

2024

Global Skills Report

North America

coursera



Foreword

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 automation¹ and GenAI poised to deliver \$4.4 trillion in productivity gains to the global economy.² 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,³ labor force participation,⁴ human capital,⁵ and GDP per capita.⁶

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.⁷

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,⁸ Malaysia’s National AI Studies Centre,⁹ and Thailand’s AI infrastructure development program are just a few examples.¹⁰

① 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,¹¹ 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.¹² 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.¹³

→ Turn insight into action

Businesses

Invest in upskilling employees in mission-critical digital skills to keep pace with digital transformation in your industry.

Governments

Use labor market data to design local and national training programs that emphasize the most in-demand digital skills.

Higher education institutions

Integrate digital skills into curricula to ensure learners are well-prepared for jobs.

Learners

Build in-demand digital skills that are valuable to your field and desired career path.

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.¹⁴ 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.¹⁵

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.¹⁶ 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.¹⁷

→ 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 41% growth, with learners focusing on similar skills.

Sub-Saharan Africa saw the smallest growth (12%), indicating a need for increased access to learning resources and support to overcome barriers—such as underdeveloped digital infrastructure, lack of accessible 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.²⁶ 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.²⁷ India is working toward closing its 12-percentage-point gap, despite sociocultural barriers and access issues.²⁸

→ Turn insight into action

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.

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.

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

→ 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

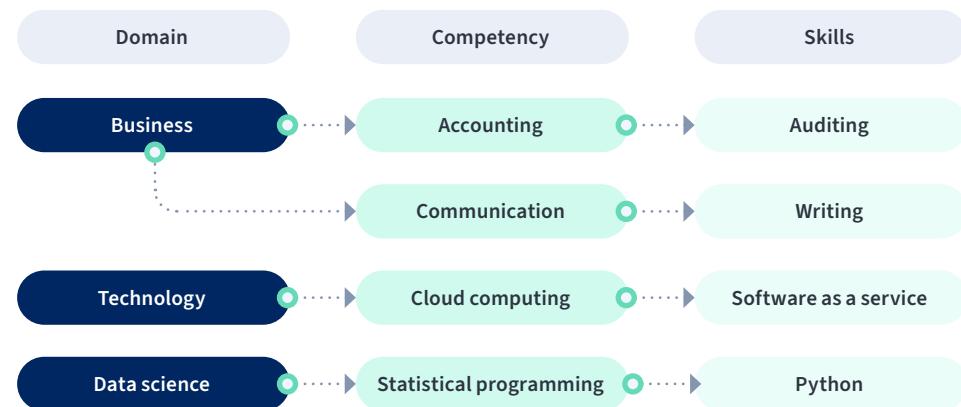
Skills in Coursera's taxonomy fall into three cascading levels: from broad to granular, they include “domains,” “competencies,” and “skills.” We use “skills” to describe all three categories in the foreword and executive summary. And in the regional and country spotlights, we use “top skills” to refer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



ⓘ 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.

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)²⁹—skill application to innovation
- Labor force participation³⁰—skill matching in labor market
- Human capital index³¹ (HCI) and GDP per capita³²—output metrics of skill application in economy

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.

Regional rank	Global rank	Country	Business	Technology	Data science
1	2	Japan	96%	99%	99%
2	12	Singapore	91%	91%	87%
3	13	Hong Kong	88%	83%	91%

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.

Recommended content for top skills and roles



Prompt Engineering
for ChatGPT



IT Support
Professional Certificate



Financial Markets



UX Design
Professional Certificate

ⓘ For more details, explore the [robust methodology](#) used in this year's report

Global Skill Trends

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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%

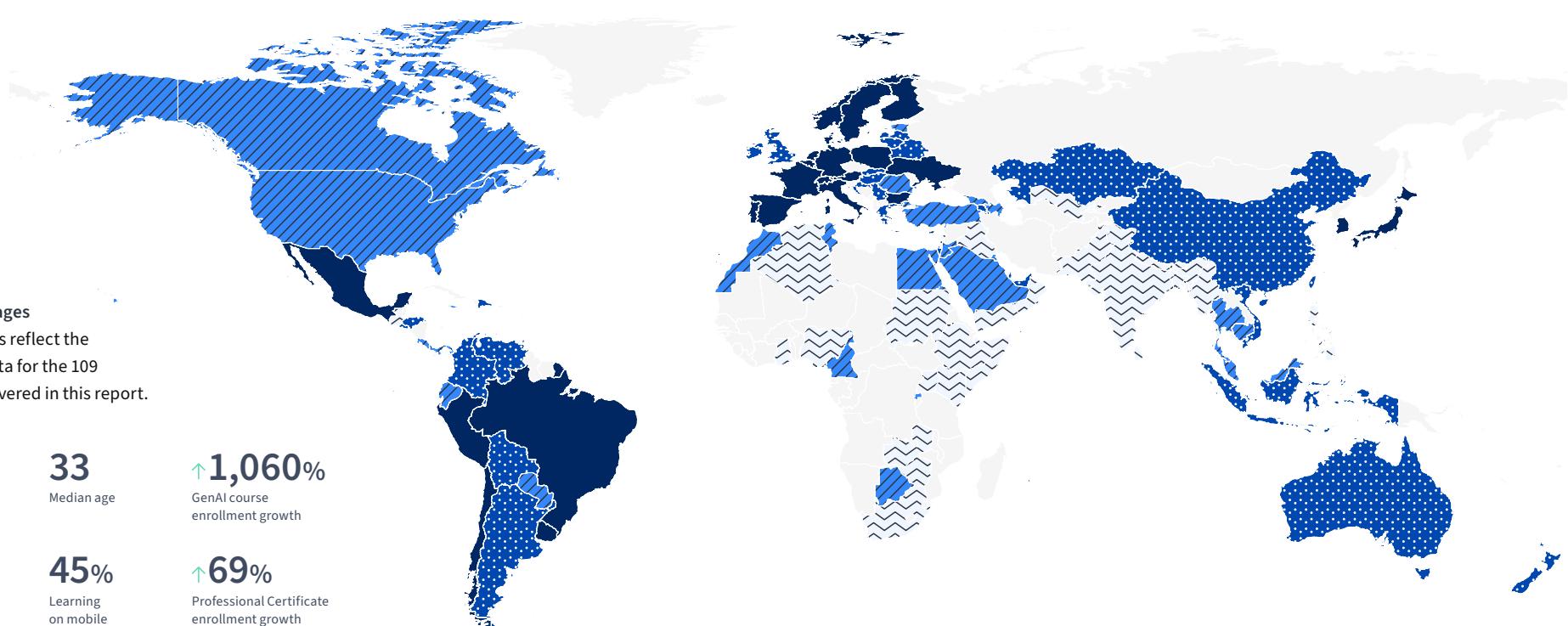
Women learners

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% **48.32**

Average skill proficiency percentile on Coursera
Average Global Innovation Index score

\$42,788 **75.3**

Average GDP per capita
Average Labor Force Participation rate

.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% **36.7**

Average skill proficiency percentile on Coursera
Average Global Innovation Index score

\$23,918 **73.4**

Average GDP per capita
Average Labor Force Participation rate

.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% **30.1**

Average skill proficiency percentile on Coursera
Average Global Innovation Index score

\$18,740 **67.8**

Average GDP per capita
Average Labor Force Participation rate

.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% **21.9**

Average skill proficiency percentile on Coursera
Average Global Innovation Index score

\$4,636 **58.4**

Average GDP per capita
Average Labor Force Participation rate

.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

Index rank	Country name	Index rank	Country name	Index rank	Country name	Index rank	Country name	Index rank	Country name	Index rank	Country name
1	Switzerland	19	Brazil	37	Dominican Republic	55	Australia	74	Cameroon	93	Iraq
2	Japan	20	Chile	38	Argentina	56	Estonia	75	Kuwait	94	Bangladesh
3	Germany	21	Uruguay	39	Serbia	57	Turkey	76	Tunisia	95	Algeria
4	Netherlands	22	Poland	40	New Zealand	58	Qatar	77	Jamaica	96	Yemen
5	France	23	Peru	41	Indonesia	59	Canada	78	Bahrain	97	Zimbabwe
6	Sweden	24	Czech Republic	42	Ireland	60	Saudi Arabia	79	Malaysia	98	Kenya
7	Spain	25	Bulgaria	43	Venezuela	61	Ecuador	80	Cambodia	99	Cote d'Ivoire
8	Austria	26	Mexico	44	Honduras	62	Costa Rica	81	Thailand	100	South Africa
9	Denmark	27	Ukraine	45	United Kingdom	63	Paraguay	82	Jordan	101	Philippines
10	Belgium	28	Cyprus	46	Hungary	64	Morocco	83	Lebanon	102	Uganda
11	Luxembourg	29	Colombia	47	Taiwan	65	Georgia	84	Pakistan	103	Myanmar
12	Singapore	30	Greece	48	El Salvador	66	Botswana	85	Guatemala	104	Ghana
13	Hong Kong	31	Slovakia	49	Croatia	67	Azerbaijan	86	Sri Lanka	105	Nigeria
14	Portugal	32	Kazakhstan	50	Bolivia	68	Panama	87	India	106	Uzbekistan
15	Italy	33	Belarus	51	Latvia	69	United States	88	Zambia	107	Somalia
16	Korea, Republic of	34	United Arab Emirates	52	Armenia	70	Romania	89	Bhutan	108	Nepal
17	Norway	35	Israel	53	Lithuania	71	Rwanda	90	Oman	109	Sudan
18	Finland	36	China	54	Vietnam	72	Egypt	91	Puerto Rico		
						73	Trinidad & Tobago	92	Ethiopia		

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.

^① [Active learners](#) are those who have started at least one course item on Coursera within the past year.

Rank	Region	Country	Labor force active on Coursera
	Global	All	0.73%
1	Asia Pacific	Uzbekistan	6.25%
2	Asia Pacific	Singapore	3.83%
3	Middle East and North Africa	United Arab Emirates	2.07%
4	North America	Canada	2.03%
5	Asia Pacific	Hong Kong	2.02%
6	North America	United States	1.66%
7	Europe	Luxembourg	1.51%
8	Middle East and North Africa	Lebanon	1.47%
9	Latin America and the Caribbean	Uruguay	1.42%
10	Europe	Ireland	1.41%
11	Latin America and the Caribbean	Trinidad and Tobago	1.21%
12	Europe	Switzerland	1.13%
13	Asia Pacific	Cyprus	1.12%
14	Europe	Estonia	1.11%
15	Europe	Netherlands	1.09%
16	Europe	Latvia	1.07%
17	Middle East and North Africa	Saudi Arabia	1.07%
18	Asia Pacific	Kazakhstan	1.06%
19	Europe	United Kingdom	1.06%
20	Latin America and the Caribbean	Colombia	1.02%

Regional Skill Trends

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



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



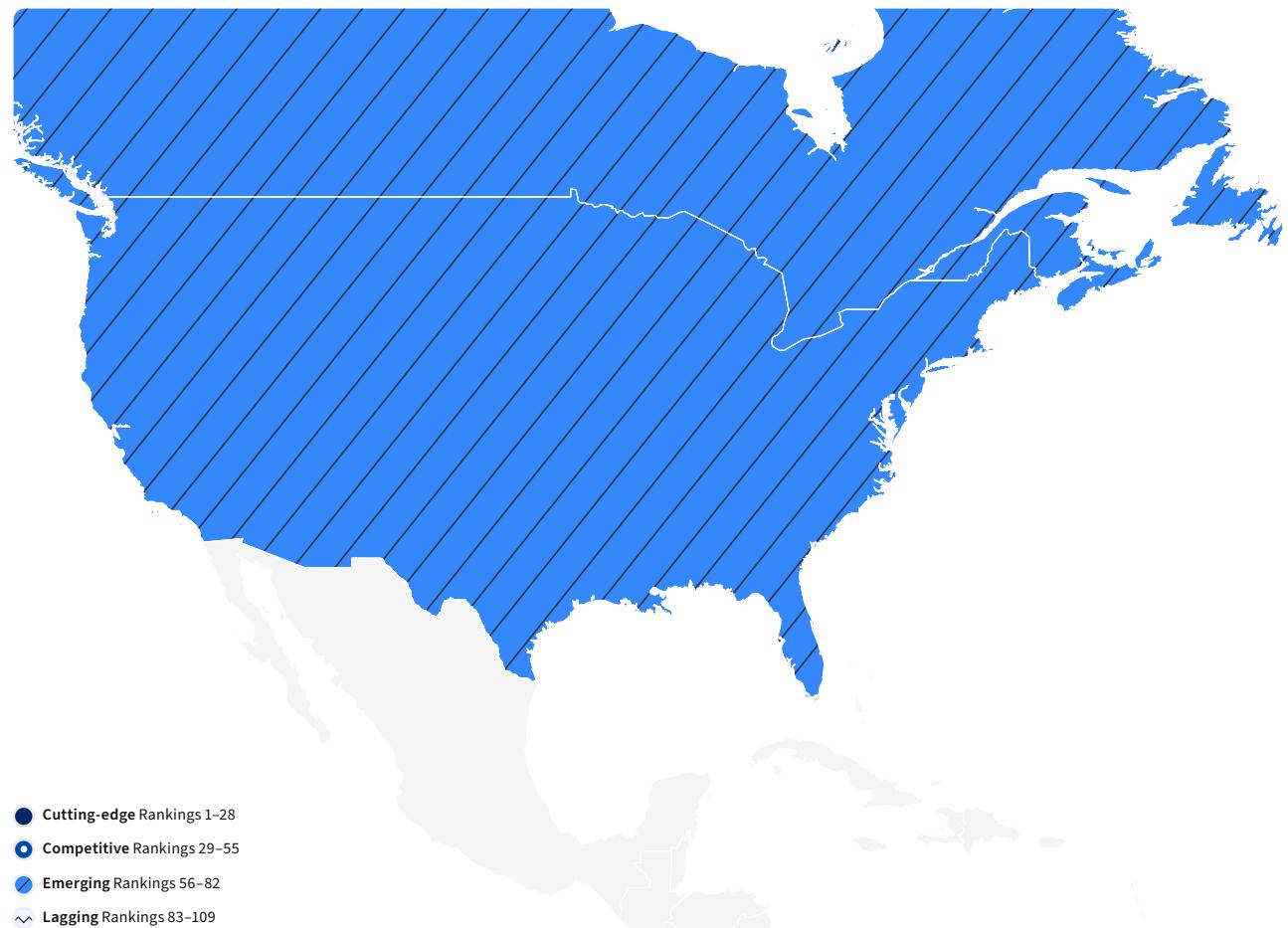
[Unlocking Productivity: The Business Leader's Playbook to Generative AI Skills Training](#)

North America

31.2M	18%	52%
Coursera learners	YoY enterprise enrollments	Women learners
40%	36	38%
Learning on mobile	Median age	Women learners in STEM

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 19](#) 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.³³

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.³⁴

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 System³⁵ and the state of Nevada³⁶ 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
9. Financial Analyst
10. Cyber Analyst

Most popular content in North America

 Google	Foundations: Data, Data, Everywhere
 Google	Foundations of Cybersecurity
 Google	Foundations of Project Management
 Google	Technical Support Fundamentals
 Google	Foundations of Digital Marketing and E-commerce
 Yale	The Science of Well-Being
 DeepLearning.AI	AI for Everyone
 Coursera project network	Supervised Machine Learning: Regression and Classification
 Vanderbilt University	Introduction to Microsoft Excel
	Prompt Engineering for ChatGPT

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.

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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

GenAI**↑ 1,040%**

YoY enrollment growth

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**↑ 8%**

YoY enrollment growth

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**↑ 61%**

YoY enrollment growth

Top Professional Certificates

- Data Analytics Professional Certificate
- Cybersecurity Professional Certificate
- Project Management Professional Certificate
- IT Support Professional Certificate
- Digital Marketing & E-commerce Professional Certificate

North America

Regional skill rankings

Regional rank	Global rank	Country	Business	Technology	Data Science
1	59	Canada	47%	50%	59%
2	69	United States	37%	36%	50%

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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 Lane, PhD**

CCNA Strategy & Innovation Engineer, Cisco

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By integrating these certificates into their curricula, institutions can enhance the value of their degrees and equip students with additional industry-relevant skills. This not only improves students' overall employability, but also prepares them for the demands of the modern workforce.

**Mark Woychick**

Clinical Assistant Professor and Director at the College of Innovation and Design, Boise State University



[CampusTalks Insights: Boise State Empowers Students with Industry Credentials](#)

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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

Country spotlight

Canada

4M

Coursera learners

59

Global rank

36

Median age

54%

Women learners

40%

Women learners in STEM

38%

Learning on mobile

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.³⁷ 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.³⁸

Domain rankings

59

Business

56

Tech

46

Data science

Enrollment trends

GenAI

↑ 914% YoY enrollments

Top courses

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

Professional Certificates

↑ 63% YoY enrollments

Top Professional Certificates

-  Data Analytics [Professional Certificate]
-  Cybersecurity [Professional Certificate]
-  Project Management [Professional Certificate]

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 |  Data Analysis with Spreadsheets and SQL |
|  Storytelling and influencing: Communicate with impact |  Essential Epidemiologic Tools for Public Health Practice |
|  Adaptability and Resiliency |  Everyday Excel, Part 1 |
|  Spatial Analysis and Satellite Imagery in a GIS |  Digital Marketing & E-commerce [Professional Certificate] |
|  Natural Creativity |  Social Media Marketing [Professional Certificate] |

Country spotlight

United States

27.7M

Coursera learners

69

Global rank

36

Median age

52%

Women learners

38%

Women learners in STEM

40%

Learning on mobile

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.³⁹ 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.⁴⁰

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.

Domain rankings

70
Business
71
Tech
55
Data science

Enrollment trends

GenAI

↑ 1,058% YoY enrollments

Top courses

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

Professional Certificates

↑ 61% YoY enrollments

Top Professional Certificates

-  Data Analytics Professional Certificate
-  Cybersecurity Professional Certificate
-  Project Management Professional Certificate

Top skills

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

Top target roles

1. Personal Financial Advisor
2. Business Intelligence Analyst
3. Bookkeeper
4. Risk Analyst
5. Technology Consultant
6. Network Engineer
7. Financial Quantitative Analyst
8. Database Architect
9. Cybersecurity Analyst
10. Financial Analyst

Recommended content for top skills and roles

- | | |
|---|--|
|  Bayesian Statistics: From Concept to Data Analysis |  Cross-Cultural Communication and Management |
|  Python Scripting Fundamentals |  Financial Accounting Fundamentals |
|  Data Analysis with Spreadsheets and SQL |  Leading Transformations: Manage Change |
|  Introduction to GIS Mapping |  Power BI Data Analyst Professional Certificate |
|  Investigating Epidemics like COVID-19: An Analyst's Guide |  Project Management Professional Certificate |

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. Skill proficiency is a key metric used in this report to benchmark countries and 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

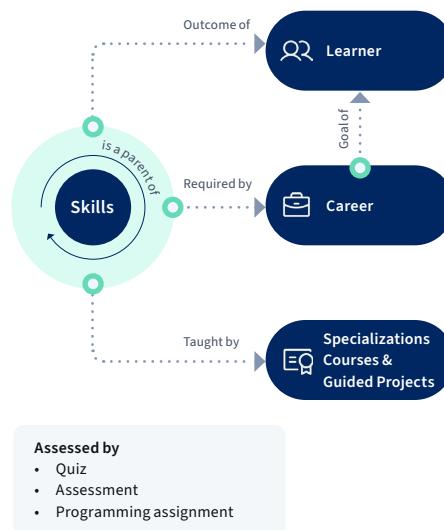
Coursera's *Global Skills Report* assesses the skill proficiency of learners, measures which skills are trending globally, and identifies roles that engage highly with skills critical for the future of work. This year's report focuses on the 109 countries with the most learners on the Coursera platform, 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 [New](#)
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	Technology	Data science
<p>Business</p> <p>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.</p>	<p>Technology</p> <p>Skills in this domain focus on the creation, maintenance, and scaling of computer systems and software.</p>	<p>Data science</p> <p>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.</p>
<p>1. Accounting focuses on proper record keeping and communication of financial information for corporations in accordance with government regulations.</p> <p>Sample skills: auditing, financial accounting</p>	<p>Cloud Computing involves delivering computing resources—namely hardware, software, or software development platforms—via the internet.</p> <p>Sample skills: software as a service (SaaS), Kubernetes</p>	<p>Data Management comprises everything related to managing and accessing data for reporting, analysis, and model building.</p> <p>Sample skills: cloud APIs, Hadoop</p>
<p>2. Business Analysis is the discipline of recognizing business needs and developing solutions to business problems.</p> <p>Sample skills: business intelligence, spreadsheet software</p>	<p>Computer Architecture is the set of rules and methods that specify the structure, organization, and implementation of computer systems.</p> <p>Sample skills: network architecture, distributed computing architecture</p>	<p>Data Visualization involves the creation and study of visual representations of data to communicate information clearly and efficiently.</p> <p>Sample skills: Tableau, plotting data</p>
<p>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.</p> <p>Sample skills: marketing psychology, organization development</p>	<p>Computer Graphics is the creation and manipulation of visual data through the use of computational tools and techniques.</p> <p>Sample skills: graphic design, interactive design</p>	<p>Machine Learning creates algorithms and statistical models that computer systems can use to perform a specific task without explicit instructions.</p> <p>Sample skills: multitask learning, deep learning</p>
<p>4. Communication is the practice of discussion between two or more individuals in written or oral forms.</p> <p>Sample skills: people skills, writing</p>	<p>Computer Networking is the process of creating a digital telecommunications network where connected devices exchange data with each other.</p> <p>Sample skills: cloud computing, Internet of Things</p>	<p>Math is the study of numbers and their relationships, applying these principles to models of real phenomena.</p> <p>Sample skills: calculus, linear algebra</p>

Business (cont.)	Technology (cont.)	Data science (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	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	Statistical Programming is the set of programming languages and tools used to create statistical models and algorithms. Sample skills: R, Python
6. Entrepreneurship is the process of designing, launching, and running a new business. Sample skills: adaptability, innovation	Databases are an organized collection of data, generally stored and accessed electronically from a computer system. Sample skills: relational database, key value database	Statistics deals with all aspects of data collection, organization, analysis, interpretation, and presentation. Sample skills: regression, A/B testing
7. Finance is focused on the efficient allocation of capital toward investment opportunities under conditions of risk or uncertainty. Sample skills: financial ratios, blockchain	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	N/A
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	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	N/A
9. Management is about how to set a company's strategy and coordinate the efforts of employees. Sample skills: people management, business analytics	Human Computer Interaction studies the design and use of interfaces between people and computing environments. Sample skills: user experience, interactive design	N/A
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	Mobile Development is the process of developing software applications for mobile devices such as mobile phones or tablets. Sample skills: Android development, iOS development	N/A

Business (cont.)	Technology (cont.)	Data science (cont.)
<p>11. Research & Design is about problem framing and solution modeling to inform business strategy.</p> <p>Sample skills: innovation, market research</p>	<p>Operating Systems consists of building system software that provides common services for other types of computer programs.</p> <p>Sample skills: mobile app development, C programming language</p>	N/A
<p>12. Sales is focused on taking a company's products and services to market and transacting with actual customers.</p> <p>Sample skills: cross-selling, lead generation</p>	<p>Security Engineering 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.</p> <p>Sample skills: cybersecurity, cryptography</p>	N/A
<p>13. Strategy & Operations consists of the planning and strategic work organizations undertake to grow and prosper.</p> <p>Sample skills: operations management, strategy</p>	<p>Software Engineering involves applying rigorous principles to the design, development, maintenance, testing, and evaluation of computer software.</p> <p>Sample skills: software architecture, software development</p>	N/A
<p>14. Supply Chain & Logistics is about the systems involved in the efficient flow of goods and services from suppliers to consumers.</p> <p>Sample skills: supply chain systems, planning</p>	<p>Theoretical Computer Science focuses on mathematical aspects of computer science and the theory behind algorithms, data structures, computational complexity, and related topics.</p> <p>Sample skills: algorithms, cryptography</p>	N/A
15. N/A	<p>Web Development 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.</p> <p>Sample skills: Angular, HTML and CSS</p>	N/A

Relationships between skills and content

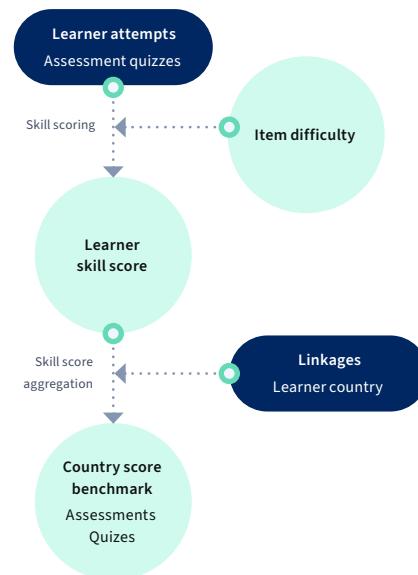
The skills in the Coursera Skills Taxonomy are mapped to the content that teaches them using a machine learning model trained on a dataset of instructor and learner-labeled skill-to-content mappings. The model considers features like occurrence counts in lecture transcripts, assignments, and course descriptions, 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. To define the set of skill-to-content tags that power this report, we tune a cutoff threshold based on expert feedback from our content strategy team.

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.⁴¹

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 capita⁴²
- Human Capital Index⁴³
- Labor force participation rate⁴⁴

We incorporate the following metrics from the World Intellectual Property Organization (WIPO):

- Global Innovation Index (GII)⁴⁵

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:

$$\frac{0.5}{4} \text{ (GII percentile)} + \frac{0.5}{4} \text{ (LFP percentile)} + \\ \frac{0.5}{4} \text{ (GDP percentile)} + \frac{0.5}{4} \text{ (human capital index)}$$

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)⁴⁶—skill application to innovation
 - Labor force participation⁴⁷—skill matching in labor market
 - Human capital index (HCI)⁴⁸ and GDP per capita⁴⁹—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: United States

① Rankings include states with a minimum of 250 learners.

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

United States cont.

① Rankings include states with a minimum of 250 learners.

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

Examples of large-scale AI initiatives

Region	Country	Initiative
Asia Pacific	India	Digital Personal Data Protection (DPDP) Act ⁵⁰
Asia Pacific	Thailand	AI Thailand ⁵¹
Asia Pacific	Singapore	AI Verify ⁵²
Europe	European Union	AI Act ⁵³
Latin America and the Caribbean	Chile	Política Nacional De Inteligencia Artificial ⁵⁴
Latin America and the Caribbean	Colombia	Política Nacional Para La Transformación Digital e Inteligencia Artificial ⁵⁵
Middle East and North Africa	Saudi Arabia	Saudi Data & AI Authority ⁵⁶
Middle East and North Africa	UAE	UAE National Strategy for Artificial Intelligence 2031 ⁵⁷
North America	Canada	Pan-Canadian Artificial Intelligence Strategy ⁵⁸
North America	United States	Federal: Blueprint for an AI Bill of Rights ⁵⁹ Connecticut: SSB No. 1103 - Public Act No. 23-16 ⁶⁰ Louisiana: SCR 49 ⁶¹ Maryland: HB0622 ⁶² North Dakota: HB1361 ⁶³ Texas: Artificial Intelligence Advisory Council ⁶⁴
Sub-Saharan Africa	N/A	African Union Development Agency's AI Blueprint ⁶⁵

“

The capabilities of GenAI are groundbreaking and game-changing.



Dr. Jules White

Director of the Initiative on the Future of Learning & GenAI, 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)
13. [The Future of Jobs Report](#) (World Economic Forum, 2023)
14. [ISC2 Cybersecurity Workforce Study](#) (ISC2, 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)
18. [The Future of Jobs Report](#) (World Economic Forum, 2023)
19. [Occupational Outlook Handbook](#) (U.S. Bureau of Labor Statistics, 2024)
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)
21. [Digital skills in 2023: impact of education and age](#) (European Union, 2024)
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)
27. [Bigger Bandwidth: Girls in ICT make way for digital equity in Thailand](#) (UN Sustainable Development Group, 2021)
28. [India Social Development Report 2023](#) (Oxford Academic, 2023)
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. [Closing the digital skill divide](#) (National Skills Coalition, 2023)

34. [Joint statement on the launch of the North American Semiconductor Conference and North American Ministerial Committee on Economic Competitiveness](#) (The White House, 2023)
35. [University of Texas System and Coursera Launch the Most Comprehensive Industry Micro-Credential Program Offered by a U.S. University System](#) (Coursera, 2023)
36. [Nevada DETR and Coursera announce statewide program providing free job training to thousands of people](#) (Coursera, 2023)
37. [Government of Canada creating more skills training opportunities for Canadians](#) (Employment and Social Development Canada, 2023)
38. [Ontario Invests in New and Expanded Rapid Training Programs](#) (Ontario, 2021)
39. [Closing the digital skill divide](#) (National Skills Coalition, 2023)
40. [Improving workforce development and STEM education to preserve America's innovation edge](#) (Brookings, 2023)
41. [Using a Glicko-based Algorithm to Measure In-Course Learning](#) (Educational Data Mining Conference Proceedings, 2019)
42. [GDP per capita](#) (World Bank, 2018–2023)
43. [Human Capital Index \(HCI\)](#) (World Bank, 2018–2023)
44. [Labor force participation rate](#) (World Bank, 2018–2023)
45. [Global Innovation Index \(GII\)](#) (WIPO, 2018–2023)
46. [Global Innovation Index \(GII\)](#) (WIPO, 2018–2023)
47. [Labor force participation rate](#) (World Bank, 2018–2023)
48. [Human Capital Index \(HCI\)](#) (World Bank, 2018–2023)
49. [GDP per capita](#) (World Bank, 2018–2023)
50. [Understanding India's New Data Protection Law](#) (Carnegie India, 2023)
51. [Thailand national AI strategy and action plan](#) (AI Thailand, 2022)
52. [Singapore's Approach to AI Governance](#) (Personal Data Protection Commission, Government of Singapore, 2023)
53. [AI Act](#) (European Commission, 2024)
54. [Política Nacional de Inteligencia Artificial](#) (Ministerio de Ciencia Tecnología Conocimiento e Innovación, Gobierno de Chile, 2021)
55. [Política Nacional Para La Transformación Digital e Inteligencia Artificial](#) (Consejo Nacional de Política Económica y Social, Gobierno de Colombia, 2019)
56. [Saudi Data & AI Authority](#) (Government of Saudi Arabia, 2019)
57. [UAE National Strategy for Artificial Intelligence 2031](#) (Government of UAE, 2023)
58. [Pan-Canadian Artificial Intelligence Strategy](#) (Innovation, Science and Economic Development Canada, 2022)
59. [Blueprint for an AI Bill of Rights](#) (White House Office of Science and Technology Policy, 2022)
60. [SSB No. 1103 - Public Act No. 23-16](#) (Connecticut State Legislature, 2023)
61. [SCR49](#) (Louisiana State Legislature, 2023)
62. [HB0622](#) (Maryland State Legislature, 2023)
63. [HB1361](#) (North Dakota State Legislature, 2023)
64. [HB 2060 \(88R\)](#) (Texas State Legislature, 2024)
65. [Africa's push to regulate AI starts now](#) (MIT Technology Review, 2024)

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