coursera

2026

Job Skills Report

Insights on the fastest-growing job skills for business, government, and education leaders

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Foreword

The pace at which people develop new skills has become the pace at which the labor market changes.

Last year, we all experienced the unprecedented acceleration driven by generative AI. In 2026, that acceleration is the baseline. AI is reshaping how we work, how we make decisions, and how we develop the skills needed to stay competitive.

For leaders across business, government, and education, this transformation presents a real challenge. But within those challenges is an extraordinary opportunity.

The dominant narrative around AI has often focused on automation. The data paints a different, more nuanced picture: one defined by both augmentation and automation. A recent Anthropic report found that while 47% of AI interactions on Claude involve augmentation—collaborating with humans to enhance capabilities and reasoning—49% involve automation, where tasks are entirely delegated to machines.[1]

This signals a fundamental shift in how work is divided. More and more, we will need to determine which tasks to offload completely to autonomous agents and which to elevate through human-machine collaboration.

But this partnership with AI is not inevitable. It requires new skills—developed at speed and scale. Our research shows that 88% of leaders believe their planned AI investments will fail without a parallel, aggressive investment in training.[2] Employees feel this gap acutely: Nearly half say they're receiving moderate or less support to build the AI skills they need, even as 48% rank training as the single *most important factor* for successful AI adoption.[3]

Learners are turning to Coursera to bridge this divide. We're now seeing 14 enrollments per minute in our catalog of more than 1,000 generative AI courses, up from eight per minute last year. In fact, generative AI is now the most in-demand skill in Coursera's history.

With data from millions of learners across nearly 7,000 enterprise customers, we have a unique window into the skills organizations are prioritizing for real-world workforce development. This year, we analyzed these trends through the lens of three in-demand career areas that are increasingly shaped by AI—Data, IT, and Software & Product Development—along with the generative AI skills that are becoming essential for everyone, regardless of job role. We recognize that different career paths have unique skill requirements. That's why we are so focused on providing data-backed, role-based learning solutions, such as Skills Tracks, enabling organizations to target the precise competencies their workforce need to drive impact.

Across every field we examined, a clear pattern emerges: Learners are layering new AI skills like natural language processing on top of foundational technical skills such as SQL and JSON. At the same time, they're doubling down on building uniquely human skills, like critical thinking, to guide, validate, and responsibly deploy this new technology.

What follows is a data-driven guide to the skills your teams, students, and citizens will need most in the year ahead. I hope this report helps you navigate the path forward with clarity—so you can lead, adapt, and thrive in a world where skills change faster than ever.

Anthony Salcito
Enterprise GM, Coursera

01

Introduction

Charting the 2026 skills landscape

The fastest-growing job skills highlighted in this report provide direction for organizations seeking to align their learning programs with the most urgent priorities of the global workforce. By understanding and addressing these trends, organizations can enable career success for their people while simultaneously driving retention, readiness, and overall impact in an ever-changing world.

This year's report analyzes skill trends through a new lens, focusing on three in-demand career areas that are driving value and innovation—**Data, IT,** and **Software & Product Development**—and the role of AI in augmenting and automating how tasks are performed across these fields. We also examine a cross-cutting competency that has become essential to nearly every job role: **generative AI (GenAI)**.

How to apply these findings

Business leaders

Use these insights to build role-based learning programs that retain top talent and close critical skills gaps, ensuring your workforce can drive innovation and adapt to rapid technological change.

Government leaders

Leverage this data to design targeted workforce development initiatives that equip both job seekers and civil servants with relevant, in-demand skills, fostering economic resilience and closing the digital divide.

Higher education leaders

Integrate these high-demand skills directly into academic curricula to boost student employability, ensuring graduates enter the workforce with the specific competencies employers are hiring for today.

How to read this report

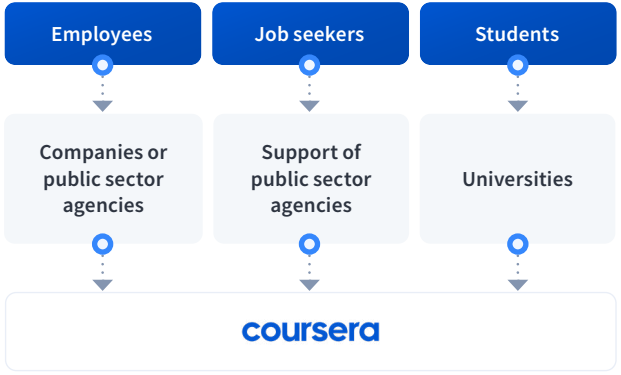
The *Job Skills Report 2026* identifies this year's fastest-growing skills by drawing on data from six million enterprise learners accessing Coursera through nearly 7,000 organizations, including businesses, higher education institutions, and governments.

These enterprise learners provide a strong basis for identifying key skill trends that are indicative of broader shifts across our global base of over 191 million learners.

Out of more than 1,000 granular skills, the fastest-growing are those that are seeing the greatest number of enrollments between 2023 and 2025 and the biggest increase in their overall enrollment ranking during this period. This approach captures both rapid growth and projected popularity, ensuring the identified skills are both trending and highly relevant.

Furthermore, this year's methodology filters out proprietary skills associated with a particular technology provider to focus on durable, transferable competencies relevant to any professional.

Who are enterprise learners?



"Enterprise" learners include **employees** engaging with Coursera through their company or public sector agency; **job seekers** pursuing learning on Coursera through the support of public sector agencies; and **students** accessing Coursera through their university.

Why career areas?

In this year's *Job Skills Report*, we've moved from broad domains to specific career areas to provide you with more actionable data. Instead of general "Technology" trends, you now get specific insights related to learners investing in IT, Software & Product Development, and Data fields—and GenAI, more broadly.

Executive summary

1 Layering AI knowledge on top of technical foundations

Across career areas, learners are investing in foundational technologies like **SQL, JSON,** and **Web Applications**—which remain indispensable for managing existing infrastructure—while actively layering on new AI competencies. This AI layer is driving a rapid convergence of roles: Core machine learning skills like **Unsupervised Learning** are now the fastest-growing skills for learners in the Software & Product Development cohort, while learners in the Data cohort are investing in **Multimodal Prompts** to interface with AI models. Whether upskilling a workforce or updating university curricula, leaders should invest in developing both AI proficiency and proven foundational skills among learners.

2 Critical thinking and validation skills as core competencies

As AI automates technical tasks, human skills grow more valuable. For instance, "human-in-the-loop" skills like **Debugging** appear as a top 10 skill for IT learners, while the Data cohort shows over 100% year-over-year growth in **Data Quality** (+108%) and **Data Cleansing** (+103%). This demand for validation skills is also driving the staggering year-over-year growth in **Critical Thinking** enrollments across all cohorts: +168% for Data, +101% for Software & Product Development, +91% for IT, and +185% for GenAI learners. As workers move from collaborating with AI to delegating entire tasks to it, the human role is shifting from collaborator to critical validator of the final output.

3 AI proficiency is now essential for nontechnical roles

Among all enterprise learners, regardless of function or sector, enrollments in GenAI have increased by 234% year-over-year. The demand for AI-related skills extends far beyond engineering and IT. The #1 fastest-growing skill among learners who are specifically interested in GenAI skills development is **Content Creation**. This is complemented by skills that enable more sophisticated creative outputs, such as **Image Analysis** (#4) and **Multimodal Prompts** (#8).

Organizations should expand role-specific AI training beyond technical learners to empower nontechnical learners—like those associated with marketing, sales, and operations teams—with the skills to execute AI-augmented workflows.

> *"AI sparks a mindset shift so significant that it can no longer live solely within technical teams. To truly transform a workforce, every function must build the skills to work confidently with AI tools. That's how we democratize innovation across the enterprise.*

Matt Sanchez
Chief Operating Officer, Yahoo

4 The governance mandate

The rapid deployment of AI has elevated governance and security from niche concerns to core operational requirements. This is reflected in learner demand, with **Responsible AI, Information Privacy,** and **Cybersecurity** all emerging as top 10 fastest-growing skills across technical career areas. This urgency is driven by a new, high-stakes regulatory and threat landscape.

Leaders must embed responsibility and security skills directly into technical learning paths to empower developers as the first line of defense against regulatory and reputational risk.

5 The growth of verified credentials

Employers and job seekers are increasingly investing in verified credentials to ensure that developed skills are visible and trusted. Enrollments in Professional Certificates have increased by an average of 91% across all career areas analyzed in this report. This dramatic growth speaks to a market demand for agile, industry-recognized micro-credentials that provide verifiable proof of skills mastery.

Additional research validates the demand for trustworthy learning: 96% of employers agree that micro-credentials strengthen a candidate's job application, and nearly nine in 10 students believe they'll help them succeed in their job.[4] At a time of rapid skills turnover where traditional degrees cannot always signal real-time capability, leaders should use verifiable micro-credentials to validate job readiness, fast-track hiring, and facilitate internal mobility.

6 The narrowing of the gender gap in tech and GenAI training

Across the three technical career areas analyzed, the percentage of enterprise enrollments from women increased from 2023 to 2025, with Data moving from 32% to 35%, IT from 29% to 32%, and Software & Product Development from 30% to 33%.

GenAI-related enrollments among women enterprise learners increased from 36% in 2024 to 41% in 2025, a significant five-point jump. This signals that the accessibility and cross-functional relevance of GenAI may be a powerful force for building a more equitable workforce. We've seen that women have 6x greater enrollments in beginner-level GenAI courses, and that content featuring female instructors, like the Google AI Essentials course, enrolls tens of thousands more women than the average.[5] By prioritizing accessible, high-quality AI upskilling programs, leaders can tap into a diverse talent pool and accelerate inclusive economic growth while closing the gender gap in technical leadership.

> *"We see ourselves as bridges between learning and opportunity. By aligning degrees with workforce needs and embedding industry credentials into the curriculum, we help students move confidently from the classroom into careers in an economy shaped by automation and AI.*

Dr. Shonda Gibson
Senior Associate Vice Chancellor and Chief Transformation Officer, The Texas A&M University System

02

Career area trends

Data

Artificial intelligence has fundamentally altered the data professional landscape, fueled by an increasing volume of data, the need to personalize consumer experiences, and the critical demand to safeguard sensitive information.

This has translated into unprecedented demand for data roles and the skills needed for them. Big Data Specialist roles are projected to see 113% growth through 2030, making them the fastest-growing job globally. AI and Machine Learning Specialists follow with 82% growth, while Data Analyst and Scientist roles are expected to grow by 41%.[6]

Key insights

1 AI as a key partner in data management and analysis

The skills data reveals a priority shift from directly manipulating databases to skillfully managing and analyzing the AI layers that sit atop them. This is evidenced by the top-ranked skills for this career area: **Multimodal Prompts** is the #1 fastest-growing skill, with **Prompt Engineering** at #4 and **Natural Language Processing** at #7. This focus on the human-AI interface is reiterated by a massive 188% year-over-year growth in GenAI enrollments among learners investing in data expertise, alongside 107% growth in Automation, 177% in Pytorch, and 466% growth in Natural Language Toolkit.

These trending skills reflect a major technological shift. Multimodal AI, which processes text, images, and other data types simultaneously, is rapidly advancing. Gartner projects that 40% of generative AI solutions will be multimodal by 2027, up from just 1% in 2023.[7] This requires professionals who can craft effective prompts across different modalities, a skill now central to the data role.

2 Human judgment as an essential backstop

As AI automates routine analytical tasks, the value of human cognitive skills has escalated. **Critical Thinking** is the #2 fastest-growing skill for learners in the Data cohort, with an extraordinary 168% year-over-year enrollment growth. This trend is reinforced by massive growth in related human-led validation skills. Enrollments in **Data Quality**—the process of ensuring data is correct and consistent—grew by 108% year-over-year, while **Data Cleansing**—the process of identifying and correcting errors—grew by 103%. This all points to the growing importance of **Data-Driven**

> *Responsible innovation requires responsible innovators and a workforce fluent in ethical decision-making. As organizations delegate decisions to AI agents, governance is the method by which judgment and responsibility are scaled. The Ethical Use of AI Agents and Agentic AI course empowers professionals to identify potential risks and exercise judgment where necessary to maximize the effective, human centered use of AI agents.*

Reggie Townsend
Vice President, Data Ethics, SAS

Decision-Making (up 126% year-over-year), where professionals apply judgment to turn raw data into strategic insights.

A 2025 Microsoft Research study found that GenAI shifts the nature of critical thinking toward information verification and response integration.[8] As AI automates analysis, the ability to validate this output has become an increasingly important human skill. The data professional's role is evolving into that of a high-level auditor, responsible for spotting flawed assumptions and applying the contextual business understanding that machines lack.

3 Data governance as a nonnegotiable requirement

The rapid deployment of AI has created an urgent need for robust governance frameworks. **Responsible AI** (#6) and **Information Privacy** (#9) have emerged as the top 10 fastest-growing skills, indicating a shift from governance as a niche legal concern to a core operational requirement for data teams.

This demand is sparked by a new, complex regulatory landscape. With over 120 countries implementing international data privacy laws and governments around the world now adopting new AI regulations,[9] professionals who understand these frameworks are in high demand. The cost of noncompliance is steep. Organizations in breach of the EU AI Act, for instance, may receive fines of up to €35 million or 7% of global turnover[10]—with similarly stringent legislation being drafted in Brazil.[11]

This challenge is compounded by internal data silos. For example, MuleSoft's *2025 Connectivity Benchmark* reveals that companies with strong data integration achieve a 10.3x ROI from AI initiatives, versus just 3.7x for those with poor connectivity, highlighting the massive cost of isolated data.[12]

Sector spotlight

Why this matters for you

Business leaders

Data silos are a key blocker of AI ROI. Prioritize data quality and data integration skills to ensure your proprietary data is clean, accessible, and ready to fuel competitive AI models that improve customer experience.

Government leaders

Responsible AI begins with safe, secure, and trustworthy data. Upskill civil servants to safely handle and protect citizen data while leveraging AI to improve citizen experience and modernize service delivery.

Higher education leaders

Students in every major need data literacy. Integrate data-driven decision-making into liberal arts and business curricula to prepare graduates for a world where every role involves data validation.

Data skills in action

Siemens

Siemens AG, a multinational technology company, partners with Coursera to keep its 240,000 employees at the forefront of the industry. In particular, Siemens has focused on building vital knowledge in generative AI. The company used Coursera as part of a foundational GenAI learning module in which over 35,000 employees participated, logging 229,420 learning hours.

"We've seen a major impact with Coursera in our more technical roles," says Lisa Lang, Head of Talent & Organization, Americas at Siemens. "In the US, AI and data and analytics content accounts for 30% of our usage. Leadership development is a close second, with about 18% of our usage on that topic."

Results

- 35,000+ employees participated in the foundational GenAI learning module
- 553% ROI on Coursera licenses
- 53% higher retention rate for Coursera users

Read the full story

The fastest-growing data skills

Rank	Skill name	Skill definition
1	Multimodal Prompts	Giving instructions to an AI using a combination of inputs, such as text and images, to get more accurate and context-rich results.
2	Critical Thinking	The process of logically analyzing information, arguments, and situations to form a reasoned judgment or solve a problem.
3	AI Personalization	The use of data to tailor content, recommendations, and a user's digital experience based on their individual behavior.
4	Prompt Engineering	The skill of carefully designing and refining instructions (prompts) to get the most accurate and useful responses from an AI.
5	Excel Formulas	Using mathematical expressions within Excel to calculate, manipulate, and analyze data in a spreadsheet.
6	Responsible AI	The practice of designing, building, and using artificial intelligence in a way that's ethical, fair, and beneficial to society.
7	Natural Language Processing	A field of AI that enables computers to understand, interpret, and generate human language, both spoken and written.
8	Automation	The use of technology to perform tasks with minimal human assistance, aiming to improve efficiency and accuracy.
9	Information Privacy	Involves the practices and rules for managing and protecting sensitive personal data from unauthorized access while securing an individual's rights.
10	Large Language Modeling	The process of training large neural networks on massive amounts of text data to understand and generate human language.

Note: These are the fastest-growing skills associated with content in the Data Skills Track. See the methodology section for further information.

Year-over-year enrollment trends

Priority technical skills	
Automation enrollment	↑ 107%
Data analysis enrollment	↑ 89%
SQL enrollment	↑ 75%

Priority human skills	
Change management enrollment	↑ 82%
Critical thinking enrollment	↑ 168%
Problem-solving enrollment	↑ 58%

Additional trends	
GenAI enrollment	↑ 188%
Professional Certificate enrollment	↑ 97%
Proportion of enrollments by women	32%

Note: These skills trends have been curated based on expert insights to complement the fastest-growing skills lists.

Sample learning paths for developing in-demand data skills

How to apply skills trends through role-specific curations on Coursera

Learning path name	Item title	Partner	Key skills
Basics of Data Prep for Data Analysis	Prepare Data for Exploration	Google	Data Cleansing, Data Quality, SQL
	Getting and Cleaning Data	Johns Hopkins University	
	Design Strategies for Maximizing Total Data Quality	University of Michigan	
	Python Project for Data Engineering	IBM	
Communicate Data Insights with Impact to Engage Stakeholders	Share Data Through the Art of Visualization	Google	Data Analysis, Data Storytelling, Data Visualization
	Storytelling With Data	Coursera Project Network	
	Introduction to Business Analytics: Communicating with Data	University of Illinois Urbana-Champaign	
	Communicating Business Analytics Results	University of Colorado Boulder	
	Data Storytelling	DeepLearning.AI	
Advanced Machine Learning for Deep Data Insights in RAG	Sequence Models	DeepLearning.AI	Generative AI, Natural Language Processing, Prompt Engineering
	Machine Learning in Production	DeepLearning.AI	
	Building Generative AI-Powered Applications with Python	IBM	
	Knowledge Graphs for RAG	DeepLearning.AI	
	Project: Generative AI Applications with RAG and LangChain	IBM	

IT

The modern IT professional operates in a hybrid world, managing both the established technologies that run the business and the emerging AI infrastructure that will define its future.

For instance, the number one driver of urgency for technology leaders is keeping pace with technology, with the majority citing cloud transformation (95%) and GenAI transformation (91%) as key business goals.[13] Meanwhile, job postings requiring generative AI skills in IT roles have increased by more than 35 times between 2022 and 2024.[14]

Learners interested in IT expertise are responding to this urgency by developing the skills that are essential to AI transformation, which is reflected in the skills data: Six of the top 10 fastest-growing skills for this cohort are directly related to AI development and deployment.

Key insights

1 Fundamental programming languages remain key for IT professionals

The layering of AI skills is prominent in the IT career area. Foundational skills like **JSON** (#1) and **SQL** (#7) remain indispensable for managing databases, data interchange, and legacy systems. The *2025 Stack Overflow Developer Survey* confirms that SQL remains one of the top 10 most-used languages.[15] At the same time, JSON has become the de facto standard for data interchange in AI-powered applications, making these foundational skills more critical than ever as a bridge between old and new systems.

2 The ability to build and interface with generative applications is a growing priority

A new layer of AI-specific infrastructure skills now command the top of the list, including **Generative Model Architectures** (#2), **Machine Learning Methods** (#3), **Natural Language Processing** (NLP) (#4), and **Artificial Neural Networks** (#5). IT functions are, in fact, where GenAI initiatives are most advanced.[16]

These findings signal that IT professionals are now expected to not only support but also build and manage the generative applications that run the business. This is a high-stakes field where skills scarcity is the #1 reason 80% of automation efforts fail.[17]

> *Agentic AI represents a significant shift in how work gets done, ranging from generating content to executing complex business processes. The Building intelligent agent workflows course walks through the process of building sophisticated agents that can integrate with existing systems across a variety of use cases.*

Elisa Graceffo
Microsoft Learning Labs
General Manager

3 Managing risks of AI-powered infrastructure

The rapid adoption of AI has created new vulnerabilities and intensified the need for advanced security expertise, with **Cybersecurity** ranking as the #9 fastest-growing skill. Learner enrollments in the related skill of **Network Security** have grown by a significant 83% year-over-year.

This is a top concern for organizations, 58% of which expect to integrate cybersecurity spending directly with budgets for AI and digital transformation.[18] The risks are substantial: 13% of organizations have already reported breaches of AI models, and 97% of those compromised lacked proper AI access controls.[19]

> *While AI-specific skills are important, it's equally important to take a step back and make sure that our technical teams have solid foundations in domains like cloud engineering, cybersecurity, data management, and dev ops. These are the core skills that we need for AI transformation.*

Liz Bryson
Head of the Digital Learning Institute, Sanofi

Sector spotlight

Why this matters for you

Business leaders

Your AI strategy is only as strong as your infrastructure. Invest in system configuration and cloud computing skills to build the scalable, secure foundation required to move AI from pilot to production.

Government leaders

Security is the top priority. With cybersecurity as a top 10 skill, focus training on threat detection and responsible AI to safeguard critical national infrastructure against increasingly sophisticated, AI-driven attacks.

Higher education leaders

The IT skills gap is widening. Partner with industry leaders to embed micro-credentials in cybersecurity and network security directly into degree programs, ensuring graduates are job-ready on day one.

IT skills in action

NITDA

To bridge the digital divide and position Nigeria as a global tech talent exporter, the National Information Technology Development Agency (NITDA) launched the ambitious "Three Million Tech Talent" initiative. Partnering with Coursera, the agency provides high-quality, accessible digital skills training—from data analytics to AI—to millions of citizens, combining self-paced online learning with in-person community support.

This innovative approach allows NITDA to reach learners across the country regardless of their background, driving toward a national goal of 95% digital literacy by 2030.

Results

- 50,000+ learners empowered with essential digital skills
- 60,000+ total course enrollments
- 18,000+ verified course completions

Read the full story

The fastest-growing IT skills

Rank	Skill name	Skill definition
1	JSON	A lightweight, human-readable format used to structure and exchange data, especially in web applications and APIs.
2	Generative Model Architectures	Advanced AI frameworks designed to generate new and original content, such as text, images, or audio.
3	Machine Learning Methods	Algorithms and statistical models that enable computers to learn from data and perform tasks without being explicitly programmed for them.
4	Natural Language Processing	A field of AI that enables computers to understand, interpret, and generate human language, both spoken and written.
5	Artificial Neural Networks	Computing systems, inspired by the human brain, that form the backbone of AI by learning patterns to make predictions or decisions.
6	Prompt Engineering	The skill of carefully designing and refining instructions (prompts) to get the most accurate and useful responses from an AI.
7	SQL	A standard programming language used to manage, query, and manipulate data stored in relational databases.
8	System Configuration	The process of setting up, adjusting, and maintaining a computer's hardware, software, and network settings for optimal performance and security.
9	Cybersecurity	The practice of protecting computer systems, networks, and data from digital attacks, damage, or unauthorized access.
10	Debugging	The systematic process of finding and fixing errors, or "bugs," in a computer program or hardware to make it work as intended.

Note: These are the fastest-growing skills associated with content in the IT Skills Track. See the methodology section for further information.

Year-over-year enrollment trends

Priority technical skills	
Cloud computing enrollment	↑ 60%
Network security enrollment	↑ 83%
System configuration enrollment	↑ 98%

Priority human skills	
Change management enrollment	↑ 76%
Critical thinking enrollment	↑ 91%
Problem-solving enrollment	↑ 34%

Additional trends	
GenAI enrollment	↑ 137%
Professional Certificate enrollment	↑ 80%
Proportion of enrollments by women	30%

Note: These skills trends have been curated based on expert insights to complement the fastest-growing skills lists.

Sample learning paths for developing in-demand IT skills

How to apply skills trends through role-specific curations on Coursera

Learning path name	Item title	Partner	Key skills
Apply Security Operations to Strengthen Cyber Defense	Security Operations Center (SOC)	Cisco Learning and Certifications	Cybersecurity, Generative AI, Prompt Engineering
	Incident Response and Digital Forensics	IBM	
	Incident Response and Recovery	ISC2	
	Generative AI: Boost Your Cybersecurity Career	IBM	
	Penetration Testing, Threat Hunting, and Cryptography	IBM	
Learn Technical Diagnostics to Identify IT Issues	Operating Systems and You: Becoming a Power User	Google	Debugging, Network Monitoring, Systems Administration
	Introduction to Hardware and Operating Systems	IBM	
	Operating Systems Fundamentals	Akamai Technologies, Inc.	
	Technical Diagnostics and Troubleshooting Techniques	Microsoft	
Automate Operational Tasks With Cloud Infrastructure	Introduction to Terraform	Codio	Automation, Debugging, JSON
	Automation in the AWS Cloud	Amazon Web Services	
	Automating Real-World Tasks with Python	Google	
	Scaling with Google Cloud Operations	Google Cloud	

Software & product development

The top 10 skills identified for software & product developers—from unsupervised learning to integrated development environments—represent the technical foundations required to build, deploy, and scale AI-powered applications in enterprise environments.

Business leaders have stated that product development is a top-three area for accelerated AI investment.[20] However, only one-quarter (24%) of developers rank themselves as "experts" in generative AI, indicating a significant skills gap.[21] This is a critical challenge, as 78% of technology leaders believe software developer roles will be one of the most impacted by AI-powered task automation.[22]

Key insights

1 The AI-native developer

The line between software developer and machine learning engineer is dissolving. **Unsupervised Learning** (#1), **Supervised Learning** (#2), **Artificial Neural Networks** (#3), and **Generative Model Architectures** (#4) are ranking as the fastest-growing skills for learners interested in furthering their software & product careers. This shift is reinforced by organizational trends, with Gartner noting that tasks like "model retraining and version rollbacks are now shared efforts between software engineering and data teams."[23] Similarly, research from Lightcast, a global labor market analytics firm, shows that job postings for generative AI engineers increased 7x from 2022 to 2024, highlighting the emergence of hybrid roles that demand both software engineering foundations and advanced AI expertise.[24]

The AI-native developer is both building AI-powered applications and using AI as a collaborative partner. Gartner predicts 90% of engineers will use AI code assistants by 2028,[25] and this is already showing massive productivity gains. Studies on developer productivity confirm that junior developers using GenAI tools see their productivity increase by 21–40%, allowing them to automate routine tasks and focus on more complex, high-value work.[26] This is part of a larger trend, with 53% of technology leaders anticipating that 30–50% of their teams' tasks will be automated in the next three years, freeing up time for more strategic work.[27]

2 Balancing fundamental skills with the AI layer

While AI-centric skills lead the rankings, the data also reveals the enduring importance of foundational technologies. The presence of **Web Applications** (#5), **SQL** (#9), and **Integrated**

> *"Deep learning is a key driver of innovation in the era of AI. Mastering frameworks like PyTorch gives professionals the ability to architect solutions behind many of today's modern AI models. Our PyTorch for Deep Learning Professional Certificate is designed to provide the rigorous technical foundation needed to build these next-generation systems.*

Andrew Ng
Founder, DeepLearning.AI and
Co-founder and Chairman, Coursera

Development Environments (#10) in the top 10 highlights the importance of the core tech layer of skills.

The *2025 Stack Overflow Developer Survey* confirms that SQL remains one of the top four most-used programming languages by developers, alongside HTML/CSS and JavaScript.[28] These skills are the foundation upon which AI-powered applications are built, and they remain essential for modern developers.

3 The rise of the AI-literate product manager

As software development becomes synonymous with AI development, the role of the product manager is undergoing a parallel transformation. A 152% year-over-year growth in **Product Management** enrollments indicates a widespread effort to acquire new competencies. The presence of hands-on technical skills like **Generative AI** (#7) and **Prompt Engineering** (#8) in the top 10 for this cohort is significant.

As product managers help build experiences that satisfy end users and fulfill organization objectives, the role is evolving from a focus on "What should we build?" to a more strategic function centered on "What is now possible?" with AI. Key to this shift is understanding the risk and liability that is associated with the development of AI-driven products. Ultimately, the AI-literate product manager acts as an essential translator between business strategy and a development team that is now, in many ways, an AI team.

4 Human validation is essential to AI quality control

One of the top concerns developers have with AI is trustworthiness. Research from Stack Overflow reveals that 46% of developers actively distrust the accuracy of AI tools. Their biggest frustration, cited by 66% of developers, is dealing with "AI solutions that are almost right, but not quite," which leads to the time-consuming task of debugging AI-generated code.[29]

The skills data shows that learners interested in software & product development are investing in the human skills necessary for working with powerful yet imperfect AI tools, something that is powerfully illustrated by the 101% year-over-year growth in **Critical Thinking** enrollment in this cohort.

Sector spotlight

Why this matters for you

Business leaders

Efficiency is just the starting line. Empower your AI-native developers with skills in generative model architectures to move beyond code automation and start building proprietary, AI-driven products that deliver business impact.

Government leaders

Modernize citizen services with AI-literate product management. Train digital service teams in prompt engineering and user experience to build intuitive, AI-powered interfaces that make government services more accessible to the public.

Higher education leaders

Coding is changing, not disappearing. Update computer science curricula to focus less on syntax and more on software architecture and AI system design, teaching students how to orchestrate AI tools rather than just write code.

Software & product skills in action

Pegasystems

Pegasystems, an AI-powered decision-making and workflow automation company, faced the challenge of measuring and advancing skills development across its organization. The company partnered with Coursera to build a culture of continuous learning with 24/7 access to a rich catalog of courses.

The results were astounding: 75% of Pegasystems's employees signed up for Coursera, leading to 7,000 enrollments and 2,500 course completions in less than a year, steering Pegasystems toward its goal of a continuous learning culture.

Read the full story

The fastest-growing software & product development skills

Rank	Skill name	Skill definition
1	Unsupervised Learning	A type of machine learning that finds hidden patterns and structures within unlabeled data sets.
2	Supervised Learning	A type of machine learning that uses labeled data to train models for making predictions or classifying new data.
3	Artificial Neural Networks	Computing systems, inspired by the human brain, that form the backbone of AI by learning patterns to make predictions or decisions.
4	Generative Model Architectures	Advanced AI frameworks designed to generate new and original content, such as text, images, or audio.
5	Web Applications	Software programs, such as e-commerce sites or social media, that are accessed and used through a web browser over the internet.
6	Natural Language Processing	A field of AI that enables computers to understand, interpret, and generate human language, both spoken and written.
7	Generative AI	Advanced artificial intelligence systems that can create new content, such as text, images, and audio, using models like GANs and VAEs.
8	Prompt Engineering	The skill of carefully designing and refining instructions (prompts) to get the most accurate and useful responses from an AI.
9	SQL	A standard programming language used to manage, query, and manipulate data stored in relational databases.
10	Integrated Development Environments	A software application that provides programmers with a complete set of tools for writing, testing, and debugging code in one place.

Note: These are the fastest-growing skills associated with content in the Software & Product Skills Track. See the methodology section for further information.

Year-over-year enrollment trends

Priority technical skills	
Debugging enrollment	↑ 82%
Product management enrollment	↑ 152%
Software development enrollment	↑ 168%

Priority human skills	
Change management enrollment	↑ 80%
Critical thinking enrollment	↑ 101%
Problem-solving enrollment	↑ 40%

Additional trends	
GenAI enrollment	↑ 167%
Professional Certificate enrollment	↑ 97%
Proportion of enrollments by women	30%

Note: These skills trends have been curated based on expert insights to complement the fastest-growing skills lists.

Sample learning paths for developing in-demand software & product skills

How to apply skills trends through role-specific curations on Coursera

Learning path name	Item title	Partner	Key skills
Optimize Workflows with Python Automation	Python for Data Science, AI & Development	Cisco Learning and Certifications	Cybersecurity, Generative AI, Prompt Engineering
	Data Analysis and Visualization with Python	IBM	
	Python Basics: Automation and Bots	ISC2	
	Python Scripting	IBM	
Lead Agile Collaboration in Product Management	Product Management: Foundations & Stakeholder Collaboration	SkillUp EdTech	Agile Product Management, Generative AI, Prompt Engineering
	Agile Accelerator: Navigating Lean Startup, Agile, and Scrum	IE Business School	
	Agile with Atlassian Jira	Atlassian	
	Generative AI: Supercharge Your Product Management Career	SkillUp EdTech	
	ChatGPT for Project Management: Insight, Planning, & Success	Vanderbilt University	

03

GenAI trends

GenAI: A cross-functional competency

Much like digital literacy two decades ago, GenAI proficiency is becoming a foundational skill essential to nearly every job role, regardless of function or industry. For instance, research from Lightcast finds that over half of job postings requesting AI skills were outside IT and Computer Science fields in 2024.[30]

Among all enterprise learners, enrollments in GenAI have increased by 234% year-over-year, highlighting a surge in demand and addressing a critical need. Forty-eight percent of employees rank training as the most important factor for GenAI adoption, yet nearly half feel they're receiving moderate or less support.[31] For leaders, the #1 reported risk related to AI deployment is employees not adapting or learning quickly enough.[32]

Key insights

1 AI as a creative copilot

The most prominent application of GenAI among learners is as a powerful tool for creativity and communication. This begins with **Content Creation** (#1), the fastest-growing skill in this category. However, the data shows learners are moving beyond creation to sophisticated customization, with **AI Personalization** (#2) ranking as the second fastest-growing skill.

This combination shows GenAI acting as a universal copilot, enabling professionals to generate compelling content while also tailoring experiences to individual user behavior and preferences. This trend is supported by the growth of **Image Analysis** (#4) and **Multimodal Prompts** (#8). These capabilities allow nontechnical professionals to execute complex workflows—such as uploading a product image to instantly generate a targeted marketing campaign, or analyzing a screenshot of a data dashboard to draft a strategic report. The use of GenAI as a creative copilot is especially resonant for marketing teams, which are among the top functions already using GenAI.[33]

2 Embracing autonomous systems

The appearance of **Generative AI Agents** as the #3 fastest-growing skill is a leading indicator that learners are exploring a shift from using AI as a passive tool to deploying it as an active, autonomous agent.

This suggests that students, job seekers, and employees are increasingly seeking to understand how to manage and delegate to

> *"Generative AI is a power tool that amplifies the capabilities of digital marketers. It accelerates workflows—from keyword research to technical schema markup—enabling teams to produce optimized content at scale. Our GenAI for SEO course provides the hands-on practice professionals need to master these tools and thrive in an AI-first search landscape.*

Antonio Cangiano
Engineering Manager & AI Specialist, Lead, IBM Skills Network

autonomous digital entities. A global survey conducted by McKinsey & Company validates this momentum, finding that 62% of organizations are at least experimenting with agents, and 23% are already scaling them.[34]

Another study conducted by PwC points to applications beyond technical fields: Among companies already using AI agents, more than half are using or planning to use them in functions like customer service (57%) and sales (54%).[35] Tapping into the power of GenAI agents will require a new set of skills focused on strategic goal setting, oversight, and trust, significantly changing the nature of workflow automation.

3 Strategic oversight and critical evaluation are key for AI collaboration

Perhaps the most telling statistic in this entire report is the 185% year-over-year growth in **Critical Thinking** for learners focusing on GenAI. This reflects research from Lightcast, which found that, for job postings that explicitly ask for AI skills, eight out of the top 10 required skills are human skills like communication, problem-solving, and leadership.[36] This strong foundation in human capabilities supports a broader trend toward strategic and responsible AI application.

It is complemented by the rise of skills like **AI Product Strategy** (#9), which focuses on integrating AI into business goals, and governance-related skills like **Information Privacy** (#5) and **Debugging** (#7). As organizations ramp up efforts to mitigate GenAI-related risks like inaccuracy and cybersecurity,[37] the data shows learners are obtaining the strategic and technical skills needed to provide essential human oversight.

Sector spotlight

Why this matters for you

Business leaders

The productivity gains are real, but so are the risks. Scale generative AI training beyond tech teams to marketing, sales, and HR, while simultaneously enforcing AI ethics training to protect your brand reputation.

Government leaders

AI agents can be a force multiplier for public service. Explore GenAI agents to handle routine citizen inquiries and paperwork, freeing up human staff to focus on complex case management and community engagement.

Higher education leaders

Content creation and critical thinking are the new essential skills. Encourage students to use GenAI as a creative copilot for brainstorming and drafting, while rigorously grading them on their ability to critique, verify, and refine the AI's output.

GenAI skills in action

Moderna

Moderna, a leader in mRNA science, is leveraging AI to scale innovation and improve efficiency with a lean, highly skilled workforce. "Just as the personal computer changed the way we work, AI will completely transform our everyday lives," says CEO Stéphane Bancel.

To achieve this, Moderna partnered with Coursera to provide all 5,600+ employees with access to GenAI courses. Learners have since created more than 300 highly customized GPTs to analyze and adapt to new data more quickly than ever. As a result, Moderna is developing dynamic AI tools that expedite processes, reduce inaccuracies, and limit hallucinations.

Results

- 2,000+ learners engaged with Coursera in the first 20 months
- 300+ highly customized GPTs created by learners
- 4.8/5 average Coursera rating among Moderna users

Read the full story

GenAI skills in action

FPT University

FPT University, a leading educational institution in Vietnam and a 2025 Coursera Outstanding Achievement AI Innovation Award Finalist, has embraced an innovative "AI-first" approach to prepare students for the digital economy. To keep pace with rapid industry changes, the university partnered with Coursera to integrate cutting-edge AI content directly into its curriculum and operations.

Embedding AI tools into coursework has allowed FPT University to scale individually tailored learning and overcome language barriers for a diverse student population. The institution's commitment to workforce development extends to its own staff, ensuring faculty are equipped to teach the technologies of tomorrow.

Results

- 2.8M learning hours completed on Coursera
- 1.4M total enrollments in Coursera courses
- 1,200+ faculty members completed at least one AI course on Coursera

Read the full story

The fastest-growing GenAI skills

Rank	Skill name	Skill Definition
1	Content Creation	The process of planning, creating, and sharing engaging materials like articles, videos, and posts for different audiences and platforms.
2	AI Personalization	The use of data to tailor content, recommendations, and a user's digital experience based on their individual behavior.
3	Generative AI Agents	Independent AI systems that can automatically create content, generate responses, and complete tasks based on given prompts or context.
4	Image Analysis	A technique that teaches computers how to interpret, understand, and extract meaningful information from visual data like images and videos.
5	Information Privacy	Involves the practices and rules for managing and protecting sensitive personal data from unauthorized access while securing an individual's rights.
6	Critical Thinking	The process of logically analyzing information, arguments, and situations to form a reasoned judgment or solve a problem.
7	Debugging	The systematic process of finding and fixing errors, or "bugs," in a computer program or hardware to make it work as intended.
8	Multimodal Prompts	Involve giving instructions to an AI using a combination of inputs, such as text and images, to get more accurate and context-rich results.
9	AI Product Strategy	Involves using artificial intelligence to improve how a product is planned, developed, managed, and launched.
10	LLM Application	The skill of building and using large language models (LLMs) to create intelligent tools, like chatbots or assistants, that understand and generate human language.

Note: These are the fastest-growing skills associated with content in the GenAI Skills Track. See the methodology section for further information.

> *We are so excited about the things AI is enabling people to do. That is why we are focused on equipping people everywhere with AI skills. Our Google AI Essentials is the #1 course on Coursera, and we're integrating AI lessons into every Google Career Certificate.*

Lisa Gevelber
Founder, Grow with Google

GenAI spotlight

Most popular GenAI courses by enrollments

Beginner

- Google AI Essentials
- Introduction to Generative AI
- Introduction to Artificial Intelligence (AI)
- Generative AI for Everyone
- Prompt Engineering for ChatGPT

Intermediate

- Generative AI with Large Language Models
- Sequence Models
- Natural Language Processing in TensorFlow
- Build AI Apps with ChatGPT, Dall-E, and GPT-4
- Advanced Prompt Engineering for Everyone

Advanced

- Encoder-Decoder Architecture
- CCNA Expert – Network Automation, Cloud, and Emerging Technologies
- Create Image Captioning Models
- Create Embeddings, Vector Search, and RAG with BigQuery
- Creative Coding for Designers Using Python

Most popular GenAI tools by enrollments

1. ChatGPT
2. Microsoft Copilot
3. Google Gemini
4. LangChain
5. Anthropic Claude

Sample learning paths for developing in-demand GenAI skills

How to apply skills trends through role-specific curations on Coursera

Learning path name	Item title	Partner	Key skills
Creative Campaign Ideation with Generative AI	Generative AI Primer	Vanderbilt University	AI Personalization, Content Creation, Prompt Engineering
	Generative AI Content Creation	Adobe	
	Use AI as a Creative or Expert Partner	Google	
	Advanced Prompt Engineering for Everyone	Vanderbilt University	
	Advertising in the Age of Generative AI	University of Virginia Darden School Foundation	
	GenAI for Digital Marketing Specialists	Coursera Instructor Network	
Enhance Troubleshooting with Smart AI Agents	Technical Diagnostics and Troubleshooting Techniques	Microsoft	Creative Thinking, Generative AI Agents, Problem-Solving
	Prompt Engineering for ChatGPT	Vanderbilt University	
	Trustworthy Generative AI	Vanderbilt University	
	Scenario and Root Cause Analysis with Generative AI	Microsoft	
	Building Intelligent Troubleshooting Agents	Microsoft	
	GenAI for Cloud Support Associates	Coursera Instructor Network	

04

Conclusion

A skills-first approach to an AI-driven era

Across every career area, this era can be seen in the rise of the AI layer, where foundational skills like **SQL** and **JSON** are enhanced by AI-specific competencies like **Natural Language Processing** and **Generative Model Architectures.**

As this technology automates routine tasks, the data shows an extraordinary surge in demand for the very skills that are uniquely human. The triple-digit, year-over-year growth in **Critical Thinking**—seen in every single cohort—is perhaps the most important finding in this report. It signals a shift in value, where human judgment, validation, and strategic oversight—seen in the rise of **Debugging, Data Quality,** and **Responsible AI**—are the new, nonnegotiable backstop for AI-enhanced productivity.

This transformation is reshaping the entire workforce. It's dissolving the traditional boundaries between technical roles, creating a convergence where software developers learn machine learning and data analysts master the human-AI interface. Simultaneously, AI proficiency is becoming a universal competency for all employees, demonstrated by a 234% year-over-year growth in GenAI enrollments among all enterprise learners.

For leaders in business, government, and higher education, the primary risk in this new era is the skills gap that prevents the effective and responsible use of AI. The time for isolated pilots is over; the focus must shift to strategic, scaled deployment that empowers students, job seekers, and employees. Investing in skills—especially human judgment—is essential for realizing the promise of AI and, most importantly, the full potential of your learners.

05

Appendix

Industry skill trends

The learners across the nine industries featured in this section together account for nearly 28% of all enterprise learners on Coursera.

Energy

Rank	Data skills
1	Data Storytelling
2	Large Language Modeling
3	Data Ethics
4	Data Integration
5	Data Storytelling

Rank	IT skills
1	Identity and Access Management
2	Data Security
3	Network Security
4	Cloud Storage
5	Relationship Management

Rank	Software & product skills
1	Generative Model Architectures
2	Machine Learning
3	Prompt Engineering
4	Generative AI
5	Automation

Rank	GenAI skills
1	Data Quality
2	Image Analysis
3	Workflow Management
4	AI Product Strategy
5	Prompt Engineering

Financial services

Rank	Data skills
1	Multimodal Prompts
2	LLM Application
3	Prompt Engineering
4	Large Language Modeling
5	Data Ethics

Rank	IT skills
1	Software Installation
2	IT Automation
3	Automation
4	Debugging
5	Artificial Intelligence

Rank	Software & product skills
1	Large Language Modeling
2	Responsible AI
3	Generative Model Architectures
4	Artificial Neural Networks
5	Prompt Engineering

Rank	GenAI skills
1	Information Privacy
2	Innovation
3	Concision
4	Ethics
5	Generative AI Agents

Healthcare and Pharma

Rank	Data skills
1	Prompt Engineering
2	Excel Formulas
3	Large Language Modeling
4	Generative Model Architectures
5	Data Ethics

Rank	IT skills
1	Data Integration
2	Data-Driven Decision-Making
3	Continuous Monitoring
4	Automation
5	Identity and Access Management

Rank	Software & product skills
1	Image Analysis
2	Large Language Modeling
3	Responsible AI
4	Project Management
5	Risk Mitigation

Rank	GenAI skills
1	Workflow Management
2	AI Personalization
3	Agentic Systems
4	Generative AI Agents
5	Prompt Patterns

Industrials / manufacturing

Rank	Data skills
1	Generative Model Architectures
2	Microsoft Excel
3	Data Presentation
4	Natural Language Processing
5	Statistical Analysis

Rank	IT skills
1	Identity and Access Management
2	Network Security
3	General Networking
4	Cloud Services
5	Data Security

Rank	Software & product skills
1	Large Language Modeling
2	Data Analysis
3	Product Development
4	Software Documentation
5	Automation

Rank	GenAI skills
1	AI Personalization
2	Data-Driven Decision-Making
3	Image Analysis
4	Data Quality
5	Data Analysis

Professional services

Rank	Data skills
1	Prompt Engineering
2	Large Language Modeling
3	Multimodal Prompts
4	Agentic Systems
5	Automation

Rank	IT skills
1	Cloud Computing
2	Data Security
3	Command-Line Interface
4	Large Language Modeling
5	Artificial Intelligence and Machine Learning (AI/ML)

Rank	Software & product skills
1	Multimodal Prompts
2	Large Language Modeling
3	Artificial Neural Networks
4	Generative Model Architectures
5	AI Personalization

Rank	GenAI skills
1	Agentic Systems
2	AI Personalization
3	Multimodal Prompts
4	Data Visualization Software
5	Prompt Engineering

Retail and consumer

Rank	Data skills
1	AI Personalization
2	Excel Formulas
3	Data Entry
4	Tableau Software
5	Analytical Skills

Rank	IT skills
1	Software Installation
2	Malware Protection
3	Scripting
4	Scalability
5	Linux

Rank	Software & product skills
1	Automation
2	Collaborative Software
3	Data Analysis
4	Scalability
5	Product Development

Rank	GenAI skills
1	Data-Driven Decision-Making
2	Data Ethics
3	Machine Learning Algorithms
4	Open Source Technology
5	Cloud Computing

Technology / IT

Rank	Data skills
1	Generative AI Agents
2	Agentic Systems
3	Application Development
4	Cloud Applications
5	LLM Application

Rank	IT skills
1	Cybersecurity
2	Authentications
3	Innovation
4	Artificial Intelligence
5	Network Protocols

Rank	Software & product skills
1	Large Language Modeling
2	Responsible AI
3	Artificial Neural Networks
4	Algorithms
5	Agile Methodology

Rank	GenAI skills
1	Agentic Systems
2	AI Product Strategy
3	Image Analysis
4	Tool Calling
5	Generative AI Agents

Telecom and media

Rank	Data skills
1	Excel Formulas
2	Information Privacy
3	Data Governance
4	Data Ethics
5	Large Language Modeling

Rank	IT skills
1	Wireless Networks
2	Real Time Data
3	Interoperability
4	Mobile Security
5	Data Architecture

Rank	Software & product skills
1	Change Management
2	User Interface (UI) Design
3	System Programming
4	Deep Learning
5	Data Storage

Rank	GenAI skills
1	Workflow Management
2	Information Privacy
3	Interactive Data Visualization
4	Multimodal Prompts
5	Content Creation

Transportation

Rank	Data skills
1	AI Personalization
2	Tableau Software
3	Data Governance
4	Information Privacy
5	Data Ethics

Rank	IT skills
1	Automation
2	Artificial Intelligence
3	Debugging
4	Machine Learning
5	SQL

Rank	Software & product skills
1	Large Language Modeling
2	Responsible AI
3	Generative Model Architectures
4	Artificial Neural Networks
5	Risk Mitigation

Rank	GenAI skills
1	Workflow Management
2	Ethics of Artificial Intelligence
3	Product Management
4	Project Management
5	Performance Metric

Regional skill trends

Asia Pacific

Rank	Data skills
1	Deep Learning
2	AI Personalization
3	Statistical Analysis
4	Regression Analysis
5	Natural Language Processing

Rank	IT skills
1	Unsupervised Learning
2	Supervised Learning
3	Deep Learning
4	Generative Model Architectures
5	JSON

Rank	Software & product skills
1	HTML and CSS
2	Modeling
3	Responsible AI
4	Web Applications
5	Web Development Tools

Rank	GenAI skills
1	Generative AI Agents
2	Debugging
3	Image Analysis
4	Generative Model Architectures
5	SQL

Europe

Rank	Data skills
1	Excel Formulas
2	LLM Application
3	AI Personalization
4	Multimodal Prompts
5	Data Storytelling

Rank	IT skills
1	Linux
2	Software Installation
3	IT Automation
4	Scripting
5	Network Protocols

Rank	Software & product skills
1	Large Language Modeling
2	Responsible AI
3	Generative Model Architectures
4	Artificial Neural Networks
5	Scripting

Rank	GenAI skills
1	Concision
2	AI Personalization
3	Information Privacy
4	Multimodal Prompts
5	Generative AI Agents

Latin America

Rank	Data skills
1	Email Automation
2	Productivity Software
3	Human Factors
4	Information Management
5	Ethics

Rank	IT skills
1	System Requirements
2	Package and Software Management
3	Technical Documentation
4	Linux Commands
5	Problem Management

Rank	Software & product skills
1	Prompt Engineering Tools
2	Prompt Patterns
3	Image Quality
4	Multimodal Prompts
5	Artificial Neural Networks

Rank	GenAI skills
1	Logo Design
2	Prompt Patterns
3	Iteration
4	Human Machine Interfaces
5	Editing

Middle East and North Africa

Rank	Data skills
1	Deep Learning
2	Supervised Learning
3	Statistical Analysis
4	Excel Formulas
5	Data Visualization

Rank	IT skills
1	System Configuration
2	Malware Protection
3	Security Controls
4	Firewall
5	Authentications

Rank	Software & product skills
1	Multimodal Prompts
2	Large Language Modeling
3	Responsible AI
4	Image Analysis
5	Content Creation

Rank	GenAI skills
1	Workflow Management
2	Presentations
3	Microsoft Excel
4	Data Strategy
5	Predictive Analytics

North America

Rank	Data skills
1	Multimodal Prompts
2	Prompt Engineering
3	Large Language Modeling
4	Critical Thinking
5	Responsible AI

Rank	IT skills
1	Information Privacy
2	Identity and Access Management
3	System Configuration
4	Malware Protection
5	Package and Software Management

Rank	Software & product skills
1	Large Language Modeling
2	Responsible AI
3	Artificial Neural Networks
4	Generative Model Architectures
5	Ideation

Rank	GenAI skills
1	Email Automation
2	Content Creation
3	AI Personalization
4	Innovation
5	Concision

Sub-Saharan Africa

Rank	Data skills
1	Prompt Engineering
2	Responsible AI
3	Artificial Intelligence
4	Automation
5	AI Personalization

Rank	IT skills
1	Data Architecture
2	Application Development
3	Wide Area Networks
4	Cloud API
5	Cloud Standards

Rank	Software & product skills
1	Animations
2	Deep Learning
3	Problem-Solving
4	Machine Learning
5	Critical Thinking

Rank	GenAI skills
1	Business Process Automation
2	Tool Calling
3	Agentic Systems
4	Proofreading
5	Ethical Standards and Conduct

Learner-type skill trends

Employees

Rank	Data skills
1	Data Security
2	Critical Thinking
3	Excel Formulas
4	Prompt Engineering
5	Brainstorming

Rank	IT skills
1	System Configuration
2	Open Source Technology
3	Internet of Things
4	Automation
5	Cybersecurity

Rank	Software & product skills
1	AI Product Strategy
2	Large Language Modeling
3	LLM Application
4	Agentic Systems
5	Content Creation

Rank	GenAI skills
1	AI Personalization
2	Information Privacy
3	Data Security
4	Critical Thinking
5	Problem-Solving

Job seekers

Rank	Data skills
1	AI Personalization
2	Responsible AI
3	Artificial Intelligence
4	Automation
5	Excel Formulas

Rank	IT skills
1	Machine Learning
2	Debugging
3	System Configuration
4	Artificial Intelligence
5	Malware Protection

Rank	Software & product skills
1	Prompt Engineering Tools
2	Prompt Patterns
3	Complex Problem-Solving
4	Multimodal Prompts
5	Machine Learning Methods

Rank	GenAI skills
1	Prompt Engineering Tools
2	Complex Problem-Solving
3	Prompt Patterns
4	Decision Making
5	Generative AI Agents

Students

Rank	Data skills
1	Natural Language Processing
2	Responsible AI
3	Deep Learning
4	Data Ethics
5	Regression Analysis

Rank	IT skills
1	Unsupervised Learning
2	Supervised Learning
3	Deep Learning
4	Generative Model Architectures
5	Machine Learning Methods

Rank	Software & product skills
1	Web Design and Development
2	Prompt Engineering
3	Full-Stack Web Development
4	Generative Model Architectures
5	Unsupervised Learning

Rank	GenAI skills
1	Content Creation
2	AI Personalization
3	Generative AI Agents
4	Debugging
5	Generative Model Architectures

Methodology

About Coursera learner data

The *Job Skills Report* analyzes the evolving global skills landscape using data from its enterprise learner base of six million professionally motivated individuals. This cohort is a subset of Coursera's total community of over 191 million.

"Enterprise learners" are defined as individuals enrolled through partnerships with three categories:

1. **Businesses:** Employees in corporate training
2. **Governments:** Civil servants (employees) or citizens in workforce development (job seekers)
3. **Higher education institutions:** Currently enrolled students accessing content for academic credit or enrichment

Higher education faculty, administrators, and staff are specifically excluded from the analysis to maintain focus on current and prospective skills across the broader workforce. The nearly six million enterprise learners figure represents unique individuals, counted once regardless of the amount of content consumed, ensuring accurate reflection of distinct individuals driving the skill trends.

Skills taxonomy and rankings

- Our skills taxonomy is periodically updated to stay **relevant and accurate.**
- This year's report uses **Skills Taxonomy 2.0**, also used in last year's report, which includes a **tenfold increase in scorable skills** compared to Skills Taxonomy 1.0, used in reports prior to last year's, and is primarily based on data from Lightcast.
- We regularly introduce newer skills into our Skills Taxonomy, to keep up with the constantly evolving tech ecosystem. For example, we introduced "deepseek" as a skill in July 2025, following the widespread adoption of the DeepSeek-R1 model in 2025.
- Consequently, slight variations in skill rankings may occur from year-to-year.
- **When interpreting these rankings, we advise focusing on broader trends rather than specific ranks.**

Skills Tracks

- This year's report introduces a new data dimension: Career areas aligned to Coursera Skills Tracks.
- This enables us to zoom in and isolate growing skills and learning trends for roles across specialized areas such as Data, Information Technology (IT), and Software & Product Development—along with Generative AI as an ability multiplier that's relevant to all fields.
- This is in contrast to prior reports wherein we analyzed skills based on content pertaining to business, data, and technology domains in Coursera's taxonomy.

Influencing factors and interpretation

An individual's ability to access and use Coursera is influenced by many factors, including **internet infrastructure, educational background or past training,** and **local culture or norms**. We also use learner profile data such as **location.**

The results may also be influenced by:

- **Local economic or social conditions:** For example, economic downturns sometimes drive learners to Coursera.
- **Industry partnerships:** Our industry partnerships also sometimes quickly bring thousands of new learners onto the platform.
- **Availability of new content** launched by Coursera partners.

In general, our goal is to objectively represent what is happening across the Coursera ecosystem. Sometimes our results capture what is happening across an entire economy. Other times, the demographics and behavior of Coursera learners mean that some results should not be extrapolated or interpreted as representing broad populations, but rather, as a way of **indicating directional shifts in enterprise learner interest.**

The Coursera Career Graph

The Coursera Career Graph maps the **connections among skills, content, roles, and learners** on the Coursera platform.

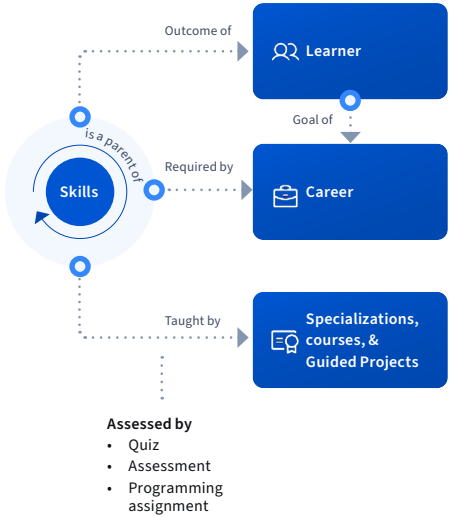
For the *Job Skills Report 2026*, we leverage the following parts of the Coursera Career Graph:

Skill to skill

- Describes the connections among skills
- Generates a skills taxonomy where broad, higher-level skills are parents of more granular, lower-level skills
- The granularities range from **level 1 (broadest) to level 3 (most specific)**

Skill to content

- Maps skills to the Coursera courses that teach them
- The skills in the Coursera Skills Taxonomy are mapped to the content that teaches them using a machine learning model trained on a dataset of instructor- and learner-labeled skill-to-content mappings
- The model considers features like occurrence counts in lecture transcripts, assignments, and course descriptions, as well as learner feedback



Calculating fastest-growing skills among enterprise learners

To determine the fastest-growing skills, enrollments are studied over two year-long periods:

Period	Dates	Label
Start period	October 1, 2023, through September 30, 2024	(1)
End period	October 1, 2024, through September 30, 2025	(2)

Skill inclusion criteria

- **Initial pool:** 2,600+ granularity 3 skills on Coursera's platform.
- **Skills considered:** We do not use a universal filter based on percentage enrollments unlike last year, so all skills are considered for analysis.
- **Scope:** The same set of skills (all granularity 3 skills) are considered in both the start and end periods.

Skill growth calculation methodology

For each period, each skill's popularity is measured by calculating its **share of Coursera enterprise learner enrollments in content that teaches the skill**. Growth is then calculated based on rank improvement:

- **Rank skills:** For each time period, rank each skill by its enrollment share in descending order (e.g., skill S is ranked 70th in the start period and 50th in the end period).
- **Compute rank improvement:** Calculate the "rank improvement" of skill S by comparing the start period rank and the end period rank.
  - *Example: Skill S rank improvement is 70−50=20.*
- **Identify fastest-growing:** Fastest-growing skills are the skills with the **largest rank improvement** (e.g., if skill S2 has a rank improvement of 25 ranks, it grew more than skill S1 that saw a rank improvement of 20 ranks).

The notion of whether a course teaches a skill is derived from the Coursera Career Graph, which was described earlier in this appendix.

Skill growth filter criteria

Our methodology balances current relevance with future growth by using a hybrid approach.

We first filter for current relevance by restricting our analysis to skills ranking within the **Top 50** in

absolute popularity based on enrollments during the most recent period. This ensures all reported skills have significant traction.

Next, we identify the most aggressive upward trends within this Top 50 by calculating the **largest positive improvement in rank** between the start and end periods of the study. This combined focus allows us to consistently **report on skills that are both currently relevant and demonstrate the most significant momentum in adoption and demand.**

Furthermore, this year's methodology filters out proprietary skills associated with a particular technology provider (ex. Google Gemini, ChatGPT, Amazon Web Services) to focus on durable, transferable competencies relevant to any professional. This restriction does not apply to the analysis of the most popular GenAI courses by enrollments and the most popular GenAI tools by enrollments in the GenAI section of this report.

Scope of fastest-growing skills data

The data is calculated for all enterprise learners, collectively providing insights into emerging skill trends:

- Employees accessing courses through their companies or public sector government agencies
- Job seekers accessing Coursera through the support of their government
- Students engaging via their universities

Skills Tracks curation

To ensure an accurate representation of skills pertaining to each Skills Track, a manual curation of courses pertaining to each Skills Track was used to identify candidate skills among which the fastest growing skills were then computed as described in the earlier section.

Endnotes

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14. Beyond The Buzz: Developing the AI Skills Employers Actually Need (Lightcast, 2025)
15. 2025 Stack Overflow Developer Survey (Stack Overflow, 2025)
16. The State of Generative AI in the Enterprise (Deloitte, 2025)
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28. 2025 Stack Overflow Developer Survey (Stack Overflow, 2025)
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30. Beyond The Buzz: Developing the AI Skills Employers Actually Need (Lightcast, 2025)
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32. Chief People Officers Outlook - September 2025 (World Economic Forum, 2025)

33. The state of AI in 2025: Agents, innovation, and transformation (McKinsey & Company, 2025)

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35. PwC's AI Agent Survey (PwC, 2025)

36. Beyond The Buzz: Developing the AI Skills Employers Actually Need (Lightcast, 2025)

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