COURSE SYLLABUS

AI & Data Literacy for the Federal Workforce (Self-Paced)

Through practical examples and hands-on activities, you'll pick up the core concepts, common terms, and best practices for working with AI tools and making sense of data.

Group classes in Live Online and onsite training is available for this course. For more information, email corporate@nobledesktop.com or visit: https://www.nobledesktop.com/classes/ai-data-literacy-for-the-federal-workforce-self-paced

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Course Outline

Module 1: AI Foundations & Responsible AI Data Workflow

- Core AI and data concepts: algorithms, models, structured vs. unstructured data
- Where AI training data comes from — and why it matters for output quality
- The AI Validation Checklist: a seven-point verification framework
- What hallucinations look like in practice — and why they're dangerous
- The DIG framework: Describe, Introspect, Goal-Set before every AI analysis
- The AI Decision Log: documenting prompts, output, verification, and decisions
- Prompt engineering: weak vs. strong prompts with federal examples
- The RACE prompt framework: Role, Action, Context, Examples

Module 2: AI in Government & Interpreting Data

- AI in government operations: fraud detection, document automation, chatbots, predictive analytics
- Human-AI partnership: why human oversight isn't optional
- The ACHIEVE framework: deciding when to use AI
- Common chart types and how to read them critically
- Common pitfalls in data interpretation: correlation vs. causation, misleading averages, and more
- Interpreting AI output: prediction scores, category labels, and generated insights

Module 3: Responsible AI & Ethics

- Current federal AI policy direction and the March 2026 national framework
- Bias and fairness: real examples from TSA, healthcare, and criminal justice
- Deepfakes and synthetic media: risks and protective practices for federal employees
- Data privacy and PII awareness: what to share and what to protect
- How the AI Decision Log connects to accountability, transparency, and FOIA readiness

Module 4: Practical Skills & Your Action Plan

- Generative AI in your federal workflow: where AI helps vs. where humans must decide
- Hands-on dataset lab: Use AI to analyze a federal operations dataset using DIG, RACE, and the Validation Checklist
- Know your agency's AI landscape: Chief AI Officer, approved tools, governance structure
- Build your personal action plan