COURSE SYLLABUS

Applied Government AI Bootcamp (Self-Paced)

This bootcamp introduces government workers to AI fundamentals, including machine learning, deep learning, and large language models, focusing on enhancing productivity, decision-making, and problem-solving. Participants will gain hands-on experience with AI tools, data literacy, and prompt engineering, while addressing ethical, legal, and regulatory considerations. Optional tracks are available in AI for project management, federal HR classification, and auditing.

> Group classes in Washington, DC and onsite training is available for this course.
> For more information, email onsite@graduateschool.edu or visit: https://www.graduateschool.edu/courses/applied-government-ai-bootcamp-self-paced

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Course Outline

This package includes these courses

- AI Fundamentals for Government Employees Course (Self-Paced) (4 hours)
- AI & Data Literacy for the Government Workforce Course (Self-Paced) (4 hours)
- AI Prompt Engineering for the Government Workforce (Self-Paced) (4 hours)
- AI for Project Management Course (Self-Paced) (6 Hours)

Choose between one of these courses to supplement your learning experience. Choose your date after you register for the program.

- AI for Federal HR Course (Self-Paced)
- AI Applications and Challenges for Auditors Course (Self-Paced)

AI Fundamentals for Government Employees Course (Self-Paced)

This course is designed to introduce government workers to the world of Artificial Intelligence (AI). This course provides foundational knowledge of AI technologies like machine learning, deep learning, and large language models, and understand how AI can be used to enhance productivity, decision-making, and problem-solving. Participants will gain a clear understanding of how AI can enhance efficiency, decision-making, and productivity while also addressing the ethical, legal, and regulatory aspects of AI use.

- Define artificial intelligence (AI) and understand its key terminology.

- Explain the architecture of AI systems, focusing on language models and neural networks.
- Engage in meaningful conversations with AI to get the output you need.
- Understand how AI can be applied in government-related tasks, such as data analysis, decision-making, and policy research.
- Evaluate the potential implications of AI technologies on privacy and data security, especially concerning sensitive government data.

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

Through practical examples and hands-on activities, participants learn how to use AI tools and interpret data in a government context, building digital confidence and supporting smarter, more informed decision-making.

- Define basic AI and data concepts including algorithms, models, structured vs. unstructured data, and data visualization
- Recognize AI applications already in use across government — fraud detection, document automation, chatbots, and predictive analytics
- Interpret data visualizations and AI-generated output critically, including prediction scores, category labels, and generated insights
- Identify ethical risks in AI use including bias at every pipeline stage, hallucinations, and deepfake threats
- Apply responsible AI practices using the DIG framework, the ACHIEVE decision model, and the RACE prompt framework
- Verify AI output using a structured seven-point validation checklist and document decisions in an AI Decision Log

AI Prompt Engineering for the Government Workforce (Self-Paced)

As AI tools become more common in government environments, knowing how to communicate clearly and responsibly with AI systems is an essential skill. This course equips participants with foundational prompt engineering techniques that help improve productivity, enhance clarity, and reduce risk when using AI to support government work.

AI for Project Management Course (Self-Paced)

Receive a practical overview of how artificial intelligence can be utilized to positively impact project management success by demystifying artificial intelligence and providing practical steps for incorporating AI into project processes.

- Define artificial intelligence and its core concepts, including natural language processing, machine learning, and generative AI, in the context of project management.
- Explain how AI tools can enhance project planning, scheduling, risk management, reporting, and stakeholder communications.
- Apply real-world examples of AI use in federal project environments to improve efficiency and decision-making.
- Identify ethical, legal, and compliance considerations, including bias, privacy, transparency, and federal AI guidelines, that impact AI adoption.