

# How to Build an AI-Ready Workforce

## Helping employees succeed on the job and advance their careers

As artificial intelligence (AI), particularly generative AI (GenAI) continues to revolutionize systems and processes, it's essential for government employees to use the technology to improve public service delivery. With so many AI training options available, knowing which skills to prioritize can seem daunting. How can employees and their supervisors determine which skills are mission-critical?

Our latest white paper, [Harnessing the Power of AI to Transform Government Training](#), introduces critical AI skills and discusses the influence of AI on learning experiences and its role in fueling mission success.

## The AI reskilling opportunity

GenAI could unlock up to \$4.4 trillion annually in productivity gains.<sup>1</sup> By 2026, automation will necessitate the retraining of 61% of workers.<sup>2</sup> This transformation extends to the government sector, where AI is set to make public service delivery faster and more efficient. Simultaneously, there's soaring demand and interest for AI skills—job postings requiring these skills surged by 2,000% within six months in 2023.<sup>3</sup>

Learner search and enrollment trends on Coursera reveal that interest in GenAI is growing rapidly<sup>4</sup>:

- *Generative AI for Everyone*, taught by AI pioneer and Coursera co-founder Andrew Ng, was Coursera's fastest-growing course, with more than 90,000 learners from more than 190 countries enrolled within 30 days.
- Searches for GenAI content surged 4x between 2022 and 2023.
- The leap was even greater – 475% year-over-year – among Coursera for Government learners.

### Top GenAI courses among government learners\*

- [Prompt Engineering for ChatGPT](#) by Vanderbilt University
- [Introduction to Generative AI](#) by Google Cloud
- [Generative AI with Large Language Models](#) by DeepLearning.AI & AWS
- [Generative AI for Everyone](#) by DeepLearning.AI
- [ChatGPT Advanced Data Analysis](#) by Vanderbilt University

\*Based on enrollments on Coursera in 2023



*We can see a future where employees are spending a lot less of their time on routine, administrative tasks. Instead, we can empower them to provide the more innovative and meaningful services that government is for.*



**Dr. Alexandra Urban**  
Learning Science  
Research Lead, Coursera

---

1. [The economic potential of generative AI: The next productivity frontier](#), McKinsey & Company, June 2023  
2. Ibid  
3. [AI threatening jobs? Most workers say technology is an accelerant for career growth](#), Randstad, September 2023  
4. [What the world learned on Coursera in 2023 and next year's must-know skills](#), Coursera, December 2023

## Critical generative AI skills for your agency

AI integration across systems and processes necessitates a basic understanding of AI for all government employees. For instance, they must understand how AI models are created, how they change over time, and how to use them to make services better and more efficient for the people they serve.

Based on Coursera skills data and an expert review by Coursera co-founder Andrew Ng, here are some of the GenAI skills that public-sector employees should prioritize developing:

**Prompt Engineering:** crafting effective input instructions for GenAI models to understand and respond to

**Natural Language Processing (NLP):** a field of AI focused on enabling computers to understand, interpret and generate human language

**Deep Learning:** a subset of machine learning (ML) that uses neural networks with multiple layers to represent complex patterns and features in data

**AI Strategy:** achieving specific organizational goals by developing a comprehensive plan for integrating and leveraging AI

**Responsible AI:** ensuring that AI systems are developed and used ethically, fairly and transparently

## Train employees in GenAI

Coursera's GenAI Academy is designed to equip senior leaders and their employees with the skills they need to thrive in an AI-driven workplace. GenAI Academy offers a unique blend of foundational literacy and executive education programs from top research universities and companies at the forefront of AI, including Microsoft, Stanford Online, Vanderbilt University, DeepLearning.AI, AWS, IBM, Google Cloud and the University of Michigan.



Upskill your workforce with critical GenAI skills.

[Learn more](#)

## Common use cases for AI in government

While many government use cases focus on unique functions (e.g., drug analysis, traffic management), here are some of the cross-cutting applications agencies envision:

**Fraud Detection:** Sifting through large volumes of financial transactions to detect abnormalities that should be followed up or flagged

**Cybersecurity:** Automating everything from threat detection and incident response to threat hunting

**Forms Processing:** Capturing data from paper or digital forms, validating it, flagging potential problems, and forwarding for additional review as needed

**Constituent Services:** Using bots to summarize key information, providing answers to common questions or guiding constituents through common online processes



*There is going to be a need for basic AI literacy for all. Everybody should know something about how this works so that they can use it to enhance their jobs and productivity.*



**Nicole Amaral**  
Principal of Skills Transformation, Coursera