Global Skills Report

Trusted skill insights for a rapidly changing world
I’m delighted to present the sixth annual Global Skills Report, which has become a trusted resource for leaders and institutions worldwide as they navigate the rapidly changing skills landscape. The report draws on data and insights from our global learning community—including over 148 million learners and 7,000 institutional customers—and content from 325 of the world’s leading university and industry partners.

The rise of generative AI (GenAI) underscores the pressing need for new and innovative strategies to build a competitive workforce. Jobs and industries stand on the cusp of profound transformation, with two-thirds of jobs exposed to some degree of automation and GenAI poised to deliver $4.4 trillion in productivity gains to the global economy. In response, businesses, governments, and higher education institutions must coordinate their efforts to equip people with critical skills.

The report captures several significant trends driven by GenAI, digital transformation, and automation. Notably, in 2023, a learner signed up for a GenAI course on Coursera every minute; by 2024, this rate had quadrupled. An astounding 1,060% year-over-year increase in global GenAI course enrollments highlights how learners are actively preparing for AI’s impact on their careers. Improved technical skill rankings in regions like Latin America and the Caribbean reinforce the global appetite for acquiring digital skills as a way to achieve greater economic mobility.

Several factors may influence a country’s skill ranking. To provide a holistic view, this edition of the report introduces an evolved skills ranking methodology that combines our skill proficiency data with leading economic indices on global innovation, labor force participation, human capital, and GDP per capita.

While skill rankings are crucial, they are not the sole indicators of advancement. There are several countries that have witnessed a surge in new learners coming online for the first time, including those with basic skills. It may reduce their ranking in the short term, but it signals major strides towards a digitized workforce. Institution-led initiatives are expected to boost the nations’ skills rankings as more individuals gain access to essential skills.

We trust this report will provide actionable insights for leaders, inspire collaboration among institutions, and contribute to a future where access to high-quality learning empowers everyone.

Jeff Maggioncalda
CEO, Coursera
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Executive summary

1 AI literacy emerges as a global imperative

The 2022 launch of ChatGPT ignited a global race toward AI literacy. GenAI course enrollments surged by 1,060% globally over the past year as learners sought foundational AI skills and enrolled in courses like “Prompt Engineering for ChatGPT” by Vanderbilt University and “Introduction to Generative AI” by Google Cloud.

Learners in regions like Latin America and the Caribbean are focusing more on foundational skills, while learners in North America are diving into more advanced courses like “Generative AI with Large Language Models” by Amazon Web Services and DeepLearning.AI. This suggests that while regions are at different stages of AI adoption, there’s a universal recognition of the need to develop AI proficiency.

→ Turn insight into action

Businesses
Understand regional AI skill readiness to build an AI-proficient global team.

Governments
Align AI training programs with regional skill needs to build an AI-ready workforce.

Higher education institutions
Tailor curricula to regional AI skill gaps to prepare students for the future of work.

Learners
Build AI skills applicable to your current or desired career path.

2 AI readiness initiatives drive emerging skill adoption across regions

The steep increase in GenAI course enrollments isn’t just a reflection of learner interest. It demonstrates the efforts of businesses, governments, and higher education institutions to prepare AI-ready economies. Across the globe, various AI initiatives are laying the foundation for skill development and innovation.

In North America, 72% of US CEOs say generative AI is a top investment priority, driving the rapid growth of the AI talent pool and increasing investments in employee AI training. Regions like Asia Pacific (1,270% YoY) and Sub-Saharan Africa (1,500% YoY) are also witnessing significant growth in GenAI course enrollments. Targeted government initiatives in countries such as India, Malaysia, and Thailand are setting the stage for AI training and adoption. India’s $1.2 billion investment in AI projects, Malaysia’s National AI Studies Centre, and Thailand’s AI infrastructure development program are just a few examples.

See a list of national initiatives in the appendix

→ Turn insight into action

Businesses
Prioritize AI training to equip employees with mission-critical skills to drive innovation and productivity.

Governments
Invest in regional and national AI infrastructure, research, and workforce development.

Higher education institutions
Upskill faculty and staff in AI to enhance productivity and leverage AI tools like Course Builder to create content.
Learners
Access AI training from universities, employers, and/or workforce agencies to boost productivity and stay competitive.

3 The digital skills gap persists in a rapidly evolving job market

More than 9 in 10 jobs now require at least some level of digital proficiency, such as using a computer to email and create documents. Despite this need, there’s still a big difference between what employers expect in terms of digital skills and what many workers actually know and can do.

Seventy percent of European businesses view the lack of digital skills as a major obstacle to investment, with 40% of adults lacking even basic digital skills. This challenge is not unique to the region. We found that learners in many regions are prioritizing human skills over the digital skills that are in high demand.

For instance, learners in Peru are more likely to focus on skills like culture and resilience, while those in Canada gravitate to storytelling and social media. While these skills are valuable, they do not align with the pressing need for advanced digital skills in domains like machine learning, data science, and programming languages. These are among the fastest-growing skills globally.

4 Cybersecurity skills remain crucial amid talent shortages and evolving threats

Cybersecurity plays a crucial role in building resilient digital infrastructure, especially with the challenges posed by emerging technologies like GenAI. Despite this, enrollment growth in cybersecurity skills falls behind high-growth areas like cloud computing and data science.

Worldwide, the gap between the number of needed and available skilled cybersecurity professionals rose by 12.6% year-over-year. This trend points to an urgent need for cybersecurity skill development, especially given the increasing frequency and sophistication of cyberattacks and the growing talent shortage. While cybersecurity enrollments have remained relatively stable in some regions, there are notable variations. In Europe, cybersecurity enrollments declined by 5% year-over-year, despite the region being heavily impacted by cyberattacks. Meanwhile, the Middle East and North Africa saw a 17% increase in cybersecurity enrollments, which could stem from increased government focus, like the creation of the Council of Ministers for Cybersecurity.

Turn insight into action

Businesses
Equip your team with cybersecurity skills to manage cyber risks and develop talent to fill skill gaps.

Governments
Foster public-private partnerships to boost cybersecurity awareness, fund skill development, and collaborate on threat management.

Higher education institutions
Integrate cutting-edge cybersecurity content into curricula to prepare students for in-demand cybersecurity careers.

Learners
Build and strengthen cybersecurity skills to prepare for an in-demand job or advance your existing career.
5 Micro-credentials are a rapid pathway for learners to prepare for in-demand jobs

Learners are increasingly turning to industry micro-credentials, including Professional Certificates, to gain digital skills for jobs. With 60% of workers requiring retraining by 2027, the need for accessible learning pathways is more pressing than ever.18

Coursera learners are enrolling in job-relevant Professional Certificates to prepare for in-demand roles, such as data analysts, project managers, and IT professionals. The most popular Professional Certificates align closely with the top target roles learners are pursuing, which also have the highest number of job openings.19

There was a 61% year-over-year growth in Professional Certificate enrollments in North America, with learners gravitating toward data analytics, cybersecurity, and project management. The Middle East and North Africa saw a 12% growth, indicating a need for increased access to learning resources and support to overcome barriers—such as underdeveloped digital infrastructure, lack of access and affordable connectivity, and inadequate regulatory and policy environments.

Turn insight into action

Businesses
Adapt hiring practices to recognize micro-credentials and prioritize developing skills in-house for data analytics, cybersecurity, and project management.

Governments
Invest in micro-credential programs to keep your workforce competitive, and focus on increasing access to learning in regions with slower growth.

Higher education institutions
Recognize or integrate micro-credentials for credit within your curriculum to help meet evolving student and market needs.

Learners
Pursue micro-credentials to gain practical skills for in-demand digital roles.

6 The global gender gap in online learning continues to narrow, but regional disparities persist

More women globally have been learning on Coursera, up from 43% in 2022 to 46% in 2023. In North America and Europe, women experience strong barriers to equitable education and careers—yet, with a gender gap of five percentage points, far fewer than almost anywhere else.20 In the European Union, for example, more women aged 16–44 have basic digital skills than men,21 despite only 18% of information and communication technology (ICT) specialists being women.

Mexico and Colombia have achieved gender parity in online learning, with women making up 51% and 50% of learners, respectively. This is supported by programs like Mexico’s NiñaSTEM Pueden—a joint initiative by the Organization for Economic Co-operation and Development (OECD) and the Government of Mexico22 to increase careers for women in STEM—and Colombia’s efforts to close the digital gender gap.

The Middle East and North Africa has the largest disparity, with a 13-percentage-point difference between women learners and women in the general population. In Saudi Arabia, women represent just 32% of learners yet make up 42% of the general population. Technological, economic, and educational barriers are limiting women’s access to education.23

Sub-Saharan Africa has a 14-percentage-point gap, with Botswana being a bright spot, achieving gender parity in online learning. The gap could be due to socioeconomic challenges, cultural norms, poor internet access, and the general unaffordability of data and devices.24 Botswana’s success is likely a result of progressive initiatives, such as SmartBots and GIGA, which connect schools to high-speed internet to strengthen access to online learning.25
The Asia Pacific region has a seven-percentage-point gap in gender parity. The Philippines and Thailand have achieved parity, likely due to effective educational reforms and STEM initiatives for girls and young women. Thailand’s Girls in ICT program builds awareness about the digital divide, supports technology education and skills training, and encourages women to pursue careers in STEM. India is working toward closing its 12-percentage-point gap, despite sociocultural barriers and access issues.

7 Different regions prioritize different skills, but the majority focus on emerging or foundational capabilities

In Europe and parts of Asia Pacific, learners tend to focus on skills related to emerging technologies—such as FinTech, machine learning algorithms, and artificial neural networks—as well as human skills like resilience and culture building. In Singapore, for example, learners are pursuing skills in epidemiology, FinTech, and blockchain, alongside roles like software developer and machine learning engineer. However, this does not diminish the value of foundational skills, which are equally important for a well-rounded skill set. In regions like Sub-Saharan Africa and other parts of Asia Pacific, learners are building foundational business and digital capabilities, such as risk management, supply chain systems, business communication, auditing, spreadsheet software, and general accounting. These skills form the bedrock of many industries and are crucial for economic development.

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Popular target roles in these regions include supply chain and logistics, entrepreneurship, personal financial advisor, and product marketing manager.

Businesses
Invest in initiatives that support women’s professional development and advancement in diverse roles.

Governments
Develop policies and initiatives that promote women’s access to online learning and address regional barriers.

Higher education institutions
Enhance curricula to align with high-earning careers for women; promote the associated salaries, economic opportunities, and job flexibility.

Learners
Use online learning resources and support from institutions to build skills and advance their careers.

→ Turn insight into action

Businesses
Use regional skill trends to guide talent recruitment, development, and retention. Tailor training programs to progress skill-set journeys in different regions, acknowledging the value of both foundational and emerging skills.

Governments
Apply these insights to your policy-making and invest in initiatives that strengthen foundational capabilities and support emerging skill development, recognizing that both impact economic growth and competitiveness.

Higher education institutions
Use these trends to guide curriculum and program enhancements. Offer courses that cater to foundational business and digital skills or skills in emerging technologies, ensuring balanced skill development.

Learners
Continue to prioritize skills aligned to in-demand careers in your region, while also exploring opportunities to develop a rounded skill set that blends foundational and emerging skills.
How to read this report

The *Global Skills Report* presents a comprehensive view of skill and credential trends at a country, regional, and global level by drawing on insights from over 148M learners.

Coursera’s skills taxonomy

Skills in Coursera’s taxonomy fall into three cascading levels: from broad to granular, they include “domains,” “competencies,” and “skills.” We use “skills” to describe all three categories in the foreword and executive summary. And in the regional and country spotlights, we use “top skills” to refer to the third level illustrated here.

**Domains** are the broadest skill categories and include business, technology, and data science. These are the only three domains featured in the report. Respective competencies and skills fall under one of these domains.

**Competencies** are more granular skills tied to a respective domain. For instance, “accounting” or “communication” are competencies in the “business” domain.

**Skills** are the most granular skills that are covered in this report and ladder directly up to competencies.

<Skills taxonomy example>

- **Domain**: Business, Technology, Data science
- **Competency**: Accounting, Communication, Cloud computing, Statistical programming
- **Skills**: Auditing, Writing, Software as a service, Python

Explore the methodology for the complete list of skills featured in this report
How to read skill rankings

The global and regional skill rankings represent how learners across countries perform in the business, technology, and data science domains. To provide a more comprehensive picture of skill proficiency in a country, this year's skill ranking methodology combines both learner skill proficiency on Coursera and third-party indicators illustrated below.

This formula aims to provide a more representative picture of skill proficiency across countries. We invite our readers to interpret these findings thoughtfully and consider them as a starting point for further exploration and action.

A country's overall rank (1-109) represents the aggregate performance of a country across all domains, and the individual domain performance is represented as a percentile (0-100%). See the table below for an example.

<table>
<thead>
<tr>
<th>Regional rank</th>
<th>Global rank</th>
<th>Country</th>
<th>Business</th>
<th>Technology</th>
<th>Data science</th>
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<td>91%</td>
<td>87%</td>
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<td>3</td>
<td>13</td>
<td>Hong Kong</td>
<td>88%</td>
<td>83%</td>
<td>91%</td>
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How to read enrollment trends

The report also features enrollment trends on the Coursera platform that capture which competencies, skills, or top target roles learners are engaging with over time. Enrollment trends are presented at global, regional, and country levels and are presented in three ways:

- Year-over-year (YoY) enrollment growth measures cybersecurity, GenAI, and Professional Certificate enrollment growth year-over-year. Timeframes for YoY enrollment may vary.

Top skills and target roles use an over-indexing methodology to capture what learners in a specific country or region are disproportionately enrolling in compared to learners globally.

Most popular content highlights the most enrolled-in courses, Guided Projects, and Professional Certificates in the past year.

How to interpret recommended content by country

This year's country spotlights also introduce recommended content that aligns to a country's top skills and top target roles. These are customized recommendations vetted by Coursera's curation experts. Consider them a starting point for identifying which content you may want to include in a learning program.
Global Skill Trends

“Learning can be transformational. You learn for a better life or a better job.”

Amanda Brophy
Director, Grow with Google

2024 Job Skills Report webinar
Global overview

Global averages
These figures reflect the averaged data for the 109 countries covered in this report.

148M+ Coursera learners
33 Median age
↑1,060% GenAI course enrollment growth

46% Women learners
45% Learning on mobile
↑69% Professional Certificate enrollment growth
Global skill ranking categories

**Cutting-edge**
Rankings 1–28

Where they are
Europe, parts of Asia Pacific, and Latin America

- 84% Average skill proficiency percentile on Coursera
- 48.32 Average Global Innovation Index score
- $42,788 Average GDP per capita
- .73 Average Human Capital Index

**Competitive**
Rankings 29–55

Where they are
Primarily Europe, Latin America, and parts of Asia Pacific, though also countries like Turkey and United Arab Emirates

- 59% Average skill proficiency percentile on Coursera
- 36.7 Average Global Innovation Index score
- $23,918 Average GDP per capita
- .66 Average Human Capital Index

**Emerging**
Rankings 56–82

Where they are
North America and parts of Asia Pacific, Europe, and the Middle East and North Africa

- 39% Average skill proficiency percentile on Coursera
- 30.1 Average Global Innovation Index score
- $18,740 Average GDP per capita
- .57 Average Human Capital Index

**Lagging**
Rankings 83–109

Where they are
Primarily Asia Pacific, the Middle East and North Africa, and Sub-Saharan Africa

- 18% Average skill proficiency percentile on Coursera
- 21.9 Average Global Innovation Index score
- $4,636 Average GDP per capita
- .48 Average Human Capital Index

Global skills rankings are calculated using a 50/50 blend of Coursera skill proficiency and third-party data.
Global skill rankings

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Global skill proficiency rankings across business, technology, and data science for 109 countries, based on the performance of learners on Coursera and key economic indices.
Top 20: Online learners as a percentage of labor force

In this year’s report, we spotlight the countries that are actively training the highest percentage of their labor force on Coursera and investing in their populations to provide the skills employers need.

The table on this page ranks the top 20 countries globally based on the percentage of their labor force active on Coursera. By investing in accessible, job-relevant learning, these digital champions are not only driving economic growth and competitiveness, but also creating opportunities for individuals to adapt and succeed in the face of change.

© Active learners are those who have started at least one course item on Coursera within the past year.
Regional Skill Trends

"AI is coming to your job; it’s not coming for your job."

Elisa Graceffo
General Manager of Technical Content,
Worldwide Learning at Microsoft

Unlocking Productivity: The Business Leader’s Playbook to Generative AI Skills Training
In the Asia Pacific (APAC) region, with 49.2 million learners representing 3.9% of the working population, leads in digital literacy. A 1,270% year-over-year increase in GenAI course enrollments reflects the region’s commitment to tech proficiency. Countries like India showcase a young, mobile-first learning demographic, with a growing number of women engaging in technical upskilling.

See page 19 for country skill rankings in Asia Pacific.
Asia Pacific

Regional enrollment trends

APAC CEOs are accelerating AI investment, driving growth in AI and cybersecurity course enrollments on Coursera. Despite this momentum, the region faces the challenge of digitally skilling 5.7 billion people by 2025.

Some countries, like Bangladesh, Myanmar, and the Philippines, have noticeable gaps in tech and data science skills. Coursera collaborates with local institutions to create tailored programs that address these gaps.

For instance, IMS Ghaziabad incorporated micro-credentials into their curricula well before the National Education Policy (NEP 2020) emphasized skill development. Differentiated learning experiences that strengthen academic excellence will be critical to preparing more students for a rapidly changing workforce.

Industry micro-credentials, such as Professional Certificates, offer pathways for businesses, governments, and educational institutions to equip the workforce with essential tech skills.

Top skills
1. HTML and CSS
2. Blockchain
3. Data Visualization Software
4. Applied Machine Learning
5. Machine Learning Algorithms
6. Regression
7. Software Architecture
8. Artificial Neural Networks
9. Network Architecture
10. Data Analysis Software

Top target roles
1. Marketing Associate
2. Web Developer
3. Computer Systems Engineer
4. Database Administrator
5. Engineering Manager
6. Business Analyst
7. Network Engineer
8. Data Engineer
9. SEO Specialist
10. Market Research Analyst

Most popular content in Asia Pacific

<table>
<thead>
<tr>
<th>Content Title</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tableau Public for Project Management and Beyond</td>
<td>Tableau</td>
</tr>
<tr>
<td>Foundations: Data, Data, Everywhere</td>
<td>Google</td>
</tr>
<tr>
<td>Small Business Marketing Using YouTube</td>
<td>Coursera</td>
</tr>
<tr>
<td>Foundations of Cybersecurity</td>
<td>Google</td>
</tr>
<tr>
<td>Foundations of Project Management</td>
<td>Google</td>
</tr>
<tr>
<td>Introduction to Microsoft Excel</td>
<td>Coursera</td>
</tr>
<tr>
<td>Foundations of Digital Marketing and E-commerce</td>
<td>Google</td>
</tr>
<tr>
<td>Financial Markets</td>
<td>Yale</td>
</tr>
<tr>
<td>Supervised Machine Learning: Regression and Classification</td>
<td>S</td>
</tr>
<tr>
<td>AI for Everyone</td>
<td>Coursera</td>
</tr>
</tbody>
</table>

Methodology snapshot

To identify top skills and target roles, we use an over-indexing methodology. Over-indexing means that learners in a specific country or region are disproportionately enrolling in a given skill compared to learners globally.
Online education with a blended learning model is going to be the most effective going forward. This is the actual coming-of-age of higher education.

Dr. Fr. Sebastian George, S J
Director at XLRI, Delhi-NCR

CampusTalks with XLRI:
Learning beyond curriculum
### Asia Pacific

#### Regional skill rankings

<table>
<thead>
<tr>
<th>Regional rank</th>
<th>Global rank</th>
<th>Country</th>
<th>Business</th>
<th>Technology</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>Japan</td>
<td>96%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>Singapore</td>
<td>91%</td>
<td>91%</td>
<td>87%</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>Hong Kong</td>
<td>88%</td>
<td>83%</td>
<td>91%</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>South Korea</td>
<td>76%</td>
<td>78%</td>
<td>93%</td>
</tr>
<tr>
<td>5</td>
<td>32</td>
<td>Kazakhstan</td>
<td>73%</td>
<td>90%</td>
<td>46%</td>
</tr>
<tr>
<td>6</td>
<td>36</td>
<td>China</td>
<td>71%</td>
<td>54%</td>
<td>77%</td>
</tr>
<tr>
<td>7</td>
<td>40</td>
<td>New Zealand</td>
<td>56%</td>
<td>61%</td>
<td>76%</td>
</tr>
<tr>
<td>8</td>
<td>41</td>
<td>Indonesia</td>
<td>25%</td>
<td>69%</td>
<td>82%</td>
</tr>
<tr>
<td>9</td>
<td>47</td>
<td>Taiwan</td>
<td>50%</td>
<td>43%</td>
<td>72%</td>
</tr>
<tr>
<td>10</td>
<td>54</td>
<td>Vietnam</td>
<td>58%</td>
<td>58%</td>
<td>48%</td>
</tr>
<tr>
<td>11</td>
<td>55</td>
<td>Australia</td>
<td>49%</td>
<td>56%</td>
<td>61%</td>
</tr>
<tr>
<td>12</td>
<td>79</td>
<td>Malaysia</td>
<td>30%</td>
<td>28%</td>
<td>33%</td>
</tr>
<tr>
<td>13</td>
<td>80</td>
<td>Cambodia</td>
<td>32%</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>14</td>
<td>81</td>
<td>Thailand</td>
<td>31%</td>
<td>23%</td>
<td>29%</td>
</tr>
<tr>
<td>15</td>
<td>84</td>
<td>Pakistan</td>
<td>24%</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>16</td>
<td>86</td>
<td>Sri Lanka</td>
<td>6%</td>
<td>34%</td>
<td>35%</td>
</tr>
<tr>
<td>17</td>
<td>87</td>
<td>India</td>
<td>11%</td>
<td>33%</td>
<td>30%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regional rank</th>
<th>Global rank</th>
<th>Country</th>
<th>Business</th>
<th>Technology</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>89</td>
<td>Bhutan</td>
<td>9%</td>
<td>31%</td>
<td>26%</td>
</tr>
<tr>
<td>19</td>
<td>94</td>
<td>Bangladesh</td>
<td>22%</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>20</td>
<td>101</td>
<td>Philippines</td>
<td>17%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>21</td>
<td>103</td>
<td>Myanmar</td>
<td>8%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>22</td>
<td>106</td>
<td>Uzbekistan</td>
<td>4%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>23</td>
<td>108</td>
<td>Nepal</td>
<td>1%</td>
<td>2%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Continuous learning is the key enabler to retaining and developing talent.

Sumegha Lazarus  
SGM & Head, Content and Digital Learning, Reliance Industries Limited

Skills Development:  
How Coursera Can Upskill Employees
India

India’s 1,648% increase in GenAI course enrollments reflects deep engagement with cutting-edge technology. This aligns with the government’s $1.2 billion investment in AI. Learners focus on programming languages and applied machine learning to prepare for technical roles, like web developer, software developer, and machine learning engineer.

India is attracting more new learners, which may impact its skill rankings compared to previous years. While enrollments in Professional Certificates remained static year-over-year, an 8% increase in Specialization enrollments year-over-year signals interest in a wide range of content. Despite sociocultural barriers and access issues, India is making significant strides toward closing its skill gaps and building a competitive workforce.

Domain rankings

<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>98</td>
<td>74</td>
<td>77</td>
<td></td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

1,648% YoY enrollments

Top courses

- Prompt Engineering for ChatGPT
- Introduction to Generative AI
- Generative AI with Large Language Models

Professional Certificates

<table>
<thead>
<tr>
<th></th>
<th>YoY enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>static</td>
<td></td>
</tr>
</tbody>
</table>

Top Professional Certificates

- Cybersecurity
- Data Analytics
- Project Management

Top skills

1. HTML and CSS
2. Applied Machine Learning
3. Python Programming
4. Regression
5. Machine Learning Algorithms
6. Blockchain
7. Distributed Computing Architecture
8. Programming Principles
9. Algorithms
10. Software Architecture

Top target roles

1. Web Developer
2. Network Engineer
3. Cloud Security Engineer
4. Software Developer
5. Machine Learning Engineer
6. Securities & Commodities Trader
7. Data Engineer
8. Database Administrator
9. Marketing Associate
10. Data Analyst

Recommended content for top skills and roles

- Introduction to HTML, CSS, & JavaScript
- Blockchain and Cryptography Overview
- Bayesian Statistics: From Concept to Data Analysis
- Creative Programming for Digital Media & Mobile Apps
- Full Stack Developer
- Network Engineering

India’s 1,648% increase in GenAI course enrollments reflects deep engagement with cutting-edge technology. This aligns with the government’s $1.2 billion investment in AI. Learners focus on programming languages and applied machine learning to prepare for technical roles, like web developer, software developer, and machine learning engineer.

India is attracting more new learners, which may impact its skill rankings compared to previous years. While enrollments in Professional Certificates remained static year-over-year, an 8% increase in Specialization enrollments year-over-year signals interest in a wide range of content. Despite sociocultural barriers and access issues, India is making significant strides toward closing its skill gaps and building a competitive workforce.
Indonesia’s 116% year-over-year increase in Professional Certificate enrollments shows a focus on industry-aligned skill development. AI and big data are projected to account for over 40% of technology training programs in the next five years, supporting Indonesia’s strategy to become a key player in Southeast Asia’s tech economy.  

<table>
<thead>
<tr>
<th>Country spotlight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indonesia</strong></td>
</tr>
</tbody>
</table>

**1.8M** Coursera learners

- **41 Global rank**
- **29 Median age**
- **46% Women learners**
- **33% Women learners in STEM**
- **46% Learning on mobile**

**Enrollment trends**

**GenAI**

- **1,158% YoY enrollments**

**Top courses**

- [Google](#) Dasar-Dasar Dukungan Teknis
- [Seluk Beluk Jaringan Komputer](#)
- [Analisis Data dengan Pemrograman R](#)

**Professional Certificates**

- **116% YoY enrollments**

**Top Professional Certificates**

- [Google](#) Analitik Data
- [Google](#) Project Management
- [Google](#) IT Automation with Python

**Domain rankings**

- **83 Business**
- **35 Tech**
- **21 Data science**

**Top skills**

1. Artificial Neural Networks
2. Applied Machine Learning
3. Computer Graphic Techniques
4. Blockchain
5. Machine Learning Algorithms
6. Computer Vision
7. Deep Learning
8. Audit
9. Network Architecture
10. Spreadsheet Software

**Top target roles**

1. Cloud Security Engineer
2. Network Engineer
3. Operations Manager
4. Product Marketing Manager
5. Personal Financial Advisor
6. Contract Administrator
7. IT Project Manager
8. Project Manager
9. Web Developer
10. General Manager

**Recommended content for top skills and roles**

- [AI for Everyone](#)
- [Introduction to Computer Vision](#)
- [Auditing I: Conceptual Foundations of Auditing](#)
- [Blockchain and Cryptography Overview](#)
- [Neural Networks and Random Forests](#)

- [Foundations of Machine Learning](#)
- [Machine Learning: Regression](#)
- [Introducing Security: Aligning Asset and Risk Management](#)
- [Network Engineering](#)
- [IT Support](#)
Country spotlight

Malaysia

Malaysia’s 97% year-over-year increase in Professional Certificate enrollments highlights the country’s drive to boost digital skills. The launch of the national AI Studies Centre emphasizes tech education to prepare the workforce for AI and ML opportunities. Learners focus on SQL, FinTech, blockchain, and business analytics in response to the growing demand for tech professionals.

<table>
<thead>
<tr>
<th>Domain rankings</th>
<th>Top target roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>1. General Manager</td>
</tr>
<tr>
<td>79</td>
<td>2. IT Director</td>
</tr>
<tr>
<td>74</td>
<td>3. Business Analyst</td>
</tr>
<tr>
<td>Business</td>
<td>4. Operations and Maintenance Specialist</td>
</tr>
<tr>
<td>Tech</td>
<td>5. Personal Financial Advisor</td>
</tr>
<tr>
<td>Data science</td>
<td>6. Operations Manager</td>
</tr>
<tr>
<td>Enrollment trends</td>
<td>7. Systems Analyst</td>
</tr>
<tr>
<td>GenAI</td>
<td>8. Auditor</td>
</tr>
<tr>
<td>🔺806% YoY enrollments</td>
<td>9. Product Manager</td>
</tr>
<tr>
<td>Top courses</td>
<td>10. Financial Analyst</td>
</tr>
<tr>
<td>Google Cloud</td>
<td>Concepts in SQL</td>
</tr>
<tr>
<td>Introduction to Generative AI</td>
<td>Appyling Data Analytics in Finance</td>
</tr>
<tr>
<td>Prompt Engineering for ChatGPT</td>
<td>Introduction to Market Research</td>
</tr>
<tr>
<td>Generative AI with Large Language Models</td>
<td>Business English for Cross-cultural Communication</td>
</tr>
<tr>
<td>Digital Marketing &amp; E-commerce</td>
<td>IT Project Manager</td>
</tr>
<tr>
<td>Top Professional Certificates</td>
<td>Portfolio and Risk Management</td>
</tr>
<tr>
<td>Professional Certificate</td>
<td>Python with Power BI</td>
</tr>
<tr>
<td>Professional Certificate</td>
<td>Business Intelligence Analyst</td>
</tr>
<tr>
<td>Professional Certificate</td>
<td>Data Analytics</td>
</tr>
<tr>
<td>Professional Certificate</td>
<td>Supply Chain Optimization</td>
</tr>
<tr>
<td>Professional Certificate</td>
<td>Advertising and Society</td>
</tr>
</tbody>
</table>

Recommended content for top skills and roles

- Concepts in SQL
- Applying Data Analytics in Finance
- Introduction to Market Research
- Business English for Cross-cultural Communication
- IT Project Manager
- Portfolio and Risk Management
- Python with Power BI
- Business Intelligence Analyst
- Data Analytics
- Supply Chain Optimization
- Advertising and Society
- Portfolio and Risk Management
Country spotlight

The Philippines

2.4M
Coursera learners

285
Top skills
1. Audit
2. Spreadsheet Software
3. Graphic Design
4. Storytelling
5. Social Media
6. General Accounting
7. Advertising
8. Business Communication
9. Influencing
10. Market Research

Top target roles
1. Personal Financial Advisor
2. Product Marketing Manager
3. Operations Manager
4. General Manager
5. IT Director
6. IT Project Manager
7. Project Manager
8. Business Analyst
9. Operations & Maintenance Specialist
10. Marketing Specialist

In the Philippines, learners pursue skills in auditing and digital marketing, enhancing both business acumen and technical proficiency. With women representing over half of learners, there’s a move toward gender inclusivity in tech education. Plus, a 79% rise in Professional Certificate enrollments demonstrates a dedication to upskilling for the digital future.

Top courses
- Introduction to Generative AI
- Prompt Engineering for ChatGPT
- Generative AI for Everyone

Recommended content for top skills and roles

Top Professional Certificates
- Data Analytics
- Project Management
- Digital Marketing & E-commerce

Professional Certificates
- Auditing I: Conceptual Foundations of Auditing
- Fundamentals of Graphic Design
- Storytelling and Influencing: Communicate with Impact
- Social Media and Social Content Strategy
- Marketing in a Digital World

Top courses
- Financial Accounting: Advanced Topics
- Introduction to Market Research
- Communication in the 21st Century Workplace
- Social Media Marketing
- Project Management

Domain rankings

<table>
<thead>
<tr>
<th>Domain</th>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global rank</td>
<td>91</td>
<td>103</td>
<td>101</td>
</tr>
<tr>
<td>Median age</td>
<td>31</td>
<td>36</td>
<td>43</td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

642% YoY enrollments

Professional Certificates

79% YoY enrollments

Digital Marketing & E-commerce Professional Certificate
- Introduction to Generative AI
- Prompt Engineering for ChatGPT
- Generative AI for Everyone

Top courses
- Auditing I: Conceptual Foundations of Auditing
- Fundamentals of Graphic Design
- Storytelling and Influencing: Communicate with Impact
- Social Media and Social Content Strategy
- Marketing in a Digital World
Country spotlight

Singapore

1.1M
Coursera learners

45%
Women learners

Global rank
12

Median age
34

Learning on mobile
31%
Women learners in STEM
36%

Singapore’s focus on future-oriented skills, like blockchain and machine learning, aligns with its strategy to maintain its position as a global learning hub. The SkillsFuture credits program reflects Singapore’s commitment to lifelong learning, ensuring the workforce remains adaptable and competitive.

Domain rankings

<table>
<thead>
<tr>
<th>Domain</th>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rankings</td>
<td>11</td>
<td>11</td>
<td>15</td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI
815% YoY enrollments

Top courses

- Introduction to Generative AI
- Prompt Engineering for ChatGPT
- Generative AI with Large Language Models

Professional Certificates

57% YoY enrollments

Top Professional Certificates

- Google Data Analytics
- Google Project Management
- Google Cybersecurity

Top skills

1. Epidemiology
2. FinTech
3. Resilience
4. Blockchain
5. Investment Management
6. Bayesian Statistics
7. Machine Learning Algorithms
8. Artificial Neural Networks
9. Applied Machine Learning
10. Risk Management

Top target roles

1. Software Developer
2. Machine Learning Engineer
3. Bookkeeper
4. Securities & Commodities Trader
5. Auditor
6. Network Engineer
7. Data Analyst
8. Business Analyst
9. Product Manager
10. Risk Analyst

Recommended content for top skills and roles

- Essential Epidemiologic Tools for Public Health Practice
- FinTech Foundations and Overview
- Introduction to Blockchain for Financial Services
- Investment Strategies and Portfolio Analysis
- Bayesian Statistics: From Concept to Data Analysis
- Neural Networks and Random Forests
- Machine Learning: Regression
- Introduction to Risk Management
- Business Intelligence (BI) Analyst
Country spotlight

**Thailand**

941k
Coursea learners

81
Global rank

32
Median age

50%
Women learners

32%
Women learners in STEM

46%
Learning on mobile

Thailand’s 311% year-over-year increase in Professional Certificate enrollments highlights a push toward digital fluency and tech innovation. Thai learners are diversifying their skills—from SQL to business communication and FinTech—to meet the evolving global job market demands. Meanwhile, the AI Thailand initiative aims to spur economic growth and competitiveness through AI development.42

**Domain rankings**

<table>
<thead>
<tr>
<th>76</th>
<th>85</th>
<th>67</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Tech</td>
<td>Data science</td>
</tr>
</tbody>
</table>

**Enrollment trends**

GenAI

↑1,073% YoY enrollments

**Top courses**

- Generative AI for Everyone
- Introduction to Generative AI
- Prompt Engineering for ChatGPT

**Professional Certificates**

↑311% YoY enrollments

**Top Professional Certificates**

1. Data Analytics
2. Project Management
3. UX Design

**Top skills**

1. Culture
2. SQL
3. Writing
4. Business Communication
5. Brand Management
6. FinTech
7. Spreadsheet Software
8. Human Learning
9. Advertising
10. Experiment

**Top target roles**

1. Media Buyer
2. Social Media Marketer
3. Public Relations Manager
4. Communications Specialist
5. Personal Financial Advisor
6. Product Marketing Manager
7. Bookkeeper
8. Financial Manager
9. Data Analyst
10. IT Director

**Recommended content for top skills and roles**

- Cultural intelligence: Become a global citizen
- Communication Strategies for a Virtual Age
- English for Effective Business Writing
- Learning Mindsets & Skills
- SQL for Software Developers
- The Power of Team Culture
- FinTech Foundations and Overview
- Social Media Marketing
- From Brand to Image: Creating High Impact Campaigns That Tell Brand Stories
- Bookkeeper
Learners in Europe demonstrate strong overall skill proficiency, with 19 of the top 25 countries globally originating from the region. Despite a 4.56% year-over-year decline in cybersecurity enrollments, Europe witnessed a 775% increase in GenAI course enrollments, reflecting a growing interest in emerging technologies. The region is nearing gender parity in online learning, with 46% of learners being women. Furthermore, 38% of learners in Europe are learning on mobile, highlighting a shift toward accessible and flexible learning solutions.

See page 29 for country skill rankings in Europe.
Europe

Regional enrollment trends

Europe’s commitment to safeguarding AI is evident in the AI Act, the world’s first-ever comprehensive AI legal framework. This aligns with the region’s ambitious targets for the Digital Decade, which aims to accelerate progress in skills, government, infrastructure, and business. However, the Digital Economy and Society Index (DESI) reveals that four out of 10 adults and every third person who works in Europe lack basic digital skills, with over 70% of businesses citing this as an obstacle to investment.

While countries like Switzerland, Germany, and the Netherlands demonstrate cutting-edge proficiency across business, technology, and data science domains, others like Romania, Georgia, and Azerbaijan have room for improvement, particularly in technology skills. To address this, the European Commission aims to reach 80% of EU adults with at least basic digital skills and 20 million ICT specialists—especially women—employed across the EU by 2030.

Coursera’s partnerships with institutions like the University of Szeged, whose students have access to all Professional Certificates, demonstrate the collaborative effort needed to bridge the digital skills gap.

Top skills
1. FinTech
2. Resilience
3. Culture
4. Epidemiology
5. Human Learning
6. Machine Learning Algorithms
7. Artificial Neural Networks
8. Applied Machine Learning
9. Regression
10. Bioinformatics

Top target roles
1. Treasurer
2. Securities & Commodities Trader
3. Machine Learning Engineer
4. Software Developer
5. Personal Financial Advisor
6. Operations Manager
7. Network Engineer
8. Financial Analyst
9. Budget Analyst
10. Web Developer

Methodology snapshot
To identify top skills and target roles, we use an over-indexing methodology. Over-indexing means that learners in a specific country or region are disproportionately enrolling in a given skill compared to learners globally.

Most popular content in Europe
- Foundations: Data, Data, Everywhere
- Foundations of Project Management
- The Science of Well-Being
- Learning How to Learn: Powerful mental tools to help you master tough subjects
- Ai for Everyone
- Financial Markets
- Foundations of Cybersecurity
- Supervised Machine Learning: Regression and Classification
- Foundations of User Experience (UX) Design
- English for Career Development
Generative AI (GenAI) is transforming the skill requirements for employees in telecoms. Today, employees must possess the ability to work collaboratively with AI systems, leverage automation tools, and interpret vast amounts of data to drive informed decision-making.

Julia Ewen-Hoffman
Head of Learning & Development, Deutsche Telekom AG
Regional skill rankings

<table>
<thead>
<tr>
<th>Regional rank</th>
<th>Global rank</th>
<th>Country</th>
<th>Business</th>
<th>Technology</th>
<th>Data Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Switzerland</td>
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<td>Romania</td>
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<td>47%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Learning is no longer an afterthought—it now informs how we solve business challenges, strategize and approach new projects.

Cyril de Avellar
Learning & Development Manager, People & Culture, Ingka Group

Ingka Group offers new online learning program through Coursera
Country spotlight

France

1.9M
Coursea learners

43%
Women learners

5
Global rank

35
Median age

33%
Women learners in STEM

37%
Learning on mobile

Enrollment trends
GenAI
↑783% YoY enrollments

Top courses
Generative AI with Large Language Models
Prompt Engineering for ChatGPT
Generative AI for Everyone

Top Professional Certificates
Google Data Analytics
Google UX Design
Google Project Management

Top skills
1. Resilience
2. Culture
3. Collaboration
4. Emotional Intelligence
5. Conflict Management
6. People Development
7. Investment Management
8. FinTech
9. Change Management
10. Planning

Top target roles
1. Operations Manager
2. Bookkeeper
3. Securities & Commodities Trader
4. IT Project Manager
5. Project Manager
6. Personal Financial Advisor
7. Budget Analyst
8. Contract Administrator
9. Systems Analyst
10. Auditor

Recommended content for top skills and roles

Learners in France demonstrate an aptitude for business skills, with a focus on developing leadership capabilities, resilience, and emotional intelligence. France proves its commitment to AI readiness with a 783% increase in GenAI course enrollments year-over-year. This aligns with the 85% of organizations that say they’re investing in employee training to maximize the potential of AI technologies. 37
Country spotlight

Germany

Learners in Germany rank third globally for overall skill proficiency—over-indexing in tech skills like artificial neural networks, applied machine learning, and deep learning. As Germany grapples with a labor gap, investing in these skills will be critical for maintaining economic growth.48

German learners demonstrate cutting-edge proficiency across all domains, particularly in data science and technology. However, their year-over-year increase in GenAI enrollments is lower than countries like Spain, France, and the UK. Industry micro-credentials could play a key role in upskilling, especially given that 81% of students in Germany agree that obtaining Professional Certificates would enhance their job prospects.49

Domain rankings

<table>
<thead>
<tr>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>5</td>
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</tbody>
</table>

Enrollment trends

GenAI

662% YoY enrollments

Top courses

- Generative AI with Large Language Models
- Prompt Engineering for ChatGPT
- Generative AI for Everyone

Professional Certificates

39% YoY enrollments

Top Professional Certificates

- Google: Project Management
- Google: Data Analytics
- Google: Cybersecurity

Top skills

1. Artificial Neural Networks
2. Applied Machine Learning
3. Machine Learning Algorithms
4. Regression
5. Linear Algebra
6. Python Programming
7. Epidemiology
8. Distributed Computing Architecture
9. Deep Learning
10. Network Architecture

Top target roles

1. Network Engineer
2. Web Developer
3. Software Developer
4. Machine Learning Engineer
5. Securities & Commodities Trader
6. Cloud Security Engineer
7. Bookkeeper
8. Computer Systems Engineer
9. Engineering Manager
10. Data Engineer

Recommended content for top skills and roles

Neural Networks and Deep Learning
Managing Machine Learning Projects
AI for Everyone
Python Data Structures
Machine Learning: Regression
Algebra and Differential Calculus for Data Science
Essential Epidemiologic Tools for Public Health Practice
Machine/Deep Learning for Mining Quality Prediction Enhanced
Network Engineering
Front-End Developer
Country spotlight
Spain

Ranking seventh for skill proficiency globally, learners in Spain excel in technology and data science. A 962% year-over-year increase in GenAI course enrollments—the highest in Europe—reflects Spain’s commitment to AI readiness, with 85% of organizations investing in employee training to maximize the potential of AI technologies.50

Spain’s National Artificial Intelligence Strategy aims to attract top AI talent. While only 64% of the population is projected to have basic digital skills by 2030, Spain’s strong performance in technology and high GenAI enrollments suggest ambitions to surpass this projection.51

Domain rankings

<table>
<thead>
<tr>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

↑962% YoY enrollments

Top courses

- Prompt Engineering for ChatGPT
- Generative AI with Large Language Models
- Generative AI for Everyone

Professional Certificates

- Cultural intelligence: Become a global citizen
- Adaptable and Resilient
- Introducción a la ciencia de datos aplicada
- Introducción a Data Science: Programación Estadística con R
- Advanced Programming in Swift

Top skills

1. Culture
2. Calculus
3. Adaptability
4. C Programming Language Family
5. Bioinformatics
6. Other Programming Languages
7. People Analysis
8. Graphic Design
9. Distributed Computing Architecture
10. Negotiation

Top target roles

1. Communications Specialist
2. Budget Analyst
3. Public Relations Manager
4. Advertising Manager
5. Bookkeeper
6. Machine Learning Engineer
7. Cloud Security Engineer
8. Operations Manager
9. Product Marketing Manager
10. Securities & Commodities Trader

Recommended content for top skills and roles

- Cultural intelligence: Become a global citizen
- Adaptable and Resilient
- Introducción a la ciencia de datos aplicada
- Introducción a Data Science: Programación Estadística con R
- Advanced Programming in Swift

- Java Programming: Solving Problems with Software
- Biology Meets Programming: Bioinformatics for Beginners
- Successful Negotiation: Essential Strategies and Skills
- Cybersecurity
- Career Coach and Navigator
Country spotlight

Turkey

1.4M
Coursera learners

57
Global rank

32
Median age

43%
Women learners

33%
Women learners in STEM

40%
Learning on mobile

In Turkey, a 545% year-over-year increase in GenAI course enrollments reflects a growing interest in AI and machine learning. Learners are over-indexing in machine learning algorithms, with top target roles including machine learning engineer and software developer. With learners pursuing Professional Certificates at a 38% higher rate than last year, there’s a clear appetite for job-relevant skills. This is critical, as Turkey must reskill more than 21 million workers to meet the demands of the future of work.

Domain rankings

<table>
<thead>
<tr>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>61</td>
<td>63</td>
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Enrollment trends

GenAI

↑ 545% YoY enrollments

Top courses

1. Prompt Engineering for ChatGPT
2. Generative AI with Large Language Models
3. Introduction to Generative AI

Professional Certificates

↑ 38% YoY enrollments

Top Professional Certificates

1. Data Analytics
2. Project Management
3. Front-End Developer

Top skills

1. Supply Chain Systems
2. Market Research
3. Human Learning
4. Epidemiology
5. Experiment
6. Writing
7. Brand Management
8. Linear Algebra
9. Budget Management
10. Machine Learning Algorithms

Top target roles

1. Securities & Commodities Trader
2. Machine Learning Engineer
3. Public Relations Manager
4. Budget Analyst
5. Communications Specialist
6. Software Developer
7. Bookkeeper
8. Operations Manager
9. Media Buyer
10. Personal Financial Advisor

Recommended content for top skills and roles

- Supply Chain Analytics Essentials
- Introduction to Market Research
- Budgeting essentials and development
- Essential Epidemiologic Tools for Public Health Practice
- Project Management
- Supply Chain Data Analyst
- Use AI Builder and Power Apps to Process Invoice Data
- High-Impact Business Writing
Country spotlight

United Kingdom

Learners in the United Kingdom are over-indexing in skills like bioinformatics, machine learning algorithms, and applied machine learning—aligning with the anticipated 38% net growth in demand for AI and ML specialists in the country. The 961% increase in GenAI course enrollments and the popularity of roles such as data analyst, software developer, and cybersecurity analyst highlight the country’s commitment to developing a tech-savvy workforce. However, with 93% of UK businesses reporting an IT skills gap, there’s an urgent need for targeted upskilling initiatives to ensure the workforce can meet the evolving demands of the digital economy.

Domain rankings

<table>
<thead>
<tr>
<th>Business</th>
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<th>Data science</th>
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<tbody>
<tr>
<td>52</td>
<td>46</td>
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Enrollment trends

GenAI 961% YoY enrollments

Top courses

- Generative AI with Large Language Models
- Prompt Engineering for ChatGPT
- Generative AI for Everyone

Professional Certificates

- Generative AI with Large Language Models
- Prompt Engineering for ChatGPT
- Generative AI for Everyone

Top skills

1. Epidemiology
2. Bioinformatics
3. Regression
4. FinTech
5. Machine Learning Algorithms
6. Python Programming
7. Investment Management
8. Bayesian Statistics
9. Risk Management
10. Applied Machine Learning

Top target roles

1. Bookkeeper
2. Risk Analyst
3. Data Analyst
4. Database Architect
5. Software Developer
6. Financial Analyst
7. Product Manager
8. Technology Consultant
9. Cybersecurity Analyst
10. Data Scientist

Recommended content for top skills and roles

- Essential Epidemiologic Tools for Public Health Practice
- Fundamental Skills in Bioinformatics
- Regression Analysis
- Bayesian Statistics: From Concept to Data Analysis
- Operational Risk Management: Frameworks & Strategies
- Basic Programming in Python I
- Mathematics for Machine Learning: Linear Algebra
- Data Analyst
- Cybersecurity Analyst

Top Professional Certificates

- Data Analytics
- Project Management
- Cybersecurity
Latin America and the Caribbean show a strong commitment to AI readiness, with GenAI course enrollment increasing 882% year-over-year. Learners focus on emerging tech skills, preparing for roles like machine learning engineer and cloud security engineer. The region nears gender parity in online learning, with 49% women learners and 46% learning on mobile, reflecting a shift toward accessible, flexible learning.

See page 38 for country skill rankings in Latin America and the Caribbean.
Latin America and the Caribbean

Regional enrollment trends

National AI strategies and policies highlight the region’s dedication to AI for socioeconomic growth. Colombia launched its national AI strategy in February 2024 to close digital access gaps and advance AI adoption, for example. However, infrastructural divides and the need for local talent development remain unresolved challenges.

While Brazil, Chile, and Uruguay show cutting-edge proficiency in tech and data science domains, Guatemala and Puerto Rico have room to grow. Micro-credentials are promising, with open and distance education participation surpassing OECD averages.

A 2023 OECD study emphasizes innovation and skill development to improve job quality and youth unemployment. Initiatives like the Consortium for North American Higher Education Collaboration (CONAHEC) and the Asociación De Universidades Grupo Montevideo (AUGM) and distance learning can help bridge skill gaps. Investing in accessible, job-relevant learning allows the region to build on its AI foundation and prepare the workforce for the digital economy.

Top skills
1. Culture
2. Negotiation
3. Calculus
4. Adaptability
5. Other Programming Languages
6. Budget Management
7. Geovisualization
8. People Analysis
9. C Programming Language Family
10. Organizational Development

Top target roles
1. Communications Manager
2. Advertising Manager
3. Communications Specialist
4. Operations Manager
5. Budget Analyst
6. Product Marketing Manager
7. Machine Learning Engineer
8. Treasury
9. Contract Administrator
10. Personal Financial Advisor

Most popular content in Latin America and the Caribbean

Methodology snapshot
To identify top skills and target roles, we use an over-indexing methodology. Over-indexing means that learners in a specific country or region are disproportionately enrolling in a given skill compared to learners globally.
Latin America and the Caribbean

Regional enrollment trends cont.

Achievable knowledge available via platforms like Coursera is the present and future of learning.

Hasari Teddy Andrade
Coursera Learner, Puebla, Mexico

GenAI
882% YoY enrollment growth

Top courses
- Prompt Engineering for ChatGPT
- Google Cloud: Introduction to Generative AI
- Generative AI with Large Language Models
- Generative AI for Everyone
- ChatGPT Advanced Data Analysis

Cybersecurity
1% YoY enrollment growth

Top courses
- Foundations: Data, Data, Everywhere
- Introducción a la programación en Python I: Aprendiendo a programar con Python
- Technical Support Fundamentals
- Programming for Everybody (Getting Started with Python)
- Foundations of Cybersecurity

Professional Certificates
17% YoY enrollment growth

Top Professional Certificates
- Data Analytics
- Project Management
- Digital Marketing & E-commerce
- IT Support
- UX Design
## Latin America and the Caribbean

### Regional skill rankings

<table>
<thead>
<tr>
<th>Regional rank</th>
<th>Global rank</th>
<th>Country</th>
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<th>Data Science</th>
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<th>Technology</th>
<th>Data Science</th>
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<td>27%</td>
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<tr>
<td>20</td>
<td>91</td>
<td>Puerto Rico</td>
<td>59%</td>
<td>17%</td>
<td>27%</td>
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</tbody>
</table>
Country spotlight

Brazil

5.8M
Coursera learners
19
Global rank
35
Median age

46%
Women learners
34%
Women learners in STEM
45%
Learning on mobile

Brazil ranks in the top 20 countries for overall skill proficiency—and the highest in Latin America and the Caribbean—with cutting-edge proficiency in tech and data science. A 1,079% increase in GenAI course enrollments and interest in roles like cloud security engineer and machine learning engineer show Brazil’s enthusiasm for developing a digital-ready workforce. However, with nearly 70% of employers reporting hiring difficulties due to a skills gap, upskilling initiatives are crucial, especially for youth facing triple the national unemployment rate.58

Domain rankings

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<th>Domain</th>
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<th>Data science</th>
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Enrollment trends

GenAI

↑1,079% YoY enrollments

Top courses

1. Generative AI with Large Language Models
2. Prompt Engineering for ChatGPT
3. Introduction to Generative AI

Professional Certificates

↑10% YoY enrollments

Top Professional Certificates

1. Data Analytics
2. Suporte em TI
3. UX Design

Top skills

1. Graphic Design
2. Collaboration
3. Calculus
4. Other Programming Languages
5. Organizational Development
6. Culture
7. Adaptability
8. People Analysis
9. Computer Vision
10. Negotiation

Top target roles

1. Advertising Manager
2. Cloud Security Engineer
3. Communications Specialist
4. Public Relations Manager
5. Machine Learning Engineer
6. Operations Manager
7. Engineering Manager
8. Product Marketing Manager
9. Computer Systems Engineer
10. Software Developer

Recommended content for top skills and roles

- 1. Fundamentals of Graphic Design
- 2. Laboratório de Programação Orientada a Objetos - Parte 1
- 3. Liderança Equilibrada e Cultura de Inclusão
- 4. Introdução ao Workforce Management
- 5. Negociação e Relações Interculturais
- 6. Calculus for Machine Learning and Data Science
- 7. Introduction to Computer Vision and Image Processing
- 8. Collaborate Effectively for Professional Success
- 9. Cloud Technology Consultant
- 10. DevOps and Software Engineering
Country spotlight

Chile

Chile ranks second-highest in Latin America and the Caribbean for overall skill proficiency, with cutting-edge proficiency in tech and data science. Learners over-index in skills like programming languages, geovisualization, and calculus.

A 700% increase in GenAI course enrollments reflects Chile’s AI leadership commitment. Chile also achieves gender parity in online learning. Government initiatives supporting digital skill development prepare the workforce for the IT sector’s projected $3.9 billion growth from 2022–2027.

Domain rankings

<table>
<thead>
<tr>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>29</td>
<td>19</td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

Revenue YoY enrollments

Top courses

1. Geovisualization
2. C Programming Language Family
3. Other Programming Languages
4. Calculus
5. Culture
6. Negotiation
7. Adaptability
8. Social Media
9. Organizational Development
10. Creativity

Top target roles

1. Operations Manager
2. Public Relations Manager
3. Advertising Manager
4. Budget Analyst
5. Communications Specialist
6. Product Marketing Manager
7. Bookkeeper
8. Machine Learning Engineer
9. Social Media Marketer
10. E-commerce Analyst

Recommended content for top skills and roles

- Fundamentals of GIS
- C# Class Development
- Cultural intelligence: Become a global citizen
- Agile Project Management
- Social Media Marketing
- HTML and CSS in depth
- Digital Marketing & E-commerce
Country spotlight

Colombia

Colombia’s commitment to technological advancement shows in a 659% GenAI course enrollments increase and the February 2024 launch of its AI strategy to close digital gaps, advance AI, and develop digital talent.¹⁰

Learners focus on programming and negotiation skills for roles like machine learning engineer and communications specialist. The Ministry of ICT’s partnership with Coursera aims to bridge skill gaps through micro-credentials, as 80% of companies expect an insufficiently skilled talent pipeline by 2027.⁶¹

Domain rankings

<table>
<thead>
<tr>
<th>Domain</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>55</td>
</tr>
<tr>
<td>Tech</td>
<td>30</td>
</tr>
<tr>
<td>Data science</td>
<td>24</td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

↑ 659% YoY enrollments

Top courses

- Prompt Engineering for ChatGPT
- Generative AI for Everyone
- Introduction to Generative AI

Professional Certificates

↑ 33% YoY enrollments

Top Professional Certificates

- Análisis de datos
- Ciberseguridad
- Gestión de Proyectos

Top skills

1. Culture
2. Negotiation
3. Calculus
4. C Programming Language Family
5. Other Programming Languages
6. Geovisualization
7. Adaptability
8. Emotional Intelligence
9. Probability Distribution
10. People Analysis

Top target roles

1. Communications Specialist
2. Public Relations Manager
3. Budget Analyst
4. Operations Manager
5. Advertising Manager
6. Machine Learning Engineer
7. Bookkeeper
8. Product Marketing Manager
9. Social Media Marketer
10. Media Buyer

Recommended content for top skills and roles

- Fundamentos del Management
- Adaptabilidad y Resiliencia
- Project Management: The Basics for Success
- Autoliderazgo y gestión de emociones para avanzar en desafíos complejos
- Liderazgo efectivo y colaboración con inteligencia emocional
- Introducción a la programación orientada a objetos en Java
- Successful Negotiation: Essential Strategies and Skills
- Comunicación efectiva para el líder actual
- Bookkeeping
- Social Media Marketing

Coursera learners

3.3M

Global rank

29

Median age

33

Women learners

50%

Women learners in STEM

34%

Learning on mobile

47%
A 1,091% GenAI course enrollment increase mirrors Mexico’s strong interest in AI and machine learning, expected to see 35% growth in specialist roles.62 Learners focus on culture, adaptability, and emotional intelligence, aligning with top target roles like operations manager, PR manager, and communications specialist.

However, with 65% of companies reporting talent shortages, upskilling is crucial. Investing in workforce development and micro-credentials allows businesses and institutions to build on strong tech and data science foundations, driving growth and preparing learners for roles requiring both technical and interpersonal skills.

Country spotlight
Mexico

6.7M Coursera learners
51% Women learners
26 Global rank
34 Median age
39% Women learners in STEM
47% Learning on mobile

A 1,091% GenAI course enrollment increase mirrors Mexico’s strong interest in AI and machine learning, expected to see 35% growth in specialist roles.62 Learners focus on culture, adaptability, and emotional intelligence, aligning with top target roles like operations manager, PR manager, and communications specialist.

However, with 65% of companies reporting talent shortages, upskilling is crucial. Investing in workforce development and micro-credentials allows businesses and institutions to build on strong tech and data science foundations, driving growth and preparing learners for roles requiring both technical and interpersonal skills.

Domain rankings
51 Business
26 Tech
22 Data science

Enrollment trends
GenAI
↑ 1,091% YoY enrollments

Top courses
1. Introduction to Generative AI
2. Generative AI with Large Language Models
3. Prompt Engineering for ChatGPT

Professional Certificates
↑ 29% YoY enrollments

Top Professional Certificates
1. Introducción al mundo de las negociaciones
2. Comunicación efectiva para el líder actual
3. Análisis de datos
4. Estadística y probabilidad
5. Gestión del talento humano
6. Programación y presupuesto del proyecto
7. Autodirigir y gestión de emociones para avanzar en desafíos complejos
8. Nursing: Principles of Medical-Surgical Nursing
9. Career Coach and Navigator
10. Bookkeeping

Recommended content for top skills and roles

Top skills
1. Negotiation
2. Calculus
3. Budget Management
4. Bioinformatics
5. Culture
6. Adaptability
7. Emotional Intelligence
8. Probability Distribution
9. General Accounting
10. People Analysis

Top target roles
1. Operations Manager
2. Public Relations Manager
3. Communications Specialist
4. Budget Analyst
5. Advertising Manager
6. Bookkeeper
7. Machine Learning Engineer
8. Product Marketing Manager
9. Contract Administrator
10. Personal Financial Advisor
Country spotlight

Peru

1.5M Coursera learners
45% Women learners

In Peru, learners pursue soft skills like resilience and hard skills like programming to prepare for marketing, operations, and engineering roles. A 953% GenAI course enrollment increase indicates strong AI interest, aligning with the government’s plan to significantly increase digital capacities by 2030. With 67% of companies reporting talent shortages, upskilling is urgent.

Domain rankings

<table>
<thead>
<tr>
<th>Domain</th>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>32</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

↑ 953% YoY enrollments

Top courses

- Google Cloud: Introduction to Generative AI
- Coursera: Generative AI for Everyone
- Meta: Business Writing
- IBM: Advanced Programming in Swift
- University of Illinois: Big Data Analytics for Managers
- UNAM: Introduction to Generative AI
- MIT: Social Media Marketing
- Coursera: Cultural Intelligence: Become a Global Citizen
- Meta: Marketing en redes sociales
- Google: Análisis de datos
- Google: Digital Marketing & E-commerce

Top skills

1. Culture
2. Resilience
3. Other Programming Languages
4. Negotiation
5. Social Media
6. Emotional Intelligence
7. C Programming Language Family
8. Calculus
9. Adaptability
10. Influencing

Top target roles

1. Advertising Manager
2. Operations Manager
3. Public Relations Manager
4. Communications Specialist
5. Budget Analyst
6. Product Marketing Manager
7. Bookkeeper
8. Cloud Security Engineer
9. Personal Financial Advisor
10. Machine Learning Engineer

Recommended content for top skills and roles

- Cultural Intelligence: Become a global citizen
- Fundamentos del Management
- Adaptability and Resiliency
- C# Class Development
- Advanced Programming in Swift
- Bookkeeping
- Social Media Marketing
- Marketing en redes sociales
- Análisis de datos
- Digital Marketing & E-commerce
- Influencing People
The Middle East and North Africa demonstrates a strong commitment to digital transformation and emerging technologies. With a 861% increase in GenAI course enrollments and a 17% rise in cybersecurity enrollments year-over-year, learners focus on cutting-edge skills to drive innovation and tackle regional challenges. Supply chain systems emerge as a popular skill, highlighting the region’s potential as a global trade hub. However, with only 35% of learners being women, there are opportunities to promote gender inclusivity in online learning.

See page 47 for country skill rankings in the Middle East and North Africa.
Middle East and North Africa

Regional enrollment trends

The Middle East and North Africa are positioned to become leaders in digital transformation and trade, with governments investing in technology infrastructure and logistics. The establishment of the 2023 Council of Ministers for Cybersecurity reflects the region’s proactive approach to cybersecurity, evident in the 17% year-over-year growth in cybersecurity course enrollments. Learners focus on skills like leadership development, supply chain systems, and auditing, preparing for roles such as operations manager and IT project manager—aligning with the region’s strategic location and workforce development goals.

However, with 82% of UAE workers seeking additional training and 60% of Saudi higher education students pursuing degrees not aligned with job market demands, there’s a need for accessible, career-ready skill development. By investing in job-relevant learning and harnessing the young, tech-savvy population, the region can build a skilled workforce to drive economic growth and competitiveness in sectors like manufacturing, logistics, and cybersecurity.

Top skills
1. Leadership Development
2. Supply Chain Systems
3. Audit
4. People Development
5. Advertising
6. Resilience
7. Storytelling
8. Influencing
9. Conflict Management
10. Budget Management

Top target roles
1. Operations Manager
2. IT Project Manager
3. Project Manager
4. Machine Learning Engineer
5. Securities & Commodities trader
6. Personal Financial Advisor
7. Communications Specialist
8. Treasurer
9. Contract Administrator
10. Communications Manager

Most popular content in the Middle East and North Africa

Methodology snapshot
To identify top skills and target roles, we use an over-indexing methodology. Over-indexing means that learners in a specific country or region are disproportionately enrolling in a given skill compared to learners globally.
Middle East and North Africa
Regional enrollment trends cont.

"We are committed to equipping our students and graduates with the skills and knowledge needed to thrive in the ever-evolving job market. In an era where rapid technological advancements and changing industries demand continuous learning and adaptation, upskilling and reskilling have become paramount."

Prof. Ibrahim Mohamed Alkaabi
Vice President for Academic Affairs, Qatar University
Middle East and North Africa

Regional skill rankings

<table>
<thead>
<tr>
<th>Regional rank</th>
<th>Global rank</th>
<th>Country</th>
<th>Business</th>
<th>Technology</th>
<th>Data Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>34</td>
<td>United Arab Emirates</td>
<td>99%</td>
<td>42%</td>
<td>55%</td>
</tr>
<tr>
<td>2</td>
<td>35</td>
<td>Israel</td>
<td>40%</td>
<td>72%</td>
<td>89%</td>
</tr>
<tr>
<td>3</td>
<td>58</td>
<td>Qatar</td>
<td>83%</td>
<td>40%</td>
<td>42%</td>
</tr>
<tr>
<td>4</td>
<td>60</td>
<td>Saudi Arabia</td>
<td>87%</td>
<td>39%</td>
<td>29%</td>
</tr>
<tr>
<td>5</td>
<td>64</td>
<td>Morocco</td>
<td>67%</td>
<td>52%</td>
<td>17%</td>
</tr>
<tr>
<td>6</td>
<td>72</td>
<td>Egypt</td>
<td>34%</td>
<td>39%</td>
<td>40%</td>
</tr>
<tr>
<td>7</td>
<td>75</td>
<td>Kuwait</td>
<td>51%</td>
<td>27%</td>
<td>31%</td>
</tr>
<tr>
<td>8</td>
<td>76</td>
<td>Tunisia</td>
<td>7%</td>
<td>41%</td>
<td>39%</td>
</tr>
<tr>
<td>9</td>
<td>78</td>
<td>Bahrain</td>
<td>45%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>10</td>
<td>82</td>
<td>Jordan</td>
<td>52%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>11</td>
<td>83</td>
<td>Lebanon</td>
<td>23%</td>
<td>32%</td>
<td>19%</td>
</tr>
<tr>
<td>12</td>
<td>90</td>
<td>Oman</td>
<td>19%</td>
<td>21%</td>
<td>18%</td>
</tr>
<tr>
<td>13</td>
<td>93</td>
<td>Iraq</td>
<td>21%</td>
<td>19%</td>
<td>9%</td>
</tr>
<tr>
<td>14</td>
<td>95</td>
<td>Algeria</td>
<td>2%</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>15</td>
<td>96</td>
<td>Yemen</td>
<td>33%</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>16</td>
<td>109</td>
<td>Sudan</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

"We will spare no effort to meet the ambitions of our students to obtain world-leading education that qualifies them for current and future labor market requirements."

His Excellency, Dr. Ahmad Belhoul Al Falasi
Minister of Education, UAE

"Realizing skill development solutions that are necessary for meeting the challenges of the 21st century requires robust innovation and collaboration between key actors."

Abdullah Al Dardari
Assistant Secretary-General
Assistant Administrator and Director of the Regional Bureau for Arab States, UNDP

Coursera, UNDP, and MBRF
Launch FutureSkills4All Initiative
Country spotlight

Egypt

Learners in Egypt are typically younger than the global average, with a median age of 29, and increasingly learn on mobile devices, with 64% accessing courses through smartphones or tablets. This tech-savvy generation focuses on skills like advertising, deep learning, and auditing, preparing for roles such as machine learning engineer, operations manager, and securities & commodities trader. As university degrees remain the most recognized hiring criteria in Egypt, integrating job-relevant skills into higher education curricula can help bridge the gap between academia and industry.57

Domain rankings

<table>
<thead>
<tr>
<th>Domain</th>
<th>Egypt Business</th>
<th>Egypt Tech</th>
<th>Egypt Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rankings</td>
<td>73</td>
<td>68</td>
<td>68</td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

↑ 585% YoY enrollments

Top skills

1. Audit
2. Storytelling
3. Advertising
4. Leadership Development
5. Social Media
6. Experiment
7. Brand Management
8. Budget Management
9. Writing
10. Deep Learning

Top target roles

1. Operations Manager
2. Machine Learning Engineer
3. Securities & Commodities Trader
4. Public Relations Manager
5. Communications Specialist
6. Social Media Marketer
7. Marketing Associate
8. Budget Analyst
9. Financial Manager
10. Web Developer

Recommended content for top skills and roles

- The Art of Data Storytelling
- Lean Leadership Fundamentals
- Social Media Marketing Professional Certificate
- Meta Career Coach and Navigator Professional Certificate
- Meta Front-End Developer Professional Certificate
- Data Analytics Professional Certificate
- Social Media Marketing Professional Certificate
- Meta Introduction to Social Media Marketing
Country spotlight
Saudi Arabia

1.2M Coursera learners
60 Global rank
35 Median age
28% Women learners
33% Women learners in STEM
55% Learning on mobile

Cybersecurity attacks cost organizations in Saudi Arabia and the UAE $6.53 million in 2023, driving a surge in demand for cybersecurity professionals. Coursera data shows a 65% year-over-year increase in cybersecurity course enrollments. This aligns with Saudi Arabia’s efforts to develop a skilled workforce, including the goal of training 40% of the workforce in data and AI skills by 2030.

With 60% of college students pursuing degrees that don’t match job market demands, bridging the skills gap remains vital.

Domain rankings

<table>
<thead>
<tr>
<th>15</th>
<th>67</th>
<th>79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Tech</td>
<td>Data science</td>
</tr>
</tbody>
</table>

Enrollment trends
GenAI
↑ 1,788% YoY enrollments

Top courses

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Generative AI</td>
</tr>
<tr>
<td>Prompt Engineering for ChatGPT</td>
</tr>
<tr>
<td>Generative AI with Large Language Models</td>
</tr>
</tbody>
</table>

Top Professional Certificates

<table>
<thead>
<tr>
<th>Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Analytics</td>
</tr>
<tr>
<td>Project Management</td>
</tr>
<tr>
<td>Cybersecurity</td>
</tr>
</tbody>
</table>

Top skills

1. Leadership Development
2. Supply Chain Systems
3. Resilience
4. People Development
5. Graphic Design
6. Change Management
7. Conflict Management
8. Regression
9. Adaptability
10. Emotional Intelligence

Top target roles

1. IT Project Manager
2. Project Manager
3. Personal Financial Advisor
4. Bookkeeper
5. Securities & Commodities Trader
6. Machine Learning Engineer
7. Market Research Analyst
8. Communications Specialist
9. Operations Manager
10. Financial Reporting Manager

Recommended content for top skills and roles

- Fundamentals of Graphic Design
- Adaptability and Resiliency
- Leading transformations: Manage change
- Career Coach and Navigator
- Project Management
United Arab Emirates

The UAE ranks first in the Middle East and North Africa for skill proficiency and second worldwide for business. Learners focus on leadership development, resilience, and blockchain skills, preparing for roles such as operations manager, IT project manager, and business analyst. This aligns with the UAE’s focus on business intelligence and digital transformation roles, both expected to grow significantly. However, with 82% of UAE workers seeking more training for career confidence, further skill development is crucial.

**Domain rankings**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Domain</th>
<th>MENA</th>
<th>Global rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Business</td>
<td>64</td>
<td>34</td>
</tr>
<tr>
<td>50</td>
<td>Data science</td>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>

**Enrollment trends**

GenAI

- 1,102% YoY enrollments

**Top courses**

- Introduction to Generative AI
- Prompt Engineering for ChatGPT
- Generative AI with Large Language Models

**Professional Certificates**

- 40% YoY enrollments

**Top Professional Certificates**

- Data Analytics
- Project Management
- Digital Marketing & E-commerce

**Top skills**

1. Resilience
2. Leadership Development
3. BlockChain
4. Supply Chain Systems
5. People Development
6. Emotional Intelligence
7. Conflict Management
8. Audit
9. General Accounting
10. Change Management

**Top target roles**

1. Operations Manager
2. IT Project Manager
3. Project Manager
4. Personal Financial Advisor
5. Contract Administrator
6. Bookkeeper
7. Product Marketing Manager
8. Business Analyst
9. IT Director
10. Public Relations Manager

**Recommended content for top skills and roles**

- Leadership: Getting Started with Leadership
- Business: Introduction to Blockchain for Financial Services
- Data Science: Accounting Principles of Financial Accounting
- Project Management: Project Management

**Other courses**

- Digital Marketing & E-commerce
- Emotional and Social Intelligence
- Project Management: Project Management
- Technical Skills: Getting Started with Leadership
North America shows a strong commitment to digital upskilling, with a 1,040% increase in GenAI course enrollments and a 61% rise in Professional Certificate enrollments year-over-year. The region has achieved gender parity in online learning, with women comprising 52% of learners. As the semiconductor industry grows, learners focus on skills like SQL, Python programming, and supply chain logistics to drive innovation and economic growth in this critical sector.

See page 54 for country skill rankings in North America.
North America

Regional enrollment trends

North America remains steadfast in developing a skilled, inclusive workforce ready for the digital economy. Learners’ focus on technical skills like SQL, Bayesian statistics, and Python programming aligns with the high demand for digital competencies in the job market, where 92% of US job ads require digital proficiency.72 Governments and industry leaders invest in initiatives like the North American Semiconductor Conference (NASC) and the North American Ministerial Committee on Economic Competitiveness (NAMCEC) to strengthen the region’s competitiveness in industries of the future, including semiconductors.73 Collaboration among government, industry, and academia is key to creating quality jobs and providing talent for growth in the digital age. Coursera’s partnerships with institutions like the University of Texas System74 and the state of Nevada75 exemplify the efforts needed to equip learners with job-relevant skills and drive economic growth.

Top skills
1. Geovisualization
2. SQL
3. Business Communication
4. General Accounting
5. Epidemiology
6. Spreadsheet Software
7. Bayesian Statistics
8. Python Programming
9. Change Management
10. Project Management

Top target roles
1. Personal Financial Advisor
2. Treasurer
3. Business Intelligence Analyst
4. Risk Analyst
5. Technology Consultant
6. Financial Quantitative Analyst
7. Network Engineer
8. Database Architect
10. Cyber Analyst

Most popular content in North America

<table>
<thead>
<tr>
<th>Platform</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coursera</td>
<td>Foundations of Digital Marketing and E-commerce</td>
</tr>
<tr>
<td>Google</td>
<td>Foundations: Data, Data, Everywhere</td>
</tr>
<tr>
<td>Google</td>
<td>Foundations of Cybersecurity</td>
</tr>
<tr>
<td>Google</td>
<td>Foundations of Project Management</td>
</tr>
<tr>
<td>Google</td>
<td>Technical Support Fundamentals</td>
</tr>
<tr>
<td>Google</td>
<td>Foundations of Digital Marketing and E-commerce</td>
</tr>
<tr>
<td>Yale</td>
<td>The Science of Well-Being</td>
</tr>
<tr>
<td>temенная</td>
<td>AI for Everyone</td>
</tr>
<tr>
<td>Supervised Machine Learning: Regression and Classification</td>
<td></td>
</tr>
<tr>
<td>Microsoft Network</td>
<td>Introduction to Microsoft Excel</td>
</tr>
<tr>
<td>CV</td>
<td>Prompt Engineering for ChatGPT</td>
</tr>
</tbody>
</table>

Methodology snapshot

To identify top skills and target roles, we use an over-indexing methodology. Over-indexing means that learners in a specific country or region are disproportionately enrolling in a given skill compared to learners globally.
North America

Regional enrollment trends cont.

"What I’m excited about is GenAI opens the door for all of our employees to have access to tools to do their job more efficiently."

Alison Klein
Information Systems Talent Manager, Dow

How to Bridge the Generative AI Skills Gap: Insights from Dow, Microsoft, and Vanderbilt University

### GenAI

<table>
<thead>
<tr>
<th>YoY enrollment growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑1,040%</td>
</tr>
</tbody>
</table>

**Top courses**

- Prompt Engineering for ChatGPT
- Introduction to Generative AI
- Generative AI with Large Language Models
- Generative AI for Everyone
- ChatGPT Advanced Data Analysis

### Cybersecurity

<table>
<thead>
<tr>
<th>YoY enrollment growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑8%</td>
</tr>
</tbody>
</table>

**Top courses**

- Foundations of Cybersecurity
- Technical Support Fundamentals
- Play It Safe: Manage Security Risks
- Connect and Protect: Networks and Network Security
- Programming for Everybody (Getting Started with Python)

### Professional Certificates

<table>
<thead>
<tr>
<th>YoY enrollment growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑61%</td>
</tr>
</tbody>
</table>

**Top Professional Certificates**

- IT Support Fundamentals
- Project Management Fundamentals
- Connect and Protect: Networks and Network Security
- Programming for Everybody (Getting Started with Python)
- Digital Marketing & E-commerce

---

Global Skills Report 2024 | Regional Skill Trends | NA
North America

Regional skill rankings

<table>
<thead>
<tr>
<th>Regional rank</th>
<th>Global rank</th>
<th>Country</th>
<th>Business</th>
<th>Technology</th>
<th>Data Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>59</td>
<td>Canada</td>
<td>47%</td>
<td>50%</td>
<td>59%</td>
</tr>
<tr>
<td>2</td>
<td>69</td>
<td>United States</td>
<td>37%</td>
<td>36%</td>
<td>50%</td>
</tr>
</tbody>
</table>

“Students want to know that their learning is linked to a career pathway. They want to acquire skills that prepare them for work immediately, and employers want the same thing.”

Mark Rosenbaum
Dean of HPU’s College of Business, Hawai‘i Pacific University

“Building a thriving workforce in Missouri means equipping everyone with the skills needed to succeed. Delivering on our commitment to provide equitable access to skills development, we have created unique courses like Missouri Job Ready Day One and learning pathways tailored to both the needs of populations facing barriers to employment and demands in the job market.”

Julie Carter
Director of Workforce Development, Department of Higher Education and Workforce Development (DHEWD), State of Missouri

“The AI revolution is not on the horizon, it is already here. Its impact will be as profound as the Industrial Revolution or the Digital Revolution. Your organization must embrace this transformation or risk being left behind. The choice is clear: adapt or become irrelevant. The time to act is now.”

Mark A. Lane, PhD
Strategy & Innovation Engineer, Cisco

Professional Certificates Playbook
Country spotlight

Canada

With a 63% year-over-year growth in Professional Certificate enrollments, Canadian learners are increasingly committed to developing job-ready skills. They’re pursuing micro-credentials in in-demand fields like data analytics and digital marketing, preparing for roles like product marketing manager, e-commerce analyst, and social media marketer.

This aligns with the government’s efforts to address the skills gap, as 45% of Canadians lack the digital skills needed for the knowledge economy.76 Initiatives like the Skills for Success Program (supporting 60,000+ Canadians) and Ontario’s $15 million investment in rapid training contribute to building this crucial workforce.77

Domain rankings

59 Business
56 Tech
46 Data science

Enrollment trends
GenAI

↑ 914% YoY enrollments

Top courses

1. Prompt Engineering for ChatGPT
2. Generative AI with Large Language Models
3. Introduction to Generative AI

Professional Certificates

↑ 63% YoY enrollments

Top Professional Certificates

1. Data Analytics
2. Cybersecurity
3. Project Management

Top skills

1. Storytelling
2. Culture
3. Social Media
4. Negotiation
5. Resilience
6. SQL
7. Epidemiology
8. Creativity
9. Spreadsheet Software
10. Geovisualization

Top target roles

1. Product Marketing Manager
2. Marketing Manager
3. Marketing Specialist
4. E-commerce Analyst
5. Media Buyer
6. Personal Financial Advisor
7. Search Engine Optimization Specialist
8. Bookkeeper
9. Social Media Marketer
10. Advertising Manager

Recommended content for top skills and roles

- Cultural intelligence: Become a global citizen
- Storytelling and influencing: Communicate with impact
- Adaptability and Resiliency
- Spatial Analysis and Satellite Imagery in a GIS
- Natural Creativity
- Data Analysis with Spreadsheets and SQL
- Essential Epidemiologic Tools for Public Health Practice
- Everyday Excel, Part 1
- Digital Marketing & E-commerce
- Social Media Marketing
United States

Country spotlight

US learners focus on a mix of business and technical skills, such as business communication, general accounting, and SQL, though mostly prepare for roles in business and finance.

However, nearly one-third of US workers lack foundational digital skills, with workers of color disproportionately affected. As the public and private sectors digitize, the need for highly trained STEM workers grows, despite fewer than 100,000 US graduates earning engineering and computer science degrees each year.

The 1,058% surge in GenAI course enrollments and the 61% year-over-year growth in Professional Certificate enrollments show learners’ commitment to upskilling for the digital economy.
Learners in Sub-Saharan Africa show a strong appetite for mobile learning, with 65% accessing courses on smartphones or tablets—the highest among all regions. They focus on developing business skills like risk management and supply chain systems, as well as technical skills like SQL and HTML/CSS. However, with only 36% of learners being women, despite comprising 46.1% of the region’s labor force, there’s a significant gender disparity in online learning. See page 60 for country skill rankings in Sub-Saharan Africa.
Sub-Saharan Africa

Regional enrollment trends

Sub-Saharan Africa must focus on developing a skilled young workforce, especially given lagging skill rankings of most countries in the region. With 230 million digital jobs projected by 2030, investing in accessible, job-relevant learning is crucial.81

Learners focus on skills like risk management, auditing, and supply chain systems. The prevalence of mobile learning (65%) highlights the importance of flexible, on-the-go learning solutions. Enabling further internet access will be critical to skills development, as 75% of Africa’s internet traffic comes from smartphones.82

The region must also address the gender gap in online learning, with only 36% of learners being women despite comprising 50.2% of the working-age population. Prioritizing digital literacy in education, promoting gender-inclusive initiatives, and collaborating with industry are key to building a skilled, diverse workforce.

Sub-Saharan Africa’s growing youth population presents both challenges and opportunities for the workforce. About 10–12 million young Africans enter the labor market annually, where only 3 million formal jobs are available.83 Transforming education systems to update curricula, investing in teacher training, and increasing education funding is vital. By equipping young Africans for the future, the region can turn its demographic challenge into an economic advantage.

Top skills
1. Risk Management
2. Epidemiology
3. Audit
4. Supply Chain Systems
5. Influencing
6. Spreadsheet Software
7. Advertising
8. Business Communication
9. People Development
10. Market Research

Top target roles
1. IT Project Manager
2. Project Manager
3. Operations Manager
4. Personal Financial Advisor
5. IT Manager
6. Business Analyst
7. Operations Specialist
8. Auditor
9. Marketing Specialist
10. Product Marketing Manager

Most popular content in Sub-Saharan Africa
- Foundations: Data, Data, Everywhere
- Foundations of Project Management
- Foundations of Cybersecurity
- Ask Questions to Make Data-Driven Decisions
- Introduction to Microsoft Excel
- Foundations of Digital Marketing and E-commerce
- Technical Support Fundamentals
- Business Analytics with Excel: Elementary to Advanced
- Cybersecurity for Everyone
- Prepare Data for Exploration

Methodology snapshot
To identify top skills and target roles, we use an over-indexing methodology. Over-indexing means that learners in a specific country or region are disproportionately enrolling in a given skill compared to learners globally.
Sub-Saharan Africa

Regional enrollment trends cont.

"My advice to learners is to BE the change you want to see! Just empower yourself to give power to others."

Oluwakemi Sarah Adenekan
Coursera Learner, Oyo State, Nigeria

<table>
<thead>
<tr>
<th>GenAI</th>
<th>YoY enrollment growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑1,500%</td>
<td></td>
</tr>
</tbody>
</table>

Top courses
- Introduction to Generative AI
- Prompt Engineering for ChatGPT
- Generative AI for Everyone
- Generative AI with Large Language Models
- ChatGPT Advanced Data Analysis

<table>
<thead>
<tr>
<th>Cybersecurity</th>
<th>YoY enrollment growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑2%</td>
<td></td>
</tr>
</tbody>
</table>

Top courses
- Foundations of Cybersecurity
- Technical Support Fundamentals
- Cybersecurity for Everyone
- Play It Safe: Manage Security Risks
- Computer Science: Programming with a Purpose

<table>
<thead>
<tr>
<th>Professional Certificates</th>
<th>YoY enrollment growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑12%</td>
<td></td>
</tr>
</tbody>
</table>

Top Professional Certificates
- Data Analytics
- Technical Support Fundamentals
- Cybersecurity
- Play It Safe: Manage Security Risks
- Computer Science: Programming with a Purpose
- IT Support
Sub-Saharan Africa

Regional skill rankings

<table>
<thead>
<tr>
<th>Regional rank</th>
<th>Global rank</th>
<th>Country</th>
<th>Business</th>
<th>Technology</th>
<th>Data Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>66</td>
<td>Botswana</td>
<td>72%</td>
<td>37%</td>
<td>23%</td>
</tr>
<tr>
<td>2</td>
<td>71</td>
<td>Rwanda</td>
<td>64%</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>3</td>
<td>74</td>
<td>Cameroon</td>
<td>48%</td>
<td>38%</td>
<td>21%</td>
</tr>
<tr>
<td>4</td>
<td>88</td>
<td>Zambia</td>
<td>14%</td>
<td>16%</td>
<td>24%</td>
</tr>
<tr>
<td>5</td>
<td>92</td>
<td>Ethiopia</td>
<td>12%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>6</td>
<td>97</td>
<td>Zimbabwe</td>
<td>13%</td>
<td>18%</td>
<td>11%</td>
</tr>
<tr>
<td>7</td>
<td>98</td>
<td>Kenya</td>
<td>17%</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>8</td>
<td>99</td>
<td>Côte d’Ivoire</td>
<td>20%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>9</td>
<td>100</td>
<td>South Africa</td>
<td>10%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>10</td>
<td>102</td>
<td>Uganda</td>
<td>18%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>11</td>
<td>104</td>
<td>Ghana</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>12</td>
<td>105</td>
<td>Nigeria</td>
<td>26%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>13</td>
<td>107</td>
<td>Somalia</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Remember: skills and learning material alone don’t make you successful. Instead, it’s on you to prove to yourself that what you’ve learned is valuable and beneficial to what you want to accomplish. For me, it’s solving existing problems in the community and seeing the positive impact I’ve helped make—from machine translation projects for Kenyan languages (Kikuyu and Kiswahili languages as part of the Masakhane Community) to using AI to solve pressing problems in the supply chain field.

Kennedy Wangari
Coursera Learner, Kenya
Country spotlight

Botswana

85K Coursera learners

66 Global rank

33 Median age

50% Women learners

32% Women learners in STEM

54% Learning on mobile

In Botswana, learners focus on leadership, risk management, and accounting skills, preparing for roles such as project manager, IT project manager, and operations manager. Despite unemployment challenges, with 25% of the labor force and 33% of youth aged 20–39 unemployed, Botswana has made strides in connecting schools to high-speed internet through initiatives like SmartBots and GIGA.

Botswana also achieves gender parity in online learning, with women making up 50% of learners. With projected annual economic growth of 4.5% over the next five years, continued investments in digital infrastructure and skills development are key to reducing unemployment and fostering inclusive growth.

Domain rankings

<table>
<thead>
<tr>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>70</td>
<td>85</td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

↑1,433% YoY enrollments

Top courses

1. Introduction to Generative AI
2. Generative AI for Everyone
3. Prompt Engineering for ChatGPT

Professional Certificates

↑35% YoY enrollments

Top Professional Certificates

1. Data Analytics
2. Project Management
3. Cybersecurity

Top skills

1. Investment Management
2. Leadership Development
3. Risk Management
4. Audit
5. Resilience
6. General Accounting
7. Conflict Management
8. Change Management
9. Emotional Intelligence
10. Market Research

Top target roles

1. Project Manager
2. IT Project Manager
3. Operations Manager
4. Contract Administrator
5. Personal Financial Advisor
6. Bookkeeper
7. Systems Analyst
8. Business Analyst
9. IT Director
10. Auditor

Recommended content for top skills and roles

- Innovations in Investment Technology: Artificial Intelligence
- Introduction to Risk Management
- Auditing I: Conceptual Foundations of Auditing
- Resolving and Transforming Conflict
- Leading and Developing Top Talent
- Storytelling and influencing: Communicate with impact
- Emotional and Social Intelligence
- Introduction to Market Research
- Career Coach and Navigator
- IT Project Manager
Country spotlight

Nigeria

With 76% of learners accessing courses on mobile devices, learners in Nigeria gravitate toward flexible, on-the-go learning. They focus on developing technical skills like SQL and HTML/ CSS, as well as business skills like advertising and business communication.

Top target roles learners prepare for span engineering and marketing, including cloud security engineer, product marketing manager, and e-commerce analyst. However, with only one in 10 workers holding positions that require advanced skill levels, these skill sets are crucial in addressing Nigeria’s youth unemployment rate, which stands at 53.4%.

Top skills

1. SQL
2. Advertising
3. Spreadsheet Software
4. Business Communication
5. Audit
6. HTML and CSS
7. Influencing
8. Supply Chain Systems
9. Storytelling
10. Market Research

Top target roles

1. Product Marketing Manager
2. E-commerce Analyst
3. Personal Financial Advisor
4. Project Manager
5. IT Project Manager
6. Social Media Marketer
7. Cloud Security Engineer
8. Marketing Specialist
9. Operations Manager
10. IT Director

Recommended content for top skills and roles

- Learn HTML and CSS
- Auditing I: Conceptual Foundations of Auditing
- Mastering Excel Essentials to Enhance Business Value
- Establishing a Professional ‘Self’ through Effective Intercultural Communication
- Storytelling and influencing: Communicate with impact
- Business Writing
- Market Research and Consumer Behavior
- Digital Marketing & E-commerce
- Supply Chain Data Analyst
Country spotlight

South Africa

1.3M
Coursera learners

100
Global rank

36
Median age

46%
Women learners

36%
Women learners in STEM

62%
Learning on mobile

South Africa has the potential to generate 4.5 million new jobs across industries by 2030.93 However, with an estimated 28,800 digital and ICT jobs already being outsourced, there’s a pressing need to develop a skilled domestic workforce.90 Learners focus on building business skills such as risk management, supply chain systems, and brand management, preparing for roles like IT project manager, operations manager, and business analyst. With 62% accessing courses on mobile devices, they demonstrate a strong preference for flexible, accessible learning.

Domain rankings

<table>
<thead>
<tr>
<th>Business</th>
<th>Tech</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>98</td>
<td>96</td>
</tr>
</tbody>
</table>

Enrollment trends

GenAI

↑1,156% YoY enrollments

Top courses

- Introduction to Generative AI
- Prompt Engineering for ChatGPT
- Generative AI for Everyone

Professional Certificates

↑33% YoY enrollments

Top Professional Certificates

1. Google Data Analytics Professional Certificate
2. Google Project Management Professional Certificate
3. Google Digital Marketing & E-commerce Professional Certificate
5. UCI Supply Chain Optimization Professional Certificate
7. LinkedIn Brand Identity and Strategy Professional Certificate
8. LinkedIn Leading transformations: Manage change Professional Certificate
9. LinkedIn Operational Risk Management: Frameworks & Strategies Professional Certificate
10. LinkedIn Storytelling and influencing: Communicate with impact Professional Certificate

Top skills

1. Risk Management
2. Supply Chain Systems
3. Brand Management
4. Market Research
5. Spreadsheet Software
6. Change Management
7. Operations Management
8. Influencing
9. FinTech
10. Business Communication

Top target roles

1. IT Project Manager
2. Project Manager
3. Operations Manager
4. IT Director
5. Personal Financial Advisor
6. Business Analyst
7. General Manager
8. Operations and Maintenance Specialist
9. Database Architect
10. Marketing Manager

Recommended content for top skills and roles

- Operational Risk Management: Frameworks & Strategies
- Storytelling and influencing: Communicate with impact
- Market Research and Consumer Behavior
- Supply Chain Optimization
- Brand Identity and Strategy
- Leading transformations: Manage change
- Everyday Excel, Part 1
- FinTech Foundations and Overview
- IT Support
- Database Engineer
Appendix

“Each and every one of us needs to own our own careers. Each and every one of us needs to be intellectually curious in building those careers.”

Leon Katsnelson
Director & CTO,
IBM Skills Network at IBM

2024 Job Skills Report webinar
Glossary

Active learners: Individuals who have started at least one course item within the past year.

Artificial Intelligence (AI) skills: A set of skills that enables individuals to understand, develop, and apply AI technologies. This report focuses on both advanced and foundational skills relevant to AI.

Advanced skills: Data management, machine learning, applied machine learning, artificial neural networks, Bayesian networks, big data, computer vision, deep learning, feature engineering, machine learning algorithms, machine learning software, natural language processing, and statistical machine learning.

Foundational skills: Computer programming, data analysis, mathematics, theoretical computer science, applied mathematics, and data modeling.

Cybersecurity skills: A collection of skills that allows individuals to protect computer systems, networks, and data from unauthorized access, attacks, or damage. These skills include risk management, network security, cryptography, and incident response, among others.

Cybersecurity enrollments: The year-over-year (YoY) increase in the number of learners enrolling in courses related to cybersecurity on the Coursera platform. We compare cybersecurity enrollments in 2022 to cybersecurity enrollments in 2023.

Digital and human skills: Two broad categories of skills that are essential in today's workforce. Digital skills encompass abilities related to understanding, using, and creating value with technology, while human skills refer to cognitive, social, and emotional capabilities that enable effective interpersonal interactions and decision-making.

Digital skills include everything from typing and posting on social media to developing software and managing cybersecurity. Digital skills exist on an ever-evolving spectrum.

Human skills constitute our ability to relate to one another and include skills such as creativity, critical thinking, information interpretation, decision-making, leadership, and communication.

Note: These two categories are complementary. People use human skills to effectively and ethically make use of digital skills. Likewise, digital skills enhance human skills.

Enrollment trends: Patterns in learner enrollments on the Coursera platform, which can reveal insights into the popularity and relevance of specific skills, competencies, or courses in a given country or region.

Generative AI (GenAI): A subset of artificial intelligence (AI) that focuses on creating new content, such as text, images, audio, or video, based on learned patterns and rules from existing data. GenAI technologies include language models like GPT-4o and image generators like DALL-E.

GenAI enrollments: The YoY increase in the number of learners enrolling in courses related to generative AI technologies on the Coursera platform, calculated for a specific country or region. We compare total cumulative enrollments on June 13, 2023 with total cumulative enrollments on May 13, 2024.

Industry micro-credential or micro-credential: A short, focused, and flexible learning program that allows individuals to acquire specific job-relevant skills or competencies. Micro-credentials, such as Coursera's Professional Certificates, prepare learners...
for in-demand industry skills and can complement traditional degree programs for higher education institutions, upskill teams for businesses, or develop an entire workforce for governments.

**Leadership skills:** A set of skills that enable individuals to guide, motivate, and manage teams effectively. These skills include adaptability, change management, emotional intelligence, decision-making, and strategic thinking, among others.

**Learner:** An individual who is registered for content on the Coursera platform. Learners can be enrolled in multiple learning programs, but are counted only once in the platform’s metrics. The skills benchmarking data in this report is based on learner data.

**Most popular content:** These sections highlight the courses, Guided Projects, and Professional Certificates with the highest enrollments in the past year among learners in each region. Most popular content is based on the overall number of enrollments and provides insights into the content that attracts the most learners in a given area.

**Over-indexing (“top skills”):** A measure of the relative popularity of a specific skill among learners in a particular country or region compared to the global learner population on Coursera. Over-indexing is not a measure of proficiency.

**Professional Certificate(s):** Coursera offers Professional Certificates, a type of micro-credential, from leading industry partners that teach the specific skills needed for entry-level roles in in-demand digital jobs. Professional Certificates typically take 4–6 months to complete and include hands-on projects that simulate real-world tasks.

**Professional Certificate enrollments:**
This metric examines the YoY growth in total enrollments for a country or region. Growth figures for regions take into consideration only the enrollment figures of the 109 countries included in this report.
We compare Professional Certificate enrollments in 2022 to Professional Certificate enrollments in 2023.

**Recommended content for top skills and roles:**
These sections highlight courses and learning programs that align with the skills and career paths trending among learners in each country or region. Recommendations are based on learner enrollment data, reflecting the content that is most popular and relevant to the local learning community. Institutions can leverage these insights to inform their learning programs, ensuring they offer courses and curricula that match learner interests and market demands.

**Skill ranking:** A measure of a learner’s mastery of a specific skill, based on their performance in assessments and projects within relevant courses on the Coursera platform. This year’s Global Skills Report introduces a new methodology that combines learners’ skill proficiency scores on the Coursera platform with third-party indicators, including the Global Innovation Index (GII), Labor Force Participation Rate, Human Capital Index (HCI), and GDP per capita. This approach provides a more comprehensive view of skill proficiency across countries. The report includes both global skill rankings, comparing countries worldwide, and regional skill rankings, comparing countries within specific regions.

**Skills:** The transference of knowledge into value and the ability to perform specific tasks. To figure out what skills each Coursera content offering teaches, we use Coursera’s Skills Graph, which draws information from open-source taxonomies like Wikipedia and insights from Coursera educators and learners. A single course often covers several different skills.

**Top GenAI course(s):** The GenAI course or courses with the highest total enrollments within a specific country or region, which is based on the overall number of learners enrolling in the course. It helps identify the GenAI course that is most in-demand among learners in a particular area.

**Top Professional Certificate(s):**
The Professional Certificate or Certificates with the highest total enrollments within a specific country or region, which is based on
the overall number of learners enrolling in the certificate program. This helps identify the most sought-after Professional Certificate(s) among learners in a particular area.

**Top target roles:** Roles and career trajectories that are gaining popularity among learners in a specific country or region, as indicated by enrollment patterns in courses and learning programs related to those roles. These insights can help institutions, businesses, and governments align their offerings with the evolving interests and aspirations of learners.

**Upskilling:** The process of acquiring new skills or enhancing existing skills to improve job performance, adapt to changing job requirements, or prepare for new roles. Upskilling is increasingly important in today’s rapidly evolving digital economy.
Methodology

Overview

Coursera’s Global Skills Report assesses the skill proficiency of learners, measures which skills are trending globally, and identifies roles that engage highly with skills critical for the future of work. This year’s report focuses on the 109 countries with the most learners on the Coursera platform, accounting for over 95% of learners.

The report’s methodology incorporates data from several components:

1. The Coursera Skills Graph
2. Skill proficiency scores and benchmarking by country
3. Third-party metrics included in our skills index
4. Over-indexing trends

The Coursera Skills Graph

The Coursera Skills Graph maps the connections among skills, content, careers, and learners on the Coursera platform.

For the Global Skills Report, we leverage the following parts of the Skills Graph:

Skill to skill
Describes the connections among skills and generates a skills taxonomy where broad, higher-level skills are parents of more granular, lower-level skills.

Skill to content
Maps skills to the Coursera content that teaches them.

Skill to assessment
Maps skills to the graded items that assess them. Graded items on Coursera include multiple-choice quizzes, peer review assignments, and programming assignments.

Skill to occupation
Connects the Lightcast Occupation Taxonomy to relevant Coursera skills needed in the roles.

Skill to learner
Connects skills to learners who have demonstrated them by passing relevant graded items, measured using a variant of the Glicko algorithm.

The full set of skills and competencies for which we measure learner proficiency, grouped by domain (business, technology, and data science), are listed in the table provided on the next page.
Set of skill levels related to the *Global Skills Report*

**Business**  
Skills in this domain include a range of soft skills for every context, along with those that are required for the management and operation of an organization.

1. **Accounting** focuses on proper record keeping and communication of financial information for corporations in accordance with government regulations.  
   Sample skills: auditing, financial accounting

2. **Business Analysis** is the discipline of recognizing business needs and developing solutions to business problems.  
   Sample skills: business intelligence, spreadsheet software

3. **Business Psychology** applies the science of human psychology to practical business applications in order to train and motivate employees and teams to work more effectively.  
   Sample skills: marketing psychology, organization development

4. **Communication** is the practice of discussion between two or more individuals in written or oral forms.  
   Sample skills: people skills, writing

**Technology**  
Skills in this domain focus on the creation, maintenance, and scaling of computer systems and software.

1. **Cloud Computing** involves delivering computing resources—namely hardware, software, or software development platforms—via the internet.  
   Sample skills: software as a service (SaaS), Kubernetes

2. **Computer Architecture** is the set of rules and methods that specify the structure, organization, and implementation of computer systems.  
   Sample skills: network architecture, distributed computing architecture

3. **Computer Graphics** is the creation and manipulation of visual data through the use of computational tools and techniques.  
   Sample skills: graphic design, interactive design

4. **Computer Networking** is the process of creating a digital telecommunications network where connected devices exchange data with each other.  
   Sample skills: cloud computing, Internet of Things

**Data science**  
Skills in this domain focus on capturing and utilizing the data generated within a business for decision-making and/or powering underlying products and services.

1. **Data Management** comprises everything related to managing and accessing data for reporting, analysis, and model building.  
   Sample skills: cloud APIs, Hadoop

2. **Data Visualization** involves the creation and study of visual representations of data to communicate information clearly and efficiently.  
   Sample skills: Tableau, plotting data

3. **Machine Learning** creates algorithms and statistical models that computer systems can use to perform a specific task without explicit instructions.  
   Sample skills: multitask learning, deep learning

4. **Math** is the study of numbers and their relationships, applying these principles to models of real phenomena.  
   Sample skills: calculus, linear algebra
### Business (cont.)

5. **Data Analysis** is the process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making.  
   Sample skills: exploratory data analysis, spatial data analysis

6. **Entrepreneurship** is the process of designing, launching, and running a new business.  
   Sample skills: adaptability, innovation

7. **Finance** is focused on the efficient allocation of capital toward investment opportunities under conditions of risk or uncertainty.  
   Sample skills: financial ratios, blockchain

8. **Human Resources** refers to the corporate function of overseeing the various aspects of employment, such as onboarding/offboarding, labor law compliance, employee benefits, and talent acquisition.  
   Sample skills: benefits, employee relations

9. **Management** is about how to set a company’s strategy and coordinate the efforts of employees.  
   Sample skills: people management, business analytics

10. **Marketing** is the process of creating relationships with potential and actual customers, allowing businesses to identify how they should present themselves and who they should cater to.  
    Sample skills: digital marketing, product placement

### Data science (cont.)

5. **Computer Programming** is the process that professionals use to write code that instructs how a computer, application, or software program performs.  
   Sample skills: JavaScript, Java

6. **Databases** are an organized collection of data, generally stored and accessed electronically from a computer system.  
   Sample skills: relational database, key value database

7. **Design & Product** is about how to create software products that effectively solve user problems or otherwise provide them value.  
   Sample skills: product management, user research

8. **DevOps** is focused on building software delivery pipelines, deploying and monitoring services, and designing accelerated feedback loops to improve development speed.  
   Sample skills: continuous integration, storage security

9. **Human Computer Interaction** studies the design and use of interfaces between people and computing environments.  
   Sample skills: user experience, interactive design

10. **Mobile Development** is the process of developing software applications for mobile devices such as mobile phones or tablets.  
    Sample skills: Android development, iOS development
<table>
<thead>
<tr>
<th>Business (cont.)</th>
<th>Technology (cont.)</th>
<th>Data science (cont.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11. Research &amp; Design</strong> is about problem framing and solution modeling to inform business strategy. Sample skills: innovation, market research</td>
<td><strong>Operating Systems</strong> consists of building system software that provides common services for other types of computer programs. Sample skills: mobile app development, C programming language</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>12. Sales</strong> is focused on taking a company’s products and services to market and transacting with actual customers. Sample skills: cross-selling, lead generation</td>
<td><strong>Security Engineering</strong> is a specialized field that focuses on the security aspects in the design of systems that need to be able to deal robustly with possible sources of disruption. Sample skills: cybersecurity, cryptography</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>13. Strategy &amp; Operations</strong> consists of the planning and strategic work organizations undertake to grow and prosper. Sample skills: operations management, strategy</td>
<td><strong>Software Engineering</strong> involves applying rigorous principles to the design, development, maintenance, testing, and evaluation of computer software. Sample skills: software architecture, software development</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>14. Supply Chain &amp; Logistics</strong> is about the systems involved in the efficient flow of goods and services from suppliers to consumers. Sample skills: supply chain systems, planning</td>
<td><strong>Theoretical Computer Science</strong> focuses on mathematical aspects of computer science and the theory behind algorithms, data structures, computational complexity, and related topics. Sample skills: algorithms, cryptography</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>15. N/A</strong></td>
<td><strong>Web Development</strong> is the work involved in developing websites. It can range from developing a simple static page to complex web applications such as e-commerce sites. Sample skills: Angular, HTML and CSS</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Relationships between skills and content

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.

With over 10,000 content offerings across business, technology, and data science from leading university and industry partners worldwide, our catalog spans the wide variety of skills relevant to the competencies in this report.

For each skill-content pair, this machine learning system outputs a score that captures the likelihood of the skill being taught in the content.

Coursera skill benchmarking

To benchmark skill proficiency at the country level, we first measure each learner’s proficiency in each skill. Then, we aggregate those proficiencies to compute statistics like the country skill proficiency in a particular skill.

Individual skill scores

Using the set of assessments for each competency, we train machine learning models to simultaneously estimate learners’ skill proficiencies and assessment difficulties. This methodology allows us to measure learner skill proficiencies while adjusting for item difficulty, ensuring fair comparisons across the wide range of content on the platform. The full details of our methodology for individual skill scoring are detailed in a public technical paper.91

Country and state skill scores

With skill scores computed at the individual level and using connections between users, states, and countries, we calculate country and state proficiency levels for each skill by averaging the individual skill scores.

For country aggregate scores in each domain, we average the country scores for the competencies within those domains, including only countries with at least 250 learners in at least three competencies per domain.

We compare countries via percentile ranking of the aggregate scores. To get a country’s overall Coursera skill proficiency, we rank the average of its business, technology, and data science percentiles. State-level scores are computed similarly and compared only to other states within the same country. The same 250-learner minimum applies to states.

Third-party data

In conjunction with the average Coursera skill proficiency of each country, we incorporate other country-level indicators from the World Bank and the World Intellectual Property Organization (WIPO) to create a skills index for the country rankings. This allows us to corroborate our on-platform scores with external metrics and captures a more holistic view of learner skill application in the economy.

We incorporate the following metrics from the World Bank:

- GDP per capita92
- Human Capital Index93
- Labor force participation rate94
We incorporate the following metrics from the World Intellectual Property Organization (WIPO):

- Global Innovation Index (GII)^95

We use the most recent year of data for each country, up to the oldest accepted year (2018). Missing metrics or data older than 2018 are imputed with the metric average. Metrics not already on a scale from 0 to 1 are normalized by ranking across all countries to create metric percentiles.

The third-party skills index for each country is calculated using the following formula:

\[
\text{Combined skill index} = \frac{0.5}{4} \times \text{(GII percentile)} + \frac{0.5}{4} \times \text{(third-party metric)}
\]

The maximum possible value for the index is 0.5 if a country is ranked number 1 in all selected metrics.

### Combined skill index

#### Country skill ranking formula

**50%** Country’s aggregated skills measurement on Coursera

- Learners’ on-platform skill proficiency scores

**50%** Country’s aggregated skills measurement index using third party metrics

- Global Innovation Index (GII)^95—skill application to innovation
- Labor force participation^97—skill matching in labor market
- Human capital index (HCI)^98 and GDP per capita^99—output metrics of skill application in economy

A country’s on-platform skill percentile and third-party index are weighted equally to calculate the final country rankings overall and by domain. The percentile rankings are divided into four quartiles:

- **Cutting-Edge** (Rankings 1–28)
- **Competitive** (Rankings 29–55)
- **Emerging** (Rankings 56–82)
- **Lagging** (Rankings 83–109)

Coursera’s over 148 million registered learners span the globe and myriad industries, but note that the Global Skills Report estimate may not reflect the average skill proficiency of all members within an entity because Coursera learners are not necessarily representative of a country, even with some normalization from the selected third-party metrics.

#### Over-indexing or “top” skills

To determine which skills learners are most interested in within a particular country or job group, we look for skills that over-index in the data by the number of enrollments. While trending skills reveal what is generally popular, over-indexing skills reveal what is disproportionately popular within a particular group.

The methodology works as follows:

1. Compute the share of enrollments in courses teaching [skill S] overall (say 20%)
2. Compute the share of enrollments in courses teaching [skill S] from learners within group G (say 30%)
3. Compute the “skill-quotient” of [skill S] for group G as (30% / 20% = 1.5)

The notion of whether a course teaches a skill is derived from the Coursera Skills Graph, described earlier in this appendix. The same methodology is applied to calculate over-indexed roles by substituting [skill S] with [competency C] or [role R]. (Role R) consists of the set of skills required for a role, as defined by our skill-to-occupation mappings.
### State skill ranking: India

 Rankings include states with a minimum of 250 learners.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Business</th>
<th>Technology</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State of Punjab</td>
<td>100%</td>
<td>100%</td>
<td>95%</td>
</tr>
<tr>
<td>2</td>
<td>Chandigarh</td>
<td>95%</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>West Bengal</td>
<td>75%</td>
<td>95%</td>
<td>85%</td>
</tr>
<tr>
<td>4</td>
<td>Haryana</td>
<td>90%</td>
<td>55%</td>
<td>80%</td>
</tr>
<tr>
<td>5</td>
<td>State of Himachal Pradesh</td>
<td>60%</td>
<td>60%</td>
<td>90%</td>
</tr>
<tr>
<td>6</td>
<td>State of Jharkhand</td>
<td>80%</td>
<td>50%</td>
<td>70%</td>
</tr>
<tr>
<td>7</td>
<td>State of Assam</td>
<td>85%</td>
<td>85%</td>
<td>30%</td>
</tr>
<tr>
<td>8</td>
<td>Maharashtra</td>
<td>70%</td>
<td>75%</td>
<td>50%</td>
</tr>
<tr>
<td>9</td>
<td>Karnataka</td>
<td>50%</td>
<td>80%</td>
<td>65%</td>
</tr>
<tr>
<td>10</td>
<td>Tamil Nadu</td>
<td>65%</td>
<td>65%</td>
<td>45%</td>
</tr>
<tr>
<td>11</td>
<td>National Capital Territory of Delhi</td>
<td>55%</td>
<td>20%</td>
<td>75%</td>
</tr>
<tr>
<td>12</td>
<td>Gujarat</td>
<td>45%</td>
<td>25%</td>
<td>60%</td>
</tr>
<tr>
<td>13</td>
<td>Uttar Pradesh</td>
<td>25%</td>
<td>30%</td>
<td>55%</td>
</tr>
<tr>
<td>14</td>
<td>Andhra Pradesh</td>
<td>15%</td>
<td>70%</td>
<td>25%</td>
</tr>
<tr>
<td>15</td>
<td>Rajasthan</td>
<td>20%</td>
<td>45%</td>
<td>40%</td>
</tr>
<tr>
<td>16</td>
<td>Bihar</td>
<td>30%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>17</td>
<td>State of Chhattisgarh</td>
<td>40%</td>
<td>40%</td>
<td>10%</td>
</tr>
<tr>
<td>18</td>
<td>Kerala</td>
<td>35%</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>19</td>
<td>Odisha</td>
<td>10%</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>20</td>
<td>Madhya Pradesh</td>
<td>5%</td>
<td>5%</td>
<td>20%</td>
</tr>
</tbody>
</table>
## State skill ranking: United States

 Rankings include states with a minimum of 250 learners.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Business</th>
<th>Technology</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Washington</td>
<td>93%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>Colorado</td>
<td>89%</td>
<td>93%</td>
<td>98%</td>
</tr>
<tr>
<td>3</td>
<td>Michigan</td>
<td>96%</td>
<td>91%</td>
<td>85%</td>
</tr>
<tr>
<td>4</td>
<td>Illinois</td>
<td>100%</td>
<td>80%</td>
<td>91%</td>
</tr>
<tr>
<td>5</td>
<td>California</td>
<td>78%</td>
<td>96%</td>
<td>96%</td>
</tr>
<tr>
<td>6</td>
<td>New Jersey</td>
<td>85%</td>
<td>87%</td>
<td>89%</td>
</tr>
<tr>
<td>7</td>
<td>Montana</td>
<td>91%</td>
<td>89%</td>
<td>76%</td>
</tr>
<tr>
<td>8</td>
<td>Minnesota</td>
<td>65%</td>
<td>98%</td>
<td>80%</td>
</tr>
<tr>
<td>9</td>
<td>Massachusetts</td>
<td>74%</td>
<td>76%</td>
<td>93%</td>
</tr>
<tr>
<td>10</td>
<td>District of Columbia</td>
<td>87%</td>
<td>74%</td>
<td>83%</td>
</tr>
<tr>
<td>11</td>
<td>Oregon</td>
<td>70%</td>
<td>85%</td>
<td>87%</td>
</tr>
<tr>
<td>12</td>
<td>Wisconsin</td>
<td>98%</td>
<td>65%</td>
<td>67%</td>
</tr>
<tr>
<td>13</td>
<td>Iowa</td>
<td>80%</td>
<td>72%</td>
<td>70%</td>
</tr>
<tr>
<td>14</td>
<td>New Hampshire</td>
<td>72%</td>
<td>70%</td>
<td>63%</td>
</tr>
<tr>
<td>15</td>
<td>Pennsylvania</td>
<td>67%</td>
<td>59%</td>
<td>74%</td>
</tr>
<tr>
<td>16</td>
<td>New York</td>
<td>61%</td>
<td>78%</td>
<td>59%</td>
</tr>
<tr>
<td>17</td>
<td>Maine</td>
<td>76%</td>
<td>63%</td>
<td>46%</td>
</tr>
<tr>
<td>18</td>
<td>Hawaii</td>
<td>83%</td>
<td>57%</td>
<td>30%</td>
</tr>
<tr>
<td>19</td>
<td>Virginia</td>
<td>11%</td>
<td>83%</td>
<td>72%</td>
</tr>
<tr>
<td>20</td>
<td>Delaware</td>
<td>43%</td>
<td>61%</td>
<td>61%</td>
</tr>
<tr>
<td>21</td>
<td>Rhode Island</td>
<td>54%</td>
<td>67%</td>
<td>41%</td>
</tr>
<tr>
<td>22</td>
<td>North Carolina</td>
<td>48%</td>
<td>43%</td>
<td>52%</td>
</tr>
<tr>
<td>23</td>
<td>Idaho</td>
<td>59%</td>
<td>30%</td>
<td>54%</td>
</tr>
</tbody>
</table>
## United States cont.

 Rankings include states with a minimum of 250 learners.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Business</th>
<th>Technology</th>
<th>Data science</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Maryland</td>
<td>26%</td>
<td>37%</td>
<td>78%</td>
</tr>
<tr>
<td>25</td>
<td>Texas</td>
<td>46%</td>
<td>50%</td>
<td>43%</td>
</tr>
<tr>
<td>26</td>
<td>Indiana</td>
<td>63%</td>
<td>22%</td>
<td>48%</td>
</tr>
<tr>
<td>27</td>
<td>Arizona</td>
<td>41%</td>
<td>48%</td>
<td>39%</td>
</tr>
<tr>
<td>28</td>
<td>West Virginia</td>
<td>57%</td>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>29</td>
<td>Utah</td>
<td>15%</td>
<td>54%</td>
<td>57%</td>
</tr>
<tr>
<td>30</td>
<td>New Mexico</td>
<td>33%</td>
<td>28%</td>
<td>65%</td>
</tr>
<tr>
<td>31</td>
<td>Missouri</td>
<td>52%</td>
<td>39%</td>
<td>35%</td>
</tr>
<tr>
<td>32</td>
<td>Florida</td>
<td>50%</td>
<td>52%</td>
<td>24%</td>
</tr>
<tr>
<td>33</td>
<td>Georgia</td>
<td>37%</td>
<td>41%</td>
<td>20%</td>
</tr>
<tr>
<td>34</td>
<td>Connecticut</td>
<td>39%</td>
<td>7%</td>
<td>50%</td>
</tr>
<tr>
<td>35</td>
<td>Ohio</td>
<td>30%</td>
<td>26%</td>
<td>33%</td>
</tr>
<tr>
<td>36</td>
<td>Nebraska</td>
<td>22%</td>
<td>46%</td>
<td>17%</td>
</tr>
<tr>
<td>37</td>
<td>Tennessee</td>
<td>35%</td>
<td>15%</td>
<td>26%</td>
</tr>
<tr>
<td>38</td>
<td>Kentucky</td>
<td>28%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>39</td>
<td>Kansas</td>
<td>13%</td>
<td>33%</td>
<td>28%</td>
</tr>
<tr>
<td>40</td>
<td>South Carolina</td>
<td>24%</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>41</td>
<td>Louisiana</td>
<td>17%</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>42</td>
<td>Alabama</td>
<td>20%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>43</td>
<td>Arkansas</td>
<td>9%</td>
<td>20%</td>
<td>2%</td>
</tr>
<tr>
<td>44</td>
<td>Nevada</td>
<td>7%</td>
<td>4%</td>
<td>15%</td>
</tr>
<tr>
<td>45</td>
<td>Mississippi</td>
<td>2%</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>46</td>
<td>Oklahoma</td>
<td>4%</td>
<td>2%</td>
<td>11%</td>
</tr>
</tbody>
</table>
### Examples of large-scale AI initiatives

<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific</td>
<td>India</td>
<td>Digital Personal Data Protection (DPDP) Act&lt;sup&gt;102&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>Thailand</td>
<td>AI Thailand&lt;sup&gt;103&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>Singapore</td>
<td>AI Verify&lt;sup&gt;103&lt;/sup&gt;</td>
</tr>
<tr>
<td>Europe</td>
<td>European Union</td>
<td>AI Act&lt;sup&gt;103&lt;/sup&gt;</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>Chile</td>
<td>Política Nacional De Inteligencia Artificial&lt;sup&gt;104&lt;/sup&gt;</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>Colombia</td>
<td>Política Nacional Para La Transformación Digital e Inteligencia Artificial&lt;sup&gt;105&lt;/sup&gt;</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>Saudi Arabia</td>
<td>Saudi Data &amp; AI Authority&lt;sup&gt;106&lt;/sup&gt;</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>UAE</td>
<td>UAE National Strategy for Artificial Intelligence 2031&lt;sup&gt;107&lt;/sup&gt;</td>
</tr>
<tr>
<td>North America</td>
<td>Canada</td>
<td>Pan-Canadian Artificial Intelligence Strategy&lt;sup&gt;108&lt;/sup&gt;</td>
</tr>
<tr>
<td>North America</td>
<td>United States</td>
<td>Federal: Blueprint for an AI Bill of Rights&lt;sup&gt;109&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connecticut: SSB No. 1103 - Public Act No. 23-16&lt;sup&gt;110&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
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<td>Louisiana: SCR 49&lt;sup&gt;111&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maryland: HB0622&lt;sup&gt;112&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North Dakota: HB1361&lt;sup&gt;113&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Texas: Artificial Intelligence Advisory Council&lt;sup&gt;114&lt;/sup&gt;</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>N/A</td>
<td>African Union Development Agency’s AI Blueprint&lt;sup&gt;115&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

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The capabilities of GenAI are groundbreaking and game-changing.

Dr. Jules White  
Director of the Initiative on the Future of Learning & GenAI, Vanderbilt University

It’s About Making Better Decisions, Not Replacing People: Generative AI Insights from Dr. Jules White of Vanderbilt University
Endnotes

1. The Potentially Large Effects of Artificial Intelligence on Economic Growth (Goldman Sachs, 2023)
2. The economic potential of generative AI: The next productivity frontier (McKinsey, 2023)
3. Global Innovation Index (GII) (WIPO, 2018–2023)
4. Labor force participation rate (World Bank, 2018–2023)
5. Human Capital Index (HCI) (World Bank, 2018–2023)
6. GDP per capita (World Bank, 2018–2023)
7. KPMG 2023 U.S. CEO Outlook (KPMG, 2023)
8. India announces $1.2 bln investment in AI projects (Reuters, 2024)
9. Expanding AI education in Malaysia’s public universities (OpenGov, 2023)
10. Thailand national AI strategy and action plan (AI Thailand, 2022)
11. Closing the digital skill divide (National Skills Coalition, 2023)
12. The Digital Economy and Society Index (DESI) (European Commission, 2022)
14. ISCS4 Cybersecurity Workforce Study (ISC4, 2023)
15. Global Cybersecurity Outlook 2024 (World Economic Forum, 2024)
16. IBM X-Force Threat Intelligence Index 2024 (IBM, 2024)
17. Arab League forms cybersecurity ministerial council to combat growing threats (Forbes Middle East, 2023)
20. The right to higher education in Europe and North America: briefing note compendium (UNESCO International Institute for Higher Education in Latin America and the Caribbean, 2023)
22. NiñaSTEM (OECD, 2023)
23. Saudi Arabian Students’ Beliefs about and Barriers to Online Education during the COVID-19 Pandemic (National Library of Medicine, 2022)
24. Preparing girls for the future of Africa: Approaches to empowerment through digital skills (World Bank, 2023)
25. Botswana makes strides in bridging the digital divide (UNICEF, 2022)
26. Philippine Commission on Women Education Initiatives (Republic of the Philippines, 2022)
29. Global Innovation Index (GII) (WIPO, 2018–2023)
30. Labor force participation rate (World Bank, 2018–2023)
31. Human Capital Index (HCI) (World Bank, 2018–2023)
32. GDP per capita (World Bank, 2018–2023)
33. How Asia-Pacific CEOs can grow in the AI era amid economic challenges (EY CEO Outlook Survey, 2023)
34. Unlocking APAC’s digital potential: Changing digital skill needs and policy approaches (AWS, 2021)
35. **India announces $1.2 bln investment in AI projects** (Reuters, 2024)

36. **How can India prepare its youth for the future of work? Here’s what’s needed now** (World Economic Forum, 2022)


38. **Expanding AI education in Malaysia’s public universities** (OpenGov, 2023)

39. **Bridging the skills gap: Fuelling careers and the economy in Malaysia** (Economist Impact, 2023)

40. **Singapore education and training services industry snapshot** (U.S. Department of Commerce, 2023)


42. **Cisco AI Readiness Index – France** (Cisco, 2023)

43. **Germany’s shortage of workers is biggest risk to growth, minister says** (Reuters, 2024)

44. **Advancing higher education with industry micro-credentials** (Coursera, 2022)

45. **Cisco AI Readiness Index – Spain** (Cisco, 2023)

46. **Unlocking Spain’s digital potential** (AWS, 2021)

47. **How reskilling can play a key role in Turkey’s recovery** (World Economic Forum, 2021)


49. **IT skills gap report 2023** (Forbes Advisor, 2023)

50. **Inteligencia Artificial, innovación y datos, las apuestas para volver a Colombia una Potencia Digital** (Gobierno de Colombia, 2024)


53. **Skills in Latin America** (OECD, 2023)

54. **Brazil’s future workforce trends** (CSIS, 2018)

55. **Chile - country commercial guide** (U.S. Department of Commerce, 2023)

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<td>Government of Canada creating more skills training opportunities for Canadians (Employment and Social Development Canada, 2023)</td>
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<td>Share of web traffic in Africa as of July 2023, by device (Statista, 2023)</td>
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<td>Understanding India’s New Data Protection Law (Carnegie India, 2023)</td>
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