AI for Knowledge Work & Decision Support

Course #: AI-104   **Duration:** 1 day

Prerequisites

Completion of AI Fundamentals for Professionals and Designing Effective Prompts & AI Interactions, or equivalent experience using AI tools responsibly in professional work.

Details

This course explores how artificial intelligence can support knowledge work and decision-making without replacing human judgment or accountability. Participants learn how to use AI as a thinking partner to frame problems, explore options, analyze tradeoffs, and test assumptions. Emphasis is placed on maintaining accountability, avoiding overreliance, and recognizing the limits of AI-assisted reasoning in professional contexts.

After attending this course, students should be able to:

Use AI to support structured thinking and analysis
Frame complex problems for AI-assisted exploration
Apply AI to scenario analysis and option evaluation
Recognize cognitive risks and overreliance in AI-assisted decisions
Integrate AI into decision workflows while maintaining accountability

This course is designed for professionals whose roles depend on analysis, judgment, and decision-making, and who are responsible for evaluating options, tradeoffs, and outcomes. This course is non-technical and does not require programming experience.

Software Needed

Access to an AI assistant tool approved by your organization (e.g., Copilot, ChatGPT, Claude, or similar) is helpful but is not required. If organizational access is not available, the course can still be completed without hands-on tool use.

Outline

AI for Knowledge Work & Decision Support

- **Understanding Knowledge Work in the Age of AI**
    - What distinguishes knowledge work from task execution
    - Where AI can support thinking—and where it cannot
    - The difference between assistance and authority
    - Risks of outsourcing judgment to AI

- **AI as a Thinking Partner**
    - Using AI to clarify thinking rather than generate answers
    - Externalizing reasoning and assumptions
    - Asking for AI to surface alternatives and blind spots

- Maintaining ownership of conclusions

- **Framing Problems for AI-Assisted Analysis**
    - Defining the decision to be made
    - Clarifying constraints, goals, and tradeoffs
    - Structuring inputs for meaningful AI support
    - Avoiding vague or misleading problem statements

- **Exploring Options and Scenarios**
    - Using AI to generate multiple options
    - Scenario exploration and "what-if" analysis
    - Evaluating tradeoffs and consequences
    - Stress-testing assumptions and logic

- **Structured Reasoning with AI**
    - Step-by-step reasoning workflows
    - Breaking complex decisions into components
    - Using AI to challenge, not confirm, conclusions
    - Avoiding circular or biased reasoning

- **Managing Bias, Confidence, and Overreliance**
    - Understanding how AI amplifies bias
    - Recognizing false confidence in AI outputs
    - Cognitive shortcuts and decision fatigue
    - When AI assistance becomes a liability

- **Validation, Accountability, and Decision Ownership**
    - Verifying AI-supported analysis
    - Documenting assumptions and inputs
    - Human accountability for decisions
    - Transparency in AI-assisted work

- **Applying AI in Real Knowledge-Work Scenarios**
    - Strategic planning and prioritization
    - Risk assessment and mitigation
    - Policy, product, and process evaluation
    - Advisory and recommendation workflows

- **Ethical and Professional Considerations**
    - Responsible use of AI in decision-making
    - Disclosure and trust
    - Organizational expectations and standards
    - Avoiding misuse in sensitive contexts

- **Summary and Next Steps**
    - Key principles for AI-assisted knowledge work
    - Applying techniques responsibly in daily work
    - Knowing when not to use AI
    - Preparing for advanced AI workflows and system design