

GLOBAL SKILLS REPORT

2022

REGIONAL EDITION:
North America

coursera

Executive Summary

The great reskilling

The way we work is changing.

Automation and digital technologies are revolutionizing almost every industry, from agriculture to manufacturing. The pandemic has transformed what people demand from their working lives. And global instability and inflation mean that a well-paid, secure job that leads to long-term career growth is more important than ever.

These transformations are remaking the world's labor market. By the middle of this decade, an estimated 85 million jobs may disappear, while another 97 million new ones will take their place.¹ As these changes occur, knowing what skills workers need most can be difficult.

That's where Coursera's Global Skills Report comes in. Whether you are a worker, student, educator, workforce leader, or employer, you'll find the information you need to stay ahead.

In our 2022 report, we present data from the more than 100 million people who have used Coursera to learn new skills.² We concentrate on three of the most important skill areas: business, technology, and data science.

As in previous years, we show regional and country-specific skill trends. You'll also find more information on our Career Pathways, in which we work with industry partners to offer Professional Certificates that provide skills training for some of today's most in-demand jobs.

At Coursera, we connect learners, educators, workforce development institutions, and employers with a single goal: a world where everyone, everywhere, has the power to transform their life through learning. We now have more than 100 million registered learners worldwide. That's an increase from 77 million in last year's Global Skills Report.

Here are some of our top findings:

- **Digital skills are the shared language of the modern economy.** Not every worker needs to learn how to code, but every worker needs to be literate in digital skills. As workers reskill, the most popular skills in the last year in the technology and data science domains, respectively, were theoretical computer science along with probability and statistics.
- **Women's participation continued to rise.** Forty-seven percent of the people enrolled in courses are now women,

up from 45% last year and 38% two years ago. Throughout the world, however, women learners lag in STEM enrollment.

- **Lower levels of internet access mean lower levels of skills proficiency.** The internet may be the great equalizer, but internet access is not equal. Countries in the lowest 25% of learner performance had average internet access rates of 54.2%, while those in the highest 25% had access rates of 83.6%.
- **Courses in human skills had more learners from developed countries, while those in digital skills had more from developing ones.** Skills like storytelling and resilience had an over-representation of learners from high-income countries compared to Coursera as a whole. Skills like audit, mobile development, and geovisualization had an over-representation of learners from low-income countries.

See what Coursera can do for you.

Whether you are a learner, employer, educator, or workforce development leader, Coursera can help you achieve your goals. Reach out to us today to learn more about [Coursera for Government](#), [Coursera for Campus](#), and [Coursera for Business](#).

How to Read the Report

About Coursera learner data

The skill trends and proficiency analyses in this report represent a view of the world through the 100 million learners on Coursera. An individual's ability to access and use Coursera is influenced by many factors, including internet infrastructure, educational background or past training, and local culture or norms. We also use learner profile data such as gender, age, and location.





The results may also be influenced by local economic or social conditions. For example, economic downturns sometimes drive learners to Coursera. Our industry partnerships also sometimes quickly bring thousands of new learners onto the platform.

In general, our goal is to objectively represent what is happening across the Coursera ecosystem. Sometimes our results capture what is happening across an entire economy. Other times, the demographics and behavior of Coursera learners mean that some results should not be extrapolated or interpreted as representing broad populations.

Reading the country rankings

For each graph in the regional sections, we show the percentile rankings of countries within each domain. A country that is at 100% ranks at the top of the 102 countries, while a country at 0% is at the bottom.

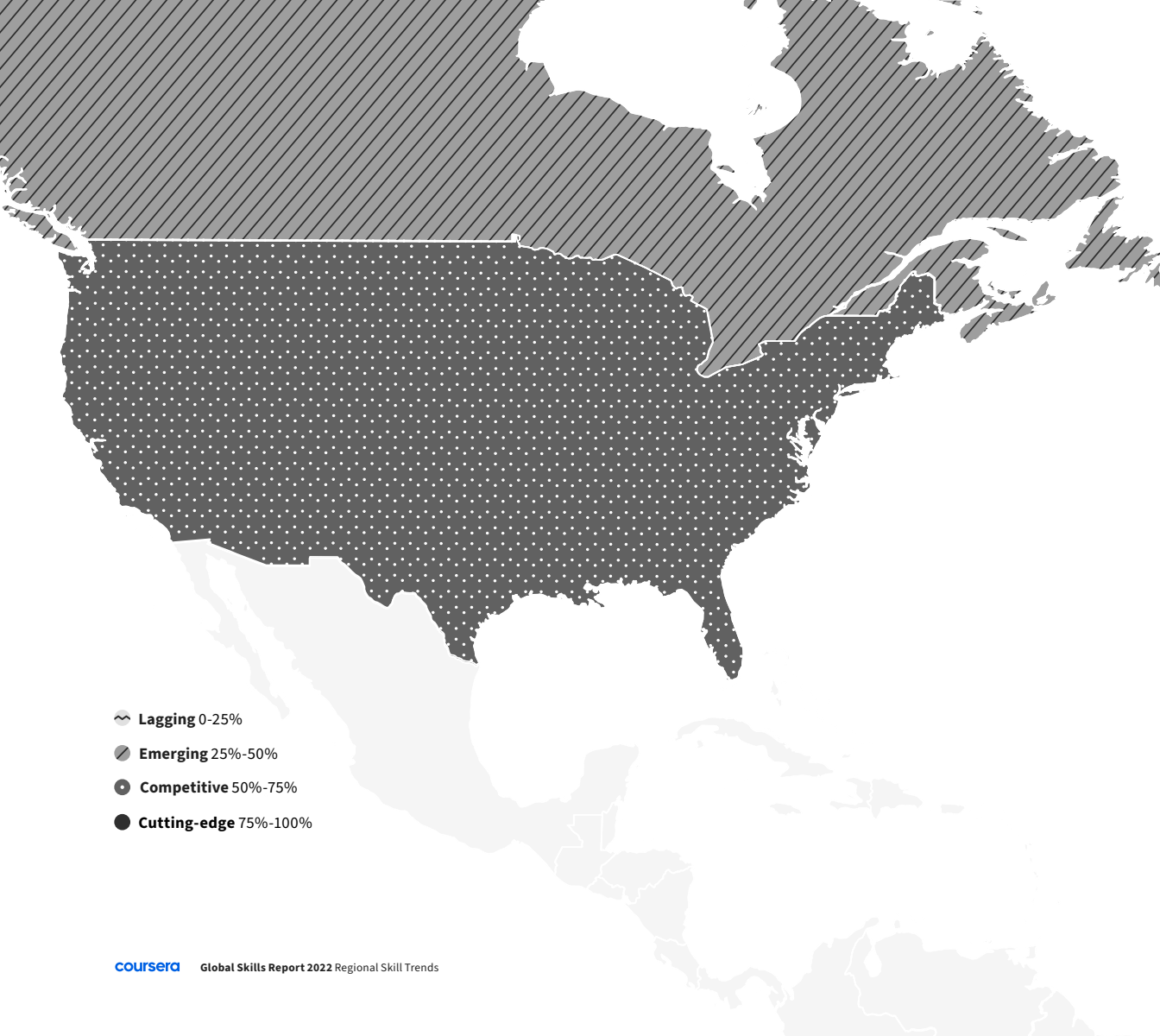
We break these percentile rankings into four categories:

-  **Lagging:** 25th percentile or below
-  **Emerging:** 26th-50th percentile
-  **Competitive:** 51st-75th percentile
-  **Cutting-edge:** 76th percentile or above

Glossary of terms

In this report, we use a few specialized terms. Here's what they mean.

- **Learner:** A person who is enrolled in a course on Coursera. A person can be enrolled in multiple classes, but we count them as a learner once.
- **Skills:** What people are learning. To figure out what skills each class 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.
- **Domains:** Educators use Coursera to teach many different topics, but in this report we focus on three areas: business, technology, and data science. They are our most popular and directly provide skills that employers need.
- **Business:** These are skills that involve the management and operation of firms. Some examples are project management, marketing, and supply chain systems.
- **Technology:** These are skills that involve computer science and applied mathematics. Some examples are software engineering, linear algebra, and Java.
- **Data Science:** These are skills that involve the creation and use of information. Some examples are SQL, big data, and machine learning.
- **Digital and Human Skills:** No matter their domain, we think about skills in two broad categories: digital and human. Digital skills include everything from social media to cybersecurity, and they're increasingly important, particularly as businesses have accelerated their digital transformations during the pandemic. Human skills include a range of cognitive, social, and emotional skills, such as creativity, critical thinking, information interpretation, decision-making, and communication. The two categories are complementary. People use human skills to effectively and ethically make use of digital skills. Likewise, digital skills enhance human skills.
- **Over-indexing:** This measures skills that are more popular with certain groups than on Coursera as a whole. For example, if a skill is over-indexed for learners with college degrees by 1.10x, that means 1.10x more learners in that group are pursuing that skill than learners as a whole.
- **Change over time:** Changes in values between last year's Global Skills Report and this one are given in percent change or, for country rankings, the numerical value of the change. The Global Skills Report for 2022 covers Q2 2021 to Q2 2022.
- **Developed and Developing Economies:** Although there is no universal definition, we follow UN conventions,⁴ which put Australia, Canada, Israel, Japan, South Africa, and the countries of Europe that are neither former Soviet states nor the former Yugoslavia in the developed world. States that were previously part of the Soviet Union or Yugoslavia are economies in transition, while all other countries are developing.



REGIONAL SKILL TRENDS

North America

Learners are focusing on the skills needed to lead the global economy

21.7M

Coursera Learners (↑28%)

34
median age (0%)

40%
learning on mobile (↑1%)

93%
internet access (↑3%)

52%
women learners (↓1%)

North America

North America's economy has rebounded—unevenly. While COVID-19 continues to pose health risks, the job market in the U.S. has come a long way since its recession in 2020. With an unemployment rate of 3.8% in February 2022,³ the country has recovered 90% of the jobs lost during the pandemic.⁴ Canada's unemployment rate has also fallen from a peak of 13.4% to 5.3% in March.⁵ In both countries,⁶ the pandemic widened the gap between haves and have-nots, particularly for minorities and those with lower levels of education.⁷ To keep disadvantaged groups from falling further behind, education leaders should invest more resources in workforce development.

Skills proficiency in the U.S. held steady but dropped in Canada. Between this year's Global Skills Report and the last, the U.S. stayed the same, but Canada⁸ slipped 23 spots. To stay competitive, workforce leaders will have to redouble their efforts.

Global Rank	Rank Change	Country Name	Business	Technology	Data Science
29	↓3	United States	96%	43%	54%
75	↓23	Canada	5%	54%	73%

COUNTRY SPOTLIGHT

United States

19M

Coursera Learners

34

Median Age



39%

Learning on Mobile



51%

Women Learners

The U.S. labor market may be what one news story called “the pit of despair for employers,”⁹ but it’s also a chance for workers to rethink what they want from their careers — and how to get it. As workers are being pushed out of old occupations and pulled into new ones, the U.S. labor market is undergoing a sweeping transformation.¹⁰ In this pivotal moment, state and local governments have the opportunity to invest in training programs that will set the foundation for a stronger, more inclusive economy.

Learners in the U.S. focused on human skills like project management, decision making, planning, and experiments.

As multinational companies offshore technical skills like computer programming,¹¹ learners in the U.S. should recognize that it may not be enough to simply have digital skills. No matter their jobs, they’ll need human skills to thrive. Business leaders should prioritize training programs that develop these skills.

Women in the U.S. are close to gender parity, but lag behind men in STEM. The percentage of women in the U.S. enrolled in courses has been above or near 50% since 2020. Enrollment in STEM courses is lower but rising. In 2019, 35% of STEM learners in the U.S. were women.¹² In this year’s report, that figure was 42%. Workforce leaders should prioritize inclusive approaches that will help achieve gender parity.

The U.S. remains behind the curve in math. Learners in the U.S. scored at a 40% proficiency level in mathematics. The states with the highest proficiency learners were Maine, Washington, and New Hampshire. At the bottom were Mississippi, Louisiana, and Tennessee. Education leaders in these states should look for new ways to improve learner outcomes.

Skills Ranking & Proficiency Levels

Business		Technology		Data Science	
Rank	5	Rank	59	Rank	48
Rank Change	↑32	Rank Change	↓26	Rank Change	↓20
Sales	100%	Databases	62%	Machine Learning	65%
Leadership and Management	67%	Computer Programming	60%	Mathematics	40%
Strategy and Operations	75%	Cloud Computing	36%	Statistical Programming	45%
Communication	26%	Software Engineering	22%	Data Visualization	44%
Human Resources	39%	Web Development	43%	Data Analysis	52%
Accounting	100%	Security Engineering	18%	Data Management	51%
Entrepreneurship	73%	Computer Networking	70%	Probability and Statistics	61%
Finance	58%	Mobile Development	69%		
Marketing	98%	Theoretical Computer Science	74%		
		Operating Systems	21%		

Over-indexing Skills

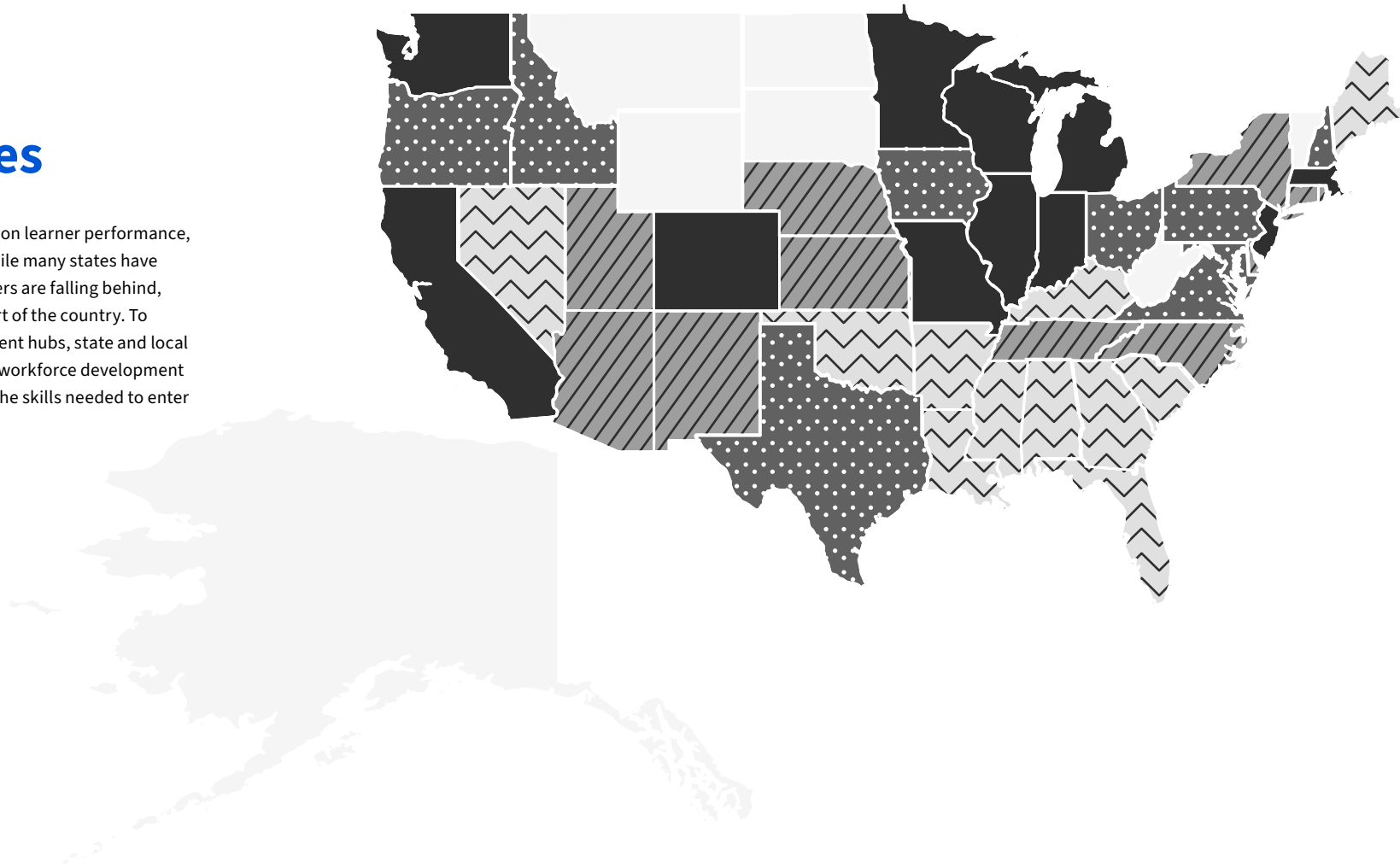
Business	Computer Science	Data Science
Project Management (1.47x)	Operating Systems (2.02x)	SQL (1.64x)
Decision Making (1.4x)	Network Architecture (1.9x)	Experiment (1.57x)
General Accounting (1.35x)	Computer Architecture (1.51x)	Data Management (1.43x)
Operations Management (1.35x)	User Experience (1.38x)	Data Visualization (1.43x)
Planning (1.34x)	Design and Product (1.37x)	Data Analysis (1.23x)

STATE-BY-STATE SKILL TRENDS

United States

The United States is split regionally on learner performance, as it is on many other measures. While many states have high levels of skills proficiency, others are falling behind, especially those in the southern part of the country. To close these gaps and create new talent hubs, state and local governments can invest in modern workforce development programs that equip learners with the skills needed to enter high-growth, in-demand jobs.

- ~ Lagging 0-25%
- ▨ Emerging 25%-50%
- Competitive 50%-75%
- Cutting-edge 75%-100%



Career Pathways

Workers out of jobs — or seeking better ones — need pathways to success, particularly for those jobs that involve digital skills. To improve employment outcomes for students, citizens, and employees at all stages of their work lives, Coursera offers Professional Certificates in Career Academy: a curated suite of courses offered by leading industry partners, including Google, IBM, Meta, and more.

There were around 1.8 million enrollments in the Professional Certificates in the Career Academy last year, a number that has grown from less than 100,000 in 2019. The number of courses in our Professional Certificate portfolio has grown as well, as has the percentage of women pursuing Professional Certificates, which increased from 25% in 2019 to 40% in the last year.

The Career Academy enables any business, government, or academic institution to give individuals — even those with no college degree or prior work experience — the opportunity to grow into a new career.

By pursuing these Professional Certificates, job seekers meet employer demand by learning skills that prepare them for specific roles, build job confidence using real-world tools, and create a portfolio that demonstrates what they have learned to prospective employers. These courses also provide a roadmap for the labor market, including information on job titles, skill requirements, open roles, and salaries (where available).

Here are some of the available Professional Certificates in Career Academy:



Google Digital Marketing & E-Commerce Professional Certificate

OFFERED BY GOOGLE

6 months at 10 hours per week

Prepare for an entry-level job in digital marketing and e-commerce



Google Project Management Professional Certificate

OFFERED BY GOOGLE

6 months at 10 hours per week

Prepare for an entry-level job as a project manager



Google IT Support Professional Certificate

OFFERED BY GOOGLE

6 months at 5 hours per week

Prepare for an entry-level job as an IT support specialist



Salesforce Sales Development Representative Professional Certificate

OFFERED BY SALESFORCE

5 months at 5 hours per week

Prepare for an entry-level job as a sales development representative



IBM Full Stack Software Developer Professional Certificate

OFFERED BY IBM

9 months at 3 hours per week

Prepare for an entry-level job as a full stack cloud developer



IBM Data Science Professional Certificate

OFFERED BY IBM

3 months at 12 hours per week

Prepare for an entry-level job as a data scientist



Meta Social Media Marketing Professional Certificate

OFFERED BY META

5-6 months at 6-10 hours per week

Prepare for an entry-level job as a social media marketer



Meta Marketing Analytics Professional Certificate

OFFERED BY META

5-6 months at 4-5 hours per week

Prepare for an entry-level job as a marketing analyst

Endnotes

1. [“The Future of Jobs Report 2020,”](#) World Economic Forum. 2020.
2. [“10 years of learning: Coursera celebrates 100 million global learners and a new Machine Learning Specialization from co-founder Andrew Ng,”](#) Coursera. 2022.
3. [“Unemployment rates were lower in February in 31 states and D.C. and stable in 19 states,”](#) United States Bureau of Labor Statistics. 2002.
4. [“The next phase of the US jobs recovery has begun,”](#) CNN. 2022.
5. [“Unemployment rate hit record low 5.3% in March: Statistics Canada,”](#) Global News. 2022.
6. [“Technological revolution of work during pandemic shows promise but also inequality,”](#) National Post. 2022.
7. [“America’s income divide unchanged by pandemic, unless you’re a minority or less educated,”](#) NBC. 2021.
8. [“Making Canada’s skills-development system up-to-date and more effective should be evidence-based and grounded in top-quality research,”](#) Institute for Research on Public Policy, 2021.
9. [“Job openings and number of people quitting hit record highs—it’s ‘the pit of despair for employers,’](#) CNBC. 2022.
10. [“The Labor Market Is Undergoing a Seismic Shift as Markets Await September’s Jobs Report,”](#) U.S. News and World Report. 2021.
11. [“Big Quit sends world’s back office back offshore,”](#) Reuters. 2021.
12. [“New Coursera Study Indicates a Narrowing Gender Gap in Online Learning,”](#) Bloomberg. 2021.

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