompter, verifier, editor).
- Describe how AI and related tech are reshaping work across industries.

**Leverage AI ethically for career preparation (i.e., identifying AI-related skills in job descriptions, crafting résumés and cover letters, and preparing for interviews).**

- Identify AI-related skills in job descriptions.
- Apply AI ethically for career preparation (e.g., creating resumes, cover letters, and interview preparation).