# Global Skills Report

Trusted skill insights for a rapidly changing world

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 automation<sup>1</sup> and GenAI poised to deliver \$4.4 trillion in productivity gains to the global economy.<sup>2</sup> 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 GenAl, digital transformation, and automation. Notably, in 2023, a learner signed up for a GenAl course on Coursera every minute; by 2024, this rate had quadrupled. An astounding 1,060% year-over-year increase in global GenAl course enrollments highlights how learners are actively preparing for Al'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, albor 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



02

03 04

## **Table of contents**

01
Foreword
Table of contents
Executive summary
How to read this report
02 Global Skill Trends Global overview

03	
Regional Skill Trends	15
Asia Pacific	16
India	20
Indonesia	21
Malaysia	22
The Philippines	23
Singapore	24
Thailand	25
Europe	26
France	30
Germany	31
Spain	32
Turkey	33
United Kingdom	34

Latin America and the Caribbean	35
Brazil	39
Chile	40
Colombia	41
Mexico	42
Peru	43
Middle East and North Africa	44
Egypt	48
Saudi Arabia	49
United Arab Emirates	50
North America	51
Canada	55
United States	56
Sub-Saharan Africa	57
Botswana	61
Nigeria	62
South Africa	63

04		
Appendix		
Glossary		

Methodology Endnotes

**10** 

78

01 02 03

## **Executive summary**

04

## 1 Al 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.

# Al 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.<sup>7</sup>

Regions like Asia Pacific (1,270% YoY) and Sub-Saharan Africa (1,500% YoY) are also witnessing significant growth in GenAl 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.

# 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 <u>digital skills</u> as a major obstacle to investment, with 40% of adults lacking even basic digital skills. <sup>12</sup> This challenge is not unique to the region. We found that learners in many regions are prioritizing <u>human skills</u> 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.<sup>13</sup>

#### → Turn insight into action

#### **Businesses**

Invest in upskilling employees in missioncritical 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. <sup>14</sup> 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. <sup>15</sup>

While <u>cybersecurity enrollments</u> 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. <sup>16</sup> 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.<sup>17</sup>

#### → 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.

## 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.<sup>19</sup>

Coursera learners are enrolling in job-relevant Professional Certificates to prepare for indemand 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.<sup>20</sup>

There was a 61% year-over-year growth in <u>Professional Certificate enrollments</u> 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.

#### $\rightarrow$ Turn insight into action

#### **Businesses**

Adapt hiring practices to recognize microcredentials 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

Over the past year, 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 between the percent of women active in the labor force and the percent learning on Coursera, far fewer than almost anywhere else. <sup>20</sup> In the European Union, for example, more women aged 16–44 have basic digital skills than men, <sup>21</sup> 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 Mexico<sup>22</sup> to increase females in STEM careers—and Colombia's efforts to close the digital gender gap.

The Middle East and North Africa has 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 43% of the general population. Technological, economic, and educational barriers are limiting women's access to education.<sup>23</sup>

Sub-Saharan Africa has the largest disparity, with a 14-percentage-point gap between women learners and women in the general population, despite Botswana being a bright spot by 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. <sup>24</sup> 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 five-percentagepoint gap in gender parity between percent of women active in the labor force and the percent learning on Coursera. The Philippines and Thailand have achieved parity, likely due to effective educational reforms and STEM initiatives for girls and young women.<sup>27</sup> Thailand's Girls in ICT program builds awareness about the digital divide, supports technology education and skills training, and encourages females to pursue careers in STEM.26 India is working toward closing its 10-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.

**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

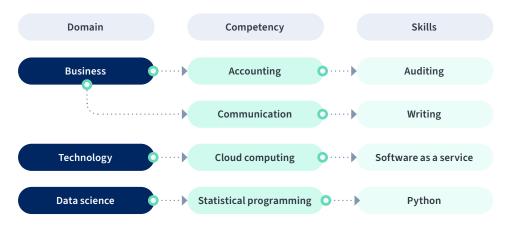
Skills in Coursera's taxonomy fall into three cascading levels: from broad to granular, they include "domains," "competencies," and "skills." We use "skills" to describe all three categories in the foreword and executive summary. And in the regional and country spotlights, we use "top skills" to refer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



① 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%

**50**%

Country's aggregated skills measurement on Coursera

• Learners' on-platform skill proficiency scores



Country's aggregated skills measurement index using third party metrics

- Global Innovation Index (GII)<sup>29</sup>—skill application to innovation
- Labor force participation<sup>30</sup>—skill matching in labor market
- Human capital index<sup>31</sup> (HCI) and GDP per capita<sup>32</sup>—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

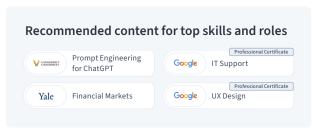
The report also features <u>enrollment trends</u> on the Coursera platform that capture which competencies, skills, or top target roles learners are engaging with over time. Enrollment trends are presented at global, regional, and country levels and are presented in three ways:

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 <u>over-indexing methodology</u> to capture what learners in a specific country or region are disproportionately enrolling in compared to learners globally.

<u>Most popular content</u> 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.



① For more details, explore the <u>robust methodology</u> used in this year's report

## Global Skill Trends



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

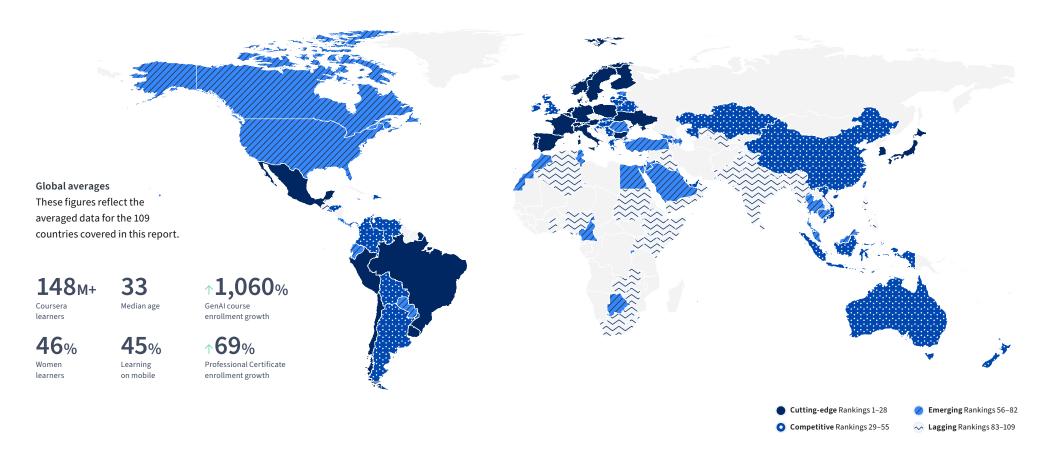




2024 Job Skills Report webinar



## **Global overview**



COUI'SEI'Q Global Skills Report 2024 | Global Skill Trends

#### 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

\$**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 Innovation Index score proficiency percentile on Coursera

\$**23,918** 

Average GDP per capita

.66

Average Human Capital Index

36.7

Average Global Innovation Index score

73.4

Average Labor Force Participation rate

.57

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

**\$18,740** 

Average GDP per capita

Participation rate

30.1

67.8

Average Global

Innovation Index score

Average Labor Force

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

\$**4,636** 

Average GDP per capita

.48

Average Human Capital Index

21.9

Average Global Innovation Index score

58.4

Average Labor Force Participation rate

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

48.32

75.3

Average Global

Average Labor Force

Participation rate

Index rank	Country name
1	Switzerland
2	Japan
3	Germany
4	Netherlands
5	France
6	Sweden
7	Spain
8	Austria
9	Denmark
10	Belgium
11	Luxembourg
12	Singapore
13	Hong Kong
14	Portugal
15	Italy
16	Korea, Republic of
17	Norway
18	Finland

Index rank	Country name
19	Brazil
20	Chile
21	Uruguay
22	Poland
23	Peru
24	Czech Republic
25	Bulgaria
26	Mexico
27	Ukraine
28	Cyprus
29	Colombia
30	Greece
31	Slovakia
32	Kazakhstan
33	Belarus
34	United Arab Emirates
35	Israel
36	China

Index rank	Country name
37	Dominican
	Republic
38	Argentina
39	Serbia
40	New Zealand
41	Indonesia
42	Ireland
43	Venezuela
44	Honduras
45	United Kingdom
46	Hungary
47	Taiwan
48	El Salvador
49	Croatia
50	Bolivia
51	Latvia
52	Armenia
53	Lithuania
54	Vietnam

Index rank	Country name
55	Australia
56	Estonia
57	Turkey
58	Qatar
59	Canada
60	Saudi Arabia
61	Ecuador
62	Costa Rica
63	Paraguay
64	Morocco
65	Georgia
66	Botswana
67	Azerbaijan
68	Panama
69	United States
70	Romania
71	Rwanda
72	Egypt
73	Trinidad & Tobago

Index rank	Country name
74	Cameroon
75	Kuwait
76	Tunisia
77	Jamaica
78	Bahrain
79	Malaysia
80	Cambodia
81	Thailand
82	Jordan
83	Lebanon
84	Pakistan
85	Guatemala
86	Sri Lanka
87	India
88	Zambia
89	Bhutan
90	Oman
91	Puerto Rico
92	Ethiopia

Index rank	Country name
93	Iraq
94	Bangladesh
95	Algeria
96	Yemen
97	Zimbabwe
98	Kenya
99	Cote d'Ivoire
100	South Africa
101	Philippines
102	Uganda
103	Myanmar
104	Ghana
105	Nigeria
106	Uzbekistan
107	Somalia
108	Nepal
109	Sudan

 $Global\ skill\ proficiency\ rankings\ across\ business,\ technology,\ and\ data\ science\ for\ 109\ countries,\ based\ on\ the\ performance\ of\ learners\ on\ Coursera\ and\ key\ economic\ indices.$ 

#### 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.

GlobalAll0.73%1Asia PacificUzbekistan6.25%2Asia PacificSingapore3.83%3Middle East and North AfricaUnited Arab Emirates2.07%4North AmericaCanada2.03%5Asia PacificHong Kong2.02%6North AmericaUnited States1.66%7EuropeLuxembourg1.51%8Middle East and North AfricaLebanon1.47%	
Asia Pacific Singapore 3.83% Middle East and North Africa United Arab Emirates 2.07% North America Canada 2.03% Singapore 2.02% North America Hong Kong 2.02% North America United States 1.66% United States 1.51%	
Middle East and North Africa United Arab Emirates 2.07% North America Canada 2.03% Hong Kong 2.02% North America United States 1.66% Luxembourg 1.51%	
4North AmericaCanada2.03%5Asia PacificHong Kong2.02%6North AmericaUnited States1.66%7EuropeLuxembourg1.51%	
5Asia PacificHong Kong2.02%6North AmericaUnited States1.66%7EuropeLuxembourg1.51%	
6 North America United States 1.66% 7 Europe Luxembourg 1.51%	
7 Europe Luxembourg 1.51%	
9 Middle East and North Africa Lobanon 1 4704	
o Middle East and Not the Africa Lebanon 1.41%	
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%	
Estonia 1.11%	
15 Europe Netherlands 1.09%	
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%	

 <u>Active learners</u> are those who have started at least one course item on Coursera within the past year.

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## Regional Skill Trends



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



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



<u>Unlocking Productivity: The Business Leader's</u> <u>Playbook to Generative AI Skills Training</u>



01 02 03 04

## **Asia Pacific**

**49.2**<sub>M</sub>

Coursera

45% 3

Learning on mobile

**182**%

YoY enterprise enrollments

31

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learners 31%

Women

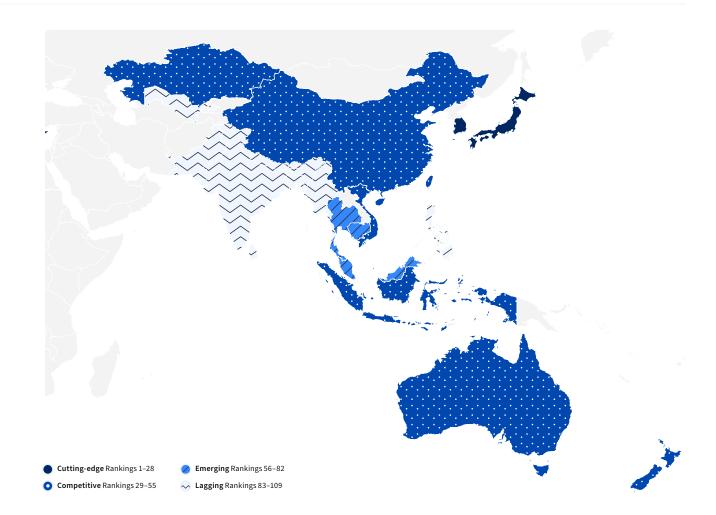
**42**%

Women learners in STEM

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 GenAl 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.

① See <u>page 19</u> for country skill rankings in Asia Pacific



#### **Asia Pacific**

02

#### Regional enrollment trends

03

APAC CEOs are accelerating AI investment, driving growth in AI and cybersecurity course enrollments on Coursera.<sup>33</sup> Despite this momentum, the region faces the challenge of digitally skilling 5.7 billion people by 2025.<sup>34</sup>

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 microcredentials 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
- Data Visualization Software
- 4. Applied Machine Learning
- 5. Machine Learning Algorithms
- 6. Regression
- 7. Software Architecture
- 3. Artificial Neural Networks
- 9. Network Architecture
- 10. Data Analysis Software

#### Top target roles

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

#### Most popular content in Asia Pacific



#### 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.

#### **Asia Pacific**

#### Regional enrollment trends cont.

66

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

#### GenAl

↑ **1,270**% YoY enrollment growth

#### Top courses



#### Cybersecurity

↑**6**% YoY enrollment growth

#### Top courses



#### **Professional Certificates**

**126**%

YoY enrollment growth

#### **Top Professional Certificates**



01 02 **03** 04

#### **Asia Pacific**

#### Regional skill rankings

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%
4	16	South Korea	76%	78%	93%
5	32	Kazakhstan	73%	90%	46%
6	36	China	71%	54%	77%
7	40	New Zealand	56%	61%	76%
8	41	Indonesia	25%	69%	82%
9	47	Taiwan	50%	43%	72%
10	54	Vietnam	58%	58%	48%
11	55	Australia	49%	56%	61%
12	79	Malaysia	30%	28%	33%
13	80	Cambodia	32%	35%	25%
14	81	Thailand	31%	23%	29%
15	84	Pakistan	24%	22%	20%
16	86	Sri Lanka	6%	34%	35%
17	87	India	11%	33%	30%

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



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

#### Country spotlight

02

## India

24.6<sub>M</sub>

87 Global rank

Median age

30

39% Women learners

learners

33% Women learners in STEM 53% Learning on mobile

India's 1,648% increase in GenAl course enrollments reflects deep engagement with cutting-edge technology. This aligns with the government's \$1.2 billion investment in Al.<sup>35</sup> 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, <sup>36</sup> India is making significant strides toward closing its skill gaps and building a competitive workforce.

#### **Domain rankings**

98 Business **74**Tech

Data science

## Enrollment trends GenAI

1,648% YoY enrollments

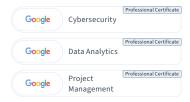
#### Top courses



#### **Professional Certificates**

Static YoY enrollments

#### **Top Professional Certificates**



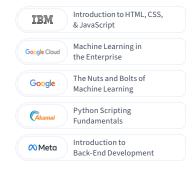
#### Top skills

- 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

- 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







#### Country spotlight

## Indonesia

1.8M Coursera learners 41
Global

29 Median

46% Women learners 33% Women learners in STEM 46%
Learning
on mobile

Indonesia's 116% year-over-year increase in Professional Certificate enrollments shows a focus on industry-aligned skill development. Al 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.<sup>37</sup>

#### **Domain rankings**

83
Business

**35** Tech

21

Data science

### Enrollment trends

GenAl

 $\uparrow$  **1,158**% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑ 116% YoY enrollments

#### **Top Professional Certificates**



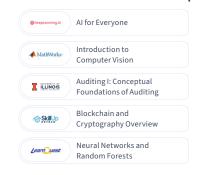
#### Top skills

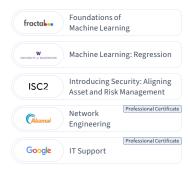
- 1. Artificial Neural Networks
- 2. Applied Machine Learning
- 3. Computer Graphic Techniques
- 4. BlockChain
- 5. Machine Learning Algorithms
- 6. Computer Vision
- 7. Deep Learning
- 8. Audit
- 9. Network Architecture
- 10. Spreadsheet Software

#### 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







#### Country spotlight

02

## Malaysia

782K Coursera learners 79 Global 32 Median age

46% Women learners 34% Women learners in STEM 38% Learning on mobile

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. Bearners focus on SQL, FinTech, blockchain, and business analytics in response to the growing demand for tech professionals. 9

#### **Domain rankings**

**77**Business

**79** Tech

74

Data science

#### **Enrollment trends**

GenAl

↑806% YoY enrollments

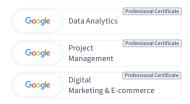
#### Top courses



#### **Professional Certificates**

↑97% YoY enrollments

#### **Top Professional Certificates**



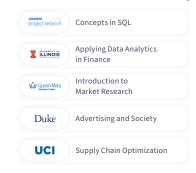
#### Top skills

- 1. Spreadsheet Software
- 2. SQL
- 3. FinTech
- 4. Supply Chain Systems
- Market Research
- 6. Business Communication
- 7. Investment Management
- Advertising
- 9. Blockchain
- 10. Risk Management

#### Top target roles

- 1. General Manager
- 2. IT Director
- 3. Business Analyst
- 4. Operations and Maintenance Specialist
- 5. Personal Financial Advisor
- 6. Operations Manager
- 7. Systems Analyst
- 8. Auditor
- 9. Product Manager
- 10. Financial Analyst







#### Country spotlight

02

## The Philippines

2.4<sub>M</sub> Coursera learners

101 Global rank

31 Median

**51**% Women learners

36% Women learners in STEM

43% Learning on mobile

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.

#### **Domain rankings**

**Business** 

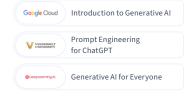
101 Data science

### **Enrollment trends**

#### GenAl

↑642% YoY enrollments

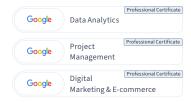
#### Top courses



#### **Professional Certificates**

↑79% YoY enrollments

#### Top Professional Certificates



#### Top skills

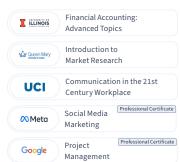
- 1. Audit
- 2. Spreadsheet Software
- 3. Graphic Design
- 4. Storytelling
- Social Media
- General Accounting
- 7. Advertising
- **Business Communication**
- 9. Influencing
- 10. Market Research

#### Top target roles

- 1. Personal Financial Advisor
- 2. Product Marketing Manager
- Operations Manager
- 4. General Manager
- 5. IT Director
- 6. IT Project Manager
- 7. Project Manager
- **Business Analyst**
- 9. Operations & Maintenance Specialist
- 10. Marketing Specialist







02

03

04

Country spotlight

## Singapore

1.1M Coursera learners 12 Global 34 Median

45% Women learners

36% Women learners

in STEM

31% Learning

on mobile

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. 40 The SkillsFuture credits program reflects Singapore's commitment to lifelong learning, ensuring the workforce remains adaptable and competitive. 41

#### **Domain rankings**

11 Business 11 Tech

15

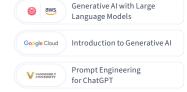
Data science

#### **Enrollment trends**

GenAl

↑815% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑57% YoY enrollments

#### **Top Professional Certificates**



#### Top skills

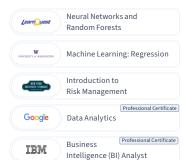
- 1. Epidemiology
- 2. FinTech
- 3. Resilience
- 4. BlockChain
- 5. Investment Management
- 6. Bayesian Statistics
- 7. Machine Learning Algorithms
- 8. Artificial Neural Networks
- 9. Applied Machine Learning
- 10. Risk Management

#### 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







03

#### Country spotlight

## **Thailand**

941<sub>k</sub> Coursera

81 Global rank

32 Median

46%

Learning

on mobile

50% Women learners

learners

**32**% Women learners in STEM

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 SOL 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**

76 Business 85 Tech

67

Data science

## **Enrollment trends**

GenAl

1,073% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑311% YoY enrollments

#### Top Professional Certificates



#### Top skills

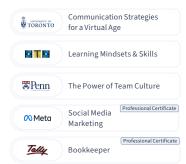
- 1. Culture
- SQL 2.
- Writing 3.
- **Business Communication**
- **Brand Management**
- FinTech 6.
- Spreadsheet Software
- Human Learning
- Advertising
- 10. Experiment

#### Top target roles

- 1. Media Buyer
- Social Media Marketer
- **Public Relations Manager**
- **Communications Specialist**
- Personal Financial Advisor
- **Product Marketing Manager**
- Bookkeeper
- 8. Financial Manager
- 9. Data Analyst
- 10. IT Director







01 02 03 04

## Europe

**24.5**<sub>M</sub>

Coursera learners

**38**%

Learning on mobile

**43**%

YoY enterprise enrollments

**34**%

Women learners in STEM

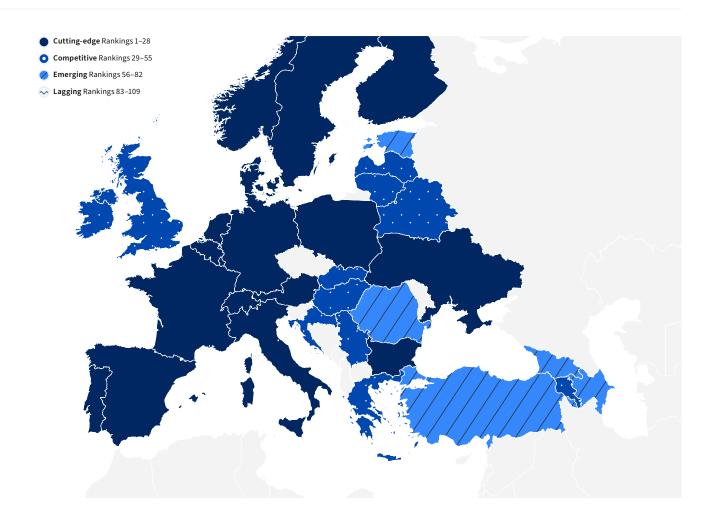
46%

Women

learners

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.

① See page 29 for country skill rankings in Europe



03

#### 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. <sup>43</sup> This aligns with the region's ambitious targets for the Digital Decade, which aims to accelerate progress in skills, government, infrastructure, and business. <sup>44</sup> 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. <sup>45</sup>

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 2030.46

Coursera's partnerships with institutions like the <u>University of Szeged</u>, whose students have access to all <u>Professional Certificates</u>, 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
- Securities & Commodities Trader
- 3. Machine Learning Engineer
- 4. Software Developer
- Personal Financial Advisor
- 6. Operations Manager
- 7. Network Engineer
- 8. Financial Analyst
- 9. Budget Analyst
- 10. Web Developer

#### Most popular content in Europe



#### 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.

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#### (

#### Europe

#### Regional enrollment trends cont.

04



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,

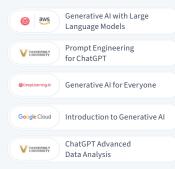
Deutsche Telekom AG

#### GenAl

**↑775**%

YoY enrollment growth

#### Top courses



#### Cybersecurity

**√5**%

YoY enrollment growth

#### Top courses



#### **Professional Certificates**

**134**%

YoY enrollment growth

#### **Top Professional Certificates**



01 02 **03** 04

#### Europe

#### Regional skill rankings

Regional rank	Global rank	Country	Business	Technology	Data Science
1	1	Switzerland	100%	100%	100%
2	3	Germany	93%	96%	97%
3	4	Netherlands	95%	95%	98%
4	5	France	97%	97%	94%
5	6	Sweden	92%	98%	95%
6	7	Spain	90%	94%	94%
7	8	Austria	94%	92%	90%
8	9	Denmark	98%	75%	96%
9	10	Belgium	89%	83%	92%
10	11	Luxembourg	94%	84%	84%
11	14	Portugal	72%	94%	88%
12	15	Italy	86%	89%	78%
13	17	Norway	84%	88%	83%
14	18	Finland	70%	93%	86%
15	22	Poland	77%	86%	67%
16	28	Cyprus	75%	70%	71%
17	24	Czech Republic	81%	82%	75%
18	25	Bulgaria	78%	80%	74%
19	27	Ukraine	79%	76%	69%

Regional rank	Global rank	Country	Business	Technology	Data Science
20	30	Greece	85%	62%	70%
21	31	Slovakia	68%	81%	58%
22	33	Belarus	55%	79%	66%
23	39	Serbia	46%	67%	65%
24	42	Ireland	60%	65%	63%
25	45	United Kingdom	53%	59%	72%
26	46	Hungary	43%	57%	62%
27	49	Croatia	57%	55%	57%
28	51	Latvia	82%	51%	41%
29	52	Armenia	29%	66%	64%
30	53	Lithuania	44%	61%	61%
31	56	Estonia	61%	50%	54%
33	57	Turkey	69%	45%	43%
34	65	Georgia	28%	48%	53%
35	67	Azerbaijan	62%	30%	36%
36	70	Romania	27%	47%	47%



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

02

## France

1.9<sub>M</sub> Coursera learners

5 Global rank

35 Median age

Women learners

Women learners in STEM

**37**% Learning on mobile

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-overyear. This aligns with the 85% of organizations that say they're investing in employee training to maximize the potential of AI technologies.<sup>47</sup>

#### **Domain rankings**

**Business** 

Tech

Data science

#### **Enrollment trends**

GenAl

↑783% YoY enrollments

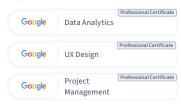
#### Top courses



#### **Professional Certificates**

↑29% YoY enrollments

#### Top Professional Certificates



#### Top skills

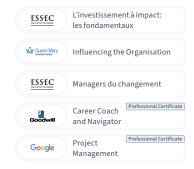
- 1. Resilience
- 2. Culture
- Collaboration
- **Emotional Intelligence**
- **Conflict Management**
- People Development
- **Investment Management**
- FinTech 8.
- Change Management
- 10. Planning

#### Top target roles

- 1. Operations Manager
- Bookkeeper
- Securities & Commodities Trader
- IT Project Manager
- **Project Manager**
- Personal Financial Advisor
- **Budget Analyst**
- Contract Administrator
- Systems Analyst
- 10. Auditor







#### Country spotlight

## Germany

2м Coursera learners

3 Global rank

34 Median age

**37**%

40% Women learners

30% Women learners

Learning in STEM on mobile

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**

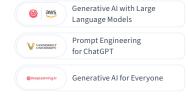
9 **Business**  Tech

Data science

#### **Enrollment trends** GenAl

↑662% YoY enrollments

#### Top courses



#### **Professional Certificates**

**↑39**% YoY enrollments

#### Top Professional Certificates



#### Top skills

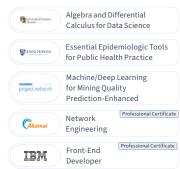
- 1. Artificial Neural Networks
- Applied Machine Learning
- Machine Learning Algorithms
- Regression
- Linear Algebra
- Python Programming
- Epidemiology
- **Distributed Computing** Architecture
- 9. Deep Learning
- 10. Network Architecture

#### Top target roles

- 1. Network Engineer
- 2. Web Developer
- Software Developer
- Machine Learning Engineer
- Securities & Commodities Trader
- **Cloud Security Engineer**
- Bookkeeper
- Computer Systems Engineer
- **Engineering Manager**
- 10. Data Engineer







02

03

04

#### Country spotlight

## **Spain**

2.3м Coursera learners

Global rank

Median age

38

**49**% Women learners

35% Women learners in STEM

38% Learning on mobile

Ranking seventh for skill proficiency globally, learners in Spain excel in technology and data science. A 962% year-over-year increase in GenAl 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.<sup>50</sup>

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**

Business

Tech

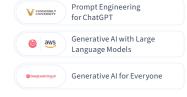
Data science

#### **Enrollment trends**

GenAl

↑962% YoY enrollments

#### Top courses



#### **Professional Certificates**

Static YoY enrollments

#### Top Professional Certificates



#### Top skills

- 1. Culture
- Calculus
- Adaptability
- C Programming Language Family
- Bioinformatics 5.
- Other Programming Languages
- People Analysis
- Graphic Design 8.
- **Distributed Computing** Architecture
- 10. Negotiation

#### Top target roles

- 1. Communications Specialist
- **Budget Analyst**
- Public Relations Manager
- Advertising Manager
- Bookkeeper
- Machine Learning Engineer
- Cloud Security Engineer
- Operations Manager
- **Product Marketing Manager**
- 10. Securities & Commodities Trader







02

04

03

Country spotlight

## **Turkey**

1.4<sub>M</sub>
Coursera
learners

57 Global 32 Median age

43% Women learners 33% Women learners in STEM 40% Learning on mobile

In Turkey, a 545% year-over-year increase in GenAl course enrollments reflects a growing interest in Al 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. 52

#### **Domain rankings**

35 Business **61**Tech

63

Data science

#### **Enrollment trends**

GenAl

↑ **545**% YoY enrollments

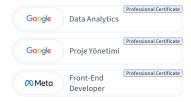
#### Top courses



#### **Professional Certificates**

↑38% YoY enrollments

#### **Top Professional Certificates**



#### 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

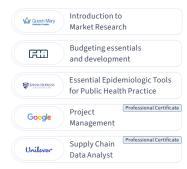
#### Top target roles

- 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







Global Skills Report 2024 | Regional Skill Trends | Europe

#### Country spotlight

02

## **United Kingdom**

3.8M Coursera learners 45 Global rank 35 Median

48% Women learners 35% Women learners in STEM 39% Learning on mobile

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.<sup>53</sup>

The 961% increase in GenAl 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. 54

#### **Domain rankings**

**52**Business

46

32

Data science

#### **Enrollment trends**

GenAl

↑961% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑59% YoY enrollments

#### **Top Professional Certificates**



#### Top skills

- 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
- Software Developer
- 6. Financial Analyst
- 7. Product Manager
- 8. Technology Consultant
- 9. Cybersecurity Analyst
- 10. Data Scientist







01 02 03

# Latin America and the Caribbean

**24.9**<sub>M</sub>

Coursera learners YoY enterprise enrollments

% 3

Learning on mobile 34

nts

46%

Women

learners

Women learners in STEM

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.

① See <u>page 38</u> for country skill rankings in Latin America and the Caribbean



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Global Skills Report 2024 | Regional Skill Trends | LATAM

02

03

Latin America and the Caribbean

#### Regional enrollment trends

04

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.<sup>55</sup> However, infrastructural divides and the need for local talent development remain unresolved challenges.

While Brazil, Chile, and Uruguay show cuttingedge 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. 56

A 2023 OECD study emphasizes innovation and skill development to improve job quality and youth unemployment.<sup>57</sup> 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
- C Programming Language Family
- 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. Treasure
- 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.

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02

03

04

Latin America and the Caribbean

### Regional enrollment trends cont.



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



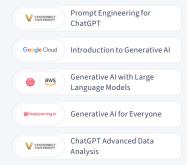
Hasari Teddy Andrade Coursera Learner, Puebla, Mexico

#### GenAl

**1882**%

YoY enrollment growth

#### Top courses



#### Cybersecurity

**1**%

YoY enrollment growth

#### Top courses

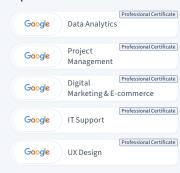


#### **Professional Certificates**

**17**%

YoY enrollment growth

#### **Top Professional Certificates**





01 02 **03** 04

#### Latin America and the Caribbean

## Regional skill rankings

Regional rank	Global rank	Country	Business	Technology	Data Science
1	19	Brazil	66%	85%	85%
2	20	Chile	65%	74%	83%
3	21	Uruguay	83%	87%	60%
4	23	Peru	74%	72%	68%
5	26	Mexico	54%	77%	81%
6	29	Colombia	50%	73%	79%
7	37	Dominican Republic	80%	64%	45%
8	38	Argentina	35%	68%	80%
9	43	Venezuela	39%	53%	73%
10	44	Honduras	61%	49%	50%
11	48	El Salvador	63%	71%	34%
12	50	Bolivia	39%	63%	51%
13	61	Ecuador	36%	44%	56%
14	62	Costa Rica	41%	60%	49%
15	63	Paraguay	38%	46%	52%
16	68	Panama	42%	26%	44%

Regional rank	Global rank	Country	Business	Technology	Data Science
17	73	Trinidad and Tobago	59%	17%	27%
18	77	Jamaica	28%	29%	37%
19	85	Guatemala	16%	15%	38%
20	91	Puerto Rico	15%	17%	17%

03

04

#### Country spotlight

02

## **Brazil**

**5.8**<sub>M</sub> Coursera learners

19 Global rank

35 Median age

on mobile

46% Women learners

34% Women learners in STEM

45% Learning

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 GenAl 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**

38 **Business**  Tech

17

Data science

## **Enrollment trends**

GenAl

1,079% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑ 10% YoY enrollments

#### Top Professional Certificates



#### Top skills

- 1. Graphic Design
- Collaboration
- Calculus 3.
- Other Programming Languages
- Organizational Development
- Culture 6.
- Adaptability
- People Analysis
- Computer Vision
- 10. Negotiation

#### Top target roles

- 1. Advertising Manager
- Cloud Security Engineer
- Communications Specialist
- Public Relations Manager
- Machine Learning Engineer
- **Operations Manager**
- **Engineering Manager**
- **Product Marketing Manager**
- Computer Systems Engineer
- 10. Software Developer







02

03

04

#### Country spotlight

## Chile

**1.6**M Coursera learners

20 Global rank

35 Median age

**50**% Women learners

38% Women learners in STEM

**45**% Learning on mobile

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 2022-2027.59

#### **Domain rankings**

39 **Business**  Tech

19

Data science

### **Enrollment trends**

GenAl

↑700% YoY enrollments

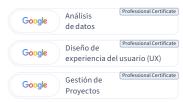
#### Top courses



#### **Professional Certificates**

**↓16**% YoY enrollments

#### Top Professional Certificates



#### Top skills

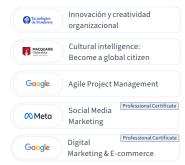
- 1. Geovisualization
- C Programming Language Family
- Other Programming Languages
- Calculus
- Culture 5.
- Negotiation
- Adaptability
- Social Media
- Organizational Development
- 10. Creativity

#### Top target roles

- 1. Operations Manager
- Public Relations Manager
- Advertising Manager
- **Budget Analyst**
- Communications Specialist
- **Product Marketing Manager**
- Bookkeeper
- Machine Learning Engineer
- Social Media Marketer
- 10. E-commerce Analyst







#### Country spotlight

## Colombia

3.3<sub>M</sub> Coursera learners

29 Global rank

33 Median age

**50**% Women learners

**34**% Women learners in STEM

**47**% Learning on mobile

Colombia's commitment to technological advancement shows in a 659% GenAl course enrollments increase and the February 2024 launch of its AI strategy to close digital gaps, advance AI, and develop digital talent.60

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**

55 **Business**  Tech

**24** 

Data science

### **Enrollment trends**

GenAl

↑659% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑33% YoY enrollments

#### Top Professional Certificates



#### Top skills

- 1. Culture
- 2. Negotiation
- 3. Calculus
- C Programming Language Family
- Other Programming Languages
- Geovisualization
- Adaptability
- **Emotional Intelligence**
- **Probability Distribution**
- 10. People Analysis

#### Top target roles

- 1. Communications Specialist
- **Public Relations Manager**
- **Budget Analyst**
- Operations Manager
- Advertising Manager
- Machine Learning Engineer
- Bookkeeper
- **Product Marketing Manager**
- Social Media Marketer
- 10. Media Buyer







#### Country spotlight

02

## Mexico

6.7M Coursera learners 26
Global

34 Median

51% Women learners 39% Women learners in STEM 47% Learning on mobile

A 1,091% GenAl course enrollment increase mirrors Mexico's strong interest in Al 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

GenAl

 $\uparrow$  **1,091**% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑29% YoY enrollments

#### **Top Professional Certificates**



#### Top skills

- 1. Negotiation
- 2. Calculus
- 3. Budget Management
- 4. Bioinformatics
- 5. Culture
- 6. Adaptability
- . 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
- Contract Administrator
- 10. Personal Financial Advisor







#### Country spotlight

02

### Peru

1.5<sub>M</sub> Coursera learners

23 Global rank

32 Median age

**45**% Women learners

31% Women learners in STEM

35% Learning on mobile

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 2030.63 With 67% of companies reporting talent shortages, upskilling is urgent.

#### **Domain rankings**

Business

Tech

36

Data science

### **Enrollment trends**

GenAl

↑953% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑ 16% YoY enrollments

#### Top Professional Certificates



#### Top skills

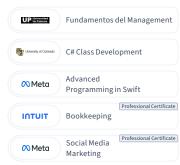
- Culture
- Resilience
- Other Programming Languages
- Negotiation
- Social Media
- **Emotional Intelligence**
- C Programming Language Family
- 8. Calculus
- Adaptability
- 10. Influencing

#### Top target roles

- 1. Advertising Manager
- Operations Manager
- Public Relations Manager
- Communications Specialist
- **Budget Analyst**
- Product Marketing Manager
- Bookkeeper
- Cloud Security Engineer
- Personal Financial Advisor
- 10. Machine Learning Engineer







## Middle East and **North Africa**

9.4<sub>M</sub>

learners enrollments

**55**%

Learning on mobile

**19%** YoY enterprise

Median

**27**%

35%

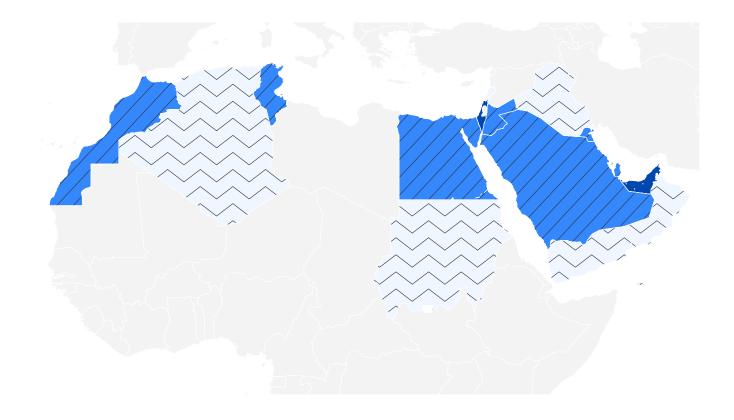
Women

learners

learners in STEM

The Middle East and North Africa demonstrates a strong commitment to digital transformation and emerging technologies. With a 861% increase in GenAl course enrollments and a 17% rise in cybersecurity enrollments year-over-year, learners focus on cuttingedge 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.

① See page 47 for country skill rankings in the Middle East and North Africa



- Cutting-edge Rankings 1–28
- O Competitive Rankings 29-55
- Emerging Rankings 56–82
- Lagging Rankings 83-109

#### Middle East and North Africa

### Regional enrollment trends

04

The Middle East and North Africa are positioned to become leaders in digital transformation and trade, with governments investing in technology infrastructure and logistics. <sup>64</sup> 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<sup>65</sup> and 60% of Saudi higher education students pursuing degrees not aligned with job market demands,<sup>66</sup> 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.

02

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

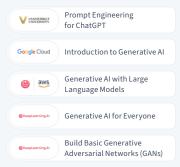
Vice President for Academic Affairs, Qatar University

#### GenAl

**1861**%

YoY enrollment growth

#### Top courses



#### Cybersecurity

**17**%

YoY enrollment growth

#### Top courses



#### **Professional Certificates**

**141**%

YoY enrollment growth

#### **Top Professional Certificates**



02

03

04

#### Middle East and North Africa

### Regional skill rankings

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



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.



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



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



Abdallah 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**

2.9м Coursera learners

Global rank

29 Median age

35% Women learners

**22**% Women learners in STEM

64% Learning on mobile

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.67

#### **Domain rankings**

73 **Business**  68 Tech

68

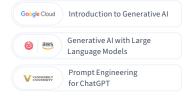
Data science

### **Enrollment trends**

GenAl

↑585% YoY enrollments

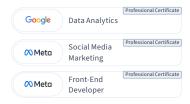
#### Top courses



#### **Professional Certificates**

↑34% YoY enrollments

#### Top Professional Certificates



#### Top skills

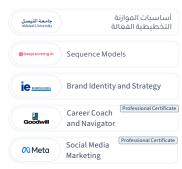
- 1. Audit
- Storytelling
- Advertising
- Leadership Development
- Social Media
- Experiment
- **Brand Management**
- **Budget Management**
- Writing
- 10. Deep Learning

#### Top target roles

- Operations Manager
- Machine Learning Engineer
- Securities & Commodities Trader
- **Public Relations Manager**
- **Communications Specialist**
- Social Media Marketer
- Marketing Associate
- **Budget Analyst**
- Financial Manager
- 10. Web Developer







02

03

04

#### Country spotlight

## Saudi Arabia

1.2M
Coursera
learners

60 Global 35 Median

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. <sup>68</sup> 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.<sup>69</sup>

#### **Domain rankings**

15 Business **67**Tech

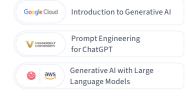
79

Data science

## Enrollment trends GenAI

↑1,788% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑98% YoY enrollments

#### Top Professional Certificates



#### 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

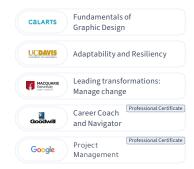
#### Top target roles

- 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







Global Skills Report 2024 | Regional Skill Trends | MENA

Country spotlight

## United Arab Emirates

1M Coursera learners 34 Global rank 35 Median age

33% Women learners 27% Women learners in STEM 42% Learning on mobile

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**

2 Business 64

Tech

50

Data science

## Enrollment trends GenAI

↑1,102% YoY enrollments

#### Top courses



#### **Professional Certificates**

**↑40**% YoY enrollments

#### **Top Professional Certificates**



#### Top skills

- 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







## **North America**

**31.2**M

Coursera learners

26

Learning on mobile

**↑18**%

YoY enterprise enrollments

36 38%

Women learners in STEM

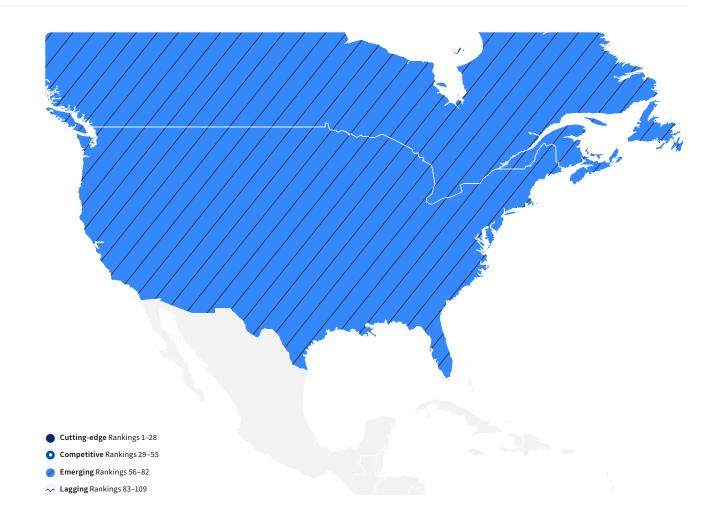
**52**%

Women

learners

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 <u>page 54</u> for country skill rankings in North America



#### **North America**

### Regional enrollment trends

04

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.<sup>72</sup>

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.<sup>73</sup>

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 System<sup>74</sup> and the state of Nevada<sup>75</sup> 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
- 5. Spreadsheet Software
- 7. Bayesian Statistics
- 8. Python Programming
- 9. Change Management
- 10. Project Management

#### Top target roles

- Personal Financial Advisor
- 2. Treasurer
- 3. Business Intelligence Analyst
- 4. Risk Analyst
- 5. Technology Consultant
- Financial Quantitative Analyst
- 7. Network Engineer
- 8. Database Architect
- 9. Financial Analyst
- 10. Cyber Analyst

## Most popular content in North America



#### 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.

66

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

#### GenAl

↑1,040%

YoY enrollment growth

#### Top courses



#### Cybersecurity

**18**%

YoY enrollment growth

#### Top courses



#### **Professional Certificates**

**161%** 

YoY enrollment growth

#### **Top Professional Certificates**



#### North America

### Regional skill rankings

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



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.



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



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



Mark Rosenbaum

Dean of HPU's College of Business, Hawai'i Pacific University



Professional Certificates Playbook

02

03

04

#### Country spotlight

## Canada

4M Coursera learners 59 Global 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. 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.

#### Domain rankings

**59**Business

56 Tech 46

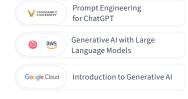
Data science

### Enrollment trends

GenAl

↑914% YoY enrollments

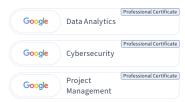
#### Top courses



#### **Professional Certificates**

↑63% YoY enrollments

#### Top Professional Certificates



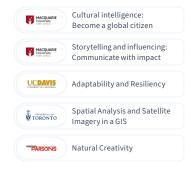
#### Top skills

- 1. Storytelling
- 2. Culture
- 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
- Search Engine
   Optimization Specialist
- 8. Bookkeeper
- 9. Social Media Marketer
- 10. Advertising Manager







#### Country spotlight

## **United States**

**27.7**M Coursera

69 Global 36 Median

age

52% Women learners

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. 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.

#### **Domain rankings**

**70**Business

**71** 

55

Data science

### Enrollment trends

GenAl

1,058% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑61% YoY enrollments

#### **Top Professional Certificates**



#### Top skills

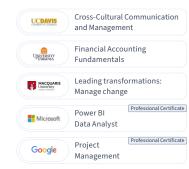
- 1. Geovisualization
- 2. SQL
- 3. Business Communication
- 4. General Accounting
- 5. Epidemiology
- 6. Bayesian Statistics
- 7. Spreadsheet Software
- 8. Change Management
- 9. Python Programming
- 10. Project Management

#### 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







## **Sub-Saharan Africa**

04

6.9м

learners

**65**% Median on mobile

YoY enterprise enrollments

learners **27**%

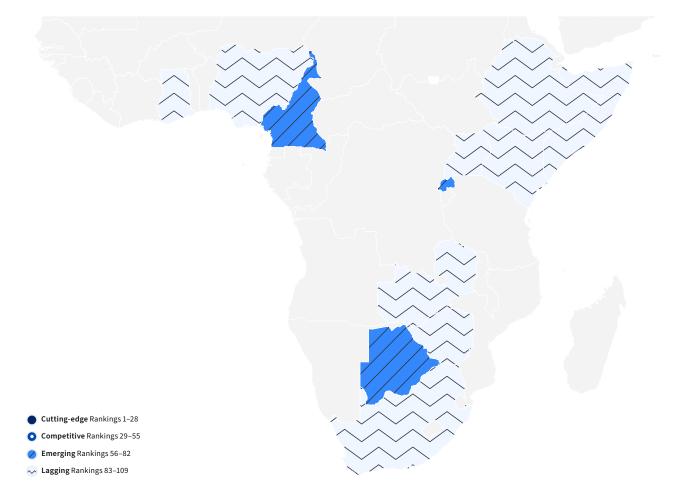
Women

36%

learners in STEM

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.80

① See page 60 for country skill rankings in Sub-Saharan Africa



coursera

Global Skills Report 2024 | Regional Skill Trends | SSA

### 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.<sup>81</sup>

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. <sup>83</sup> 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.

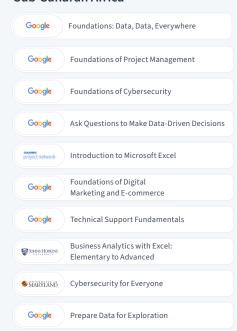
#### Top skills

- 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



#### 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

02

### Regional enrollment trends cont.

66

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

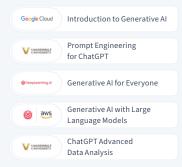


Oluwakemi Sarah Adenekan Coursera Learner, Oyo State, Nigeria

#### GenAl

↑**1,500**%
YoY enrollment growth

#### Top courses



#### Cybersecurity

↑**2**%
YoY enrollment growth

#### Top courses



#### **Professional Certificates**

**12**%

YoY enrollment growth

#### **Top Professional Certificates**



03

04

Sub-Saharan Africa

02

### Regional skill rankings

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



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

02

## **Botswana**

85K Coursera learners 66 Global 33 Median

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, 84 Botswana has made strides in connecting schools to high-speed internet through initiatives like SmartBots and GIGA.85

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. <sup>86</sup>

#### **Domain rankings**

31 Business **70** 

85

Data science

### Enrollment trends

GenAl

↑1,433% YoY enrollments

#### Top courses



#### **Professional Certificates**

↑35% YoY enrollments

#### Top Professional Certificates



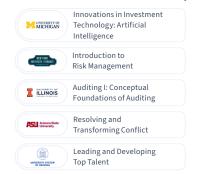
#### Top skills

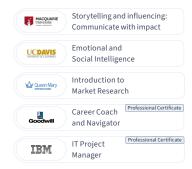
- 1. Investment Management
- 2. Leadership Development
- 3. Risk Management
- 4. Audit
- 5. Resilience
- 6. General Accounting
- 7. Conflict Management
- 8. Change Management
- 9. Emotional Intelligence
- 10. Market Research

#### 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







02

03

04

Country spotlight

## Nigeria

2.4<sub>M</sub>

learners

105
Global

rank

32 Median age

34% Women learners 29% Women learners in STEM 76% Learning on mobile

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, <sup>87</sup> these skill sets are crucial in addressing Nigeria's youth unemployment rate, which stands at 53.4%. <sup>88</sup>

#### **Domain rankings**

82 Business 109

Tech

109 Data science

## Enrollment trends GenAI

 $\uparrow$  **1,817**% YoY enrollments

#### Top courses



#### **Professional Certificates**

**√7**% YoY enrollments

#### **Top Professional Certificates**



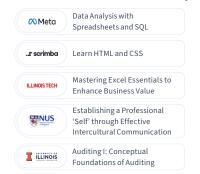
#### Top skills

- 1. SQL
- 2. Advertising
- 3. Spreadsheet Software
- 4. Business Communication
- 5. Audit
- 6. HTML and CSS
- 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







#### Country spotlight

02

## **South Africa**

03

**1.3**M Coursera learners

100 Global rank

36 Median age

46% 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 2030.89 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**

99 **Business**  98 Tech

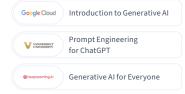
96

Data science

#### **Enrollment trends** GenAl

1,156% YoY enrollments

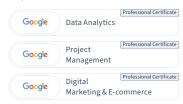
#### Top courses



#### **Professional Certificates**

**↑33**% YoY enrollments

#### Top Professional Certificates



#### Top skills

- Risk Management
- Supply Chain Systems
- **Brand Management**
- Market Research
- Spreadsheet Software
- Change Management
- Operations Management
- Influencing
- FinTech
- 10. Business Communication

#### Top target roles

- 1. IT Project Manager
- Project Manager
- **Operations Manager**
- IT Director
- Personal Financial Advisor
- **Business Analyst**
- General Manager
- Operations and Maintenance Specialist
- 9. Database Architect
- 10. Marketing Manager







# Appendix

## 66

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

03

**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-40 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 microcredential, 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 GenAl course(s):** The GenAl 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.



#### Assessed by

- Quiz
- Assessment
- Programming assignment

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.	<b>Technology</b> Skills in this domain focus on the creation, maintenance, and scaling of computer systems and software.	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.	Accounting focuses on proper record keeping and communication of financial information for corporations in accordance with government regulations.  Sample skills: auditing, financial accounting	Cloud Computing involves delivering computing resources—namely hardware, software, or software development platforms—via the internet.  Sample skills: software as a service (SaaS), Kubernetes	Data Management comprises everything related to managing and accessing data for reporting, analysis, and model building.  Sample skills: cloud APIs, Hadoop
2.	Business Analysis is the discipline of recognizing business needs and developing solutions to business problems.  Sample skills: business intelligence, spreadsheet software	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	Data Visualization involves the creation and study of visual representations of data to communicate information clearly and efficiently.  Sample skills: Tableau, plotting data
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	Computer Graphics is the creation and manipulation of visual data through the use of computational tools and techniques.  Sample skills: graphic design, interactive design	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.	Communication is the practice of discussion between two or more individuals in written or oral forms.  Sample skills: people skills, writing	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	Math is the study of numbers and their relationships, applying these principles to models of real phenomena.  Sample skills: calculus, linear algebra

coursera Global Skills Report 2024 | Appendix

Business (cont.)	Technology (cont.)	Data science (cont.)
<ol> <li>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.</li> <li>Sample skills: exploratory data analysis, spatial data analysis</li> </ol>	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
<ol> <li>Entrepreneurship is the process of designing, launching, and running a new business.</li> <li>Sample skills: adaptability, innovation</li> </ol>	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
<ol> <li>Finance is focused on the efficient allocation of capital toward investment opportunities under conditions of risk or uncertainty.</li> <li>Sample skills: financial ratios, blockchain</li> </ol>	<b>Design &amp; Product</b> 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
<ol> <li>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.</li> <li>Sample skills: benefits, employee relations</li> </ol>	<b>DevOps</b> 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
<ol> <li>Management is about how to set a company's strategy and coordinate the efforts of employees.</li> <li>Sample skills: people management, business analytics</li> </ol>	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

COUISEIG Global Skills Report 2024 | Appendix 70

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

COUISEIC Global Skills Report 2024 | Appendix

## Relationships between skills and content

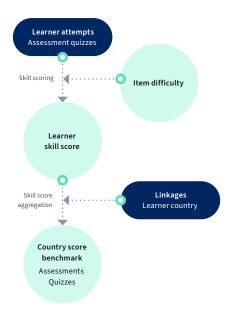
The skills in the Coursera Skills Taxonomy are mapped to the content that teaches them using a machine learning model trained on a dataset of instructor and learner-labeled skill-to-content mappings. The model considers features like occurrence counts in lecture transcripts, assignments, and course descriptions, 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. 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 capita<sup>92</sup>
- Human Capital Index<sup>93</sup>
- 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:

$$\frac{0.5}{4}$$
 (GII percentile) +  $\frac{0.5}{4}$  (LFP percentile) +

$$\frac{0.5}{4}$$
 (GDP percentile) +  $\frac{0.5}{4}$  (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

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)<sup>96</sup>—skill application to innovation
- Labor force participation<sup>97</sup> skill matching in labor market
- Human capital index (HCI)<sup>98</sup>
   and GDP per capita<sup>99</sup>—
   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%)
- 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 overindexed 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

① Rankings include states with a minimum of 250 learners.

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

## 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	lowa	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.**

 $\ensuremath{\textcircled{\scriptsize 1}}$  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) Act100
Asia Pacific	Thailand	Al Thailand <sup>101</sup>
Asia Pacific	Singapore	Al Verify <sup>102</sup>
Europe	European Union	AI Act <sup>103</sup>
Latin America and the Caribbean	Chile	Política Nacional De Inteligencia Artificial <sup>104</sup>
Latin America and the Caribbean	Colombia	Política Nacional Para La Transformación Digital e Inteligencia Artificial <sup>105</sup>
Middle East and North Africa	Saudi Arabia	Saudi Data & AI Authority <sup>106</sup>
Middle East and North Africa	UAE	UAE National Strategy for Artificial Intelligence 2031 <sup>107</sup>
North America	Canada	Pan-Canadian Artificial Intelligence Strategy <sup>108</sup>
North America	United States	Federal: Blueprint for an AI Bill of Rights <sup>109</sup>
		Connecticut: SSB No. 1103 - Public Act No. 23-16 <sup>110</sup>
		Louisiana: SCR 49 <sup>111</sup>
		Maryland: HB0622 <sup>112</sup>
		North Dakota: HB1361 <sup>113</sup>
		Texas: Artificial Intelligence Advisory Council <sup>114</sup>
Sub-Saharan Africa	N/A	African Union Development Agency's AI Blueprint <sup>115</sup>



The capabilities of GenAI are groundbreaking and game-changing.



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It's About Making Better Decisions, Not
Replacing People: Generative Al Insights from
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