

# ملخص تقرير وظائف المستقبل 2020-2025 المصادر من منتدى الاقتصاد العالمي – أهم المهارات التي يمكن للجامعات التركيز عليها

اعداد  
الدراسات – القطاع الجامعي

16 شعبان 1442 هـ

# ملخص بأهم ما ورد في تقرير وظائف المستقبل 2020-2025 الصادر من منتدى الاقتصاد العالمي وتقرير التعليم عن بعد الصادر من Coursera

- (1) 85 مليون وظيفة حالية يتوقع ان يتم الاستغناء عنها وظهور 97 مليون وظيفة بحلول عام 2025 لتلبية متطلبات التكنولوجيا المستقبلية
- (2) 42% من المهارات في الوظائف الحالية يتوقع تغييرها بحلول عام 2022 وتختلف سرعة التغير حسب القطاع
- (3) توضح الاحصائيات وجود فجوة بين مهارات الطلاب (الباحثين عن عمل) والمهارات التي يحتاجها سوق العمل، ومن تلك النتائج يمكن التركيز على أهم المهارات حسب ما هو موضح في كل قطاع
- (4) قائمة بأهم مهارات سوق العمل في 2025 حسب القطاعات المختلفة (النقل – الصحة – التصنيع – التعدين والمعادن – الزيت والغاز – وغير ذلك)

## تابع: ملخص بأهم ما ورد في تقرير وظائف المستقبل 2020-2025 الصادر من منتدى الاقتصاد العالمي وتقرير التعليم عن بعد الصادر من Coursera

- (5) قائمة تضم اكثر الوظائف الواعدة (Emerging jobs) التي يتوقع ان يكثر الطلب عليها في المستقبل (وظائف المستقبل – Jobs for Tomorrow)
- (6) إحصائية رقمية عن 25 دولة بما في ذلك المملكة توضّح: مناسبة التعليم لسوق العمل، أهم التقنيات الواعدة، الوظائف الناشئة والوظائف المترجمة، المهارات الواعدة في سوق العمل، اهم المهارات التي تحتاج لإعادة تعلم، وغير ذلك
- (7) إحصائية بأهم الوظائف التي تم الاستغناء عنها واهم الوظائف الناشئة التي تم الانتقال اليها
- (8) قائمة بأهم المهارات المفقودة في مجالات الدراسة الأكاديمية (حاسب، هندسة، إدارة أعمال، رياضيات، الخ) حسب نظرة سوق العمل
- (9) نسبة اتقان الطلاب لبعض المهارات مقارنة بالموظفين في بعض المجالات وكيفية تقليص الفجوة من خلال التعليم المدمج والتعليم طويل الأجل



# Forecasts for Labour Market Evolution in 2020-2025



# The Future of Jobs Report 2020

OCTOBER 2020

# Saudi Arabia

إحصائية رقمية عن 25 دولة بما فيها المملكة توضح مناسبة التعليم لسوق العمل، التقنيات الواعدة، الوظائف الناشئة والوظائف المترجمة، المهارات المطلوبة في سوق العمل

## Education & skills

Digital skills among active population\*  
WEIGHTED AVERAGE 2019-2020

Attainment of basic education  
2017

Business relevance of basic education\*  
WEIGHTED AVERAGE 2019-2020

Attainment of advanced education  
2017

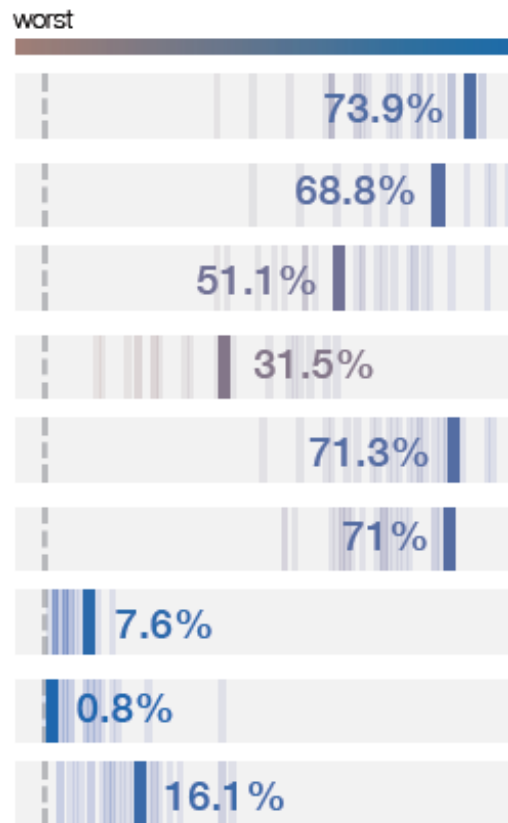
Business relevance of tertiary education\*  
WEIGHTED AVERAGE 2019-2020

Supply of business-relevant skills\*  
WEIGHTED AVERAGE 2019-2020

Unempl. rate among workers with adv. educ.  
2014

Unempl. rate among workers with basic educ.  
2014

Share of youth not in empl., educ. or training  
2020



## Emerging skills

Skills identified as being in high demand within their organization, by frequency

1. Complex problem-solving
2. Leadership and social influence
3. Analytical thinking and innovation
4. Active learning and learning strategies
5. Resilience, stress tolerance and flexibility
6. Critical thinking and analysis
7. Technology use, monitoring and control
8. Troubleshooting and user experience
9. Creativity, originality and initiative
10. Technology design and programming
11. Systems analysis and evaluation
12. Service orientation
13. Reasoning, problem-solving and ideation
14. Emotional intelligence

# Saudi Arabia

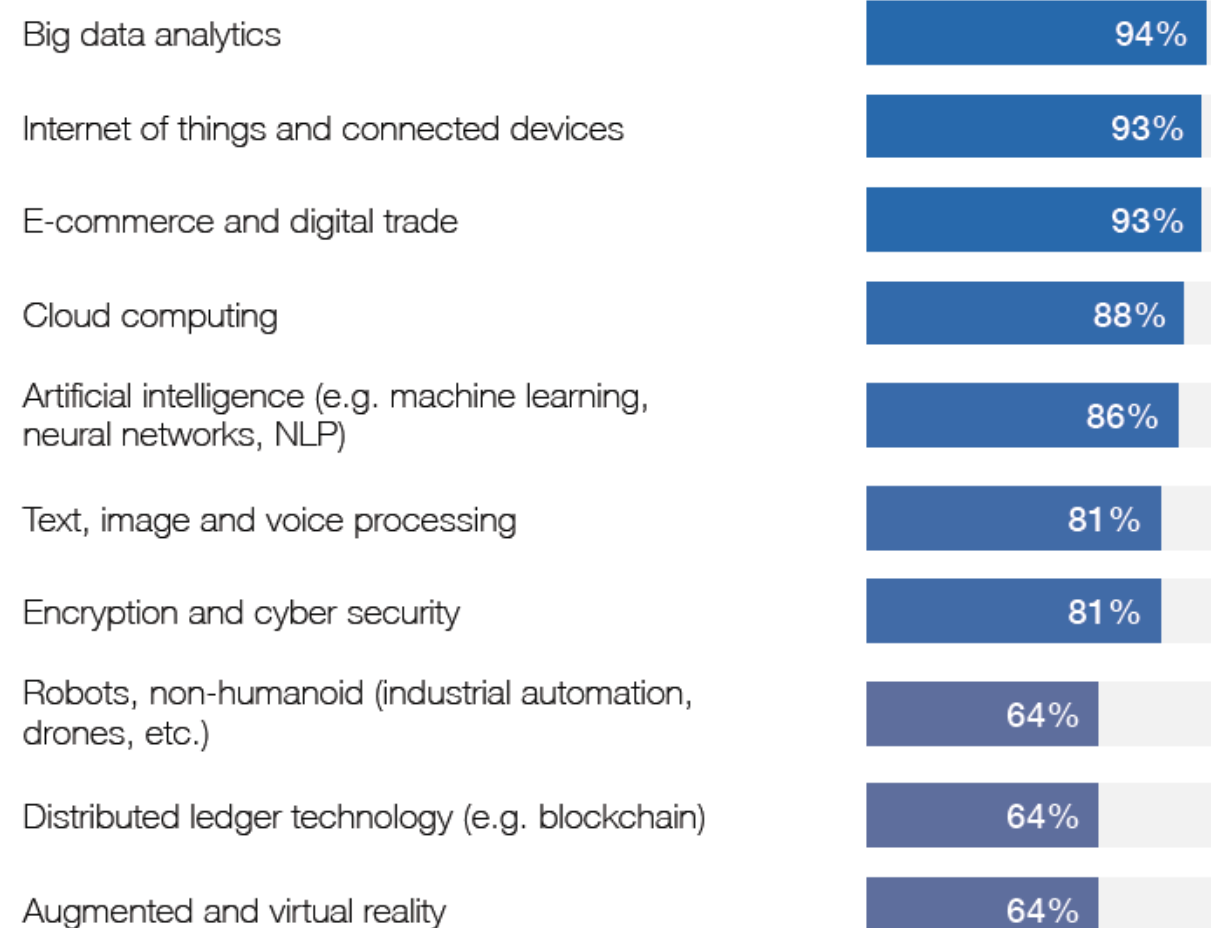
## Current skills in focus of existing reskilling/upskilling programmes

Share of companies surveyed identifying this skill as being in focus across their reskilling or upskilling programmes

|     |  |
|-----|--|
| 1.  | Leadership and social influence              |
| 2.  | Active learning and learning strategies      |
| 3.  | Analytical thinking and innovation           |
| 4.  | Quality control and safety awareness         |
| 5.  | Emotional intelligence                       |
| 6.  | Technology use, monitoring and control       |
| 7.  | Management of personnel                      |
| 8.  | Resilience, stress tolerance and flexibility |
| 9.  | Persuasion and negotiation                   |
| 10. | Management of financial, material resources  |

## Technology adoption

Share of companies surveyed

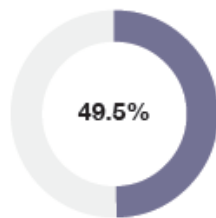


# Mining and Metals

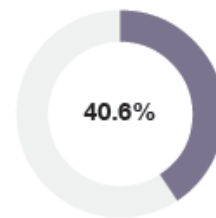
19.9%

Average share of workers at risk of displacement

Expected redeployment success rate of displaced workers

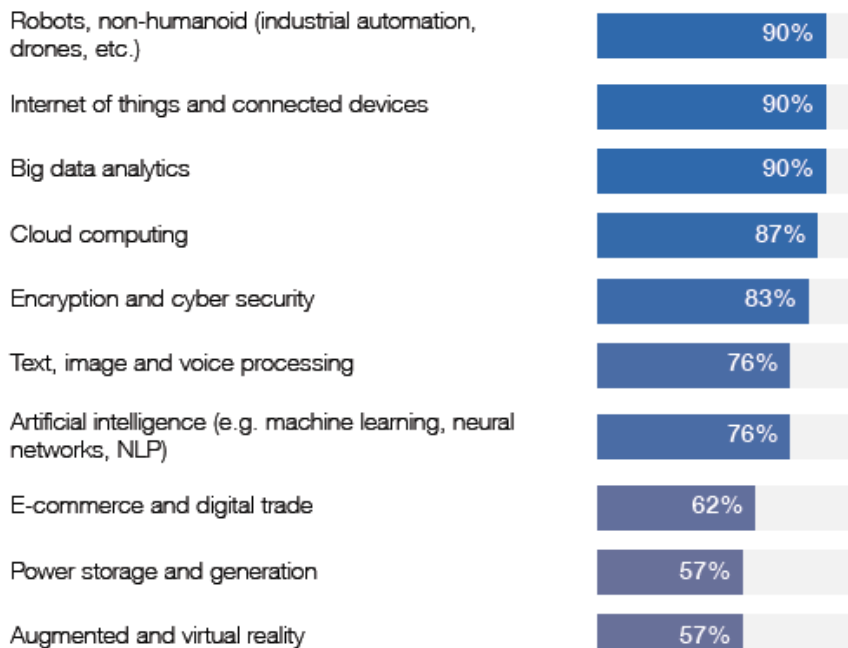


Average skills instability among workforce



## Technology adoption in industry

Share of companies surveyed



## Emerging skills

Skills identified as being in high demand within their organization, ordered by frequency

|     |  |
|-----|--|
| 1.  | Technology use, monitoring and control       |
| 2.  | Analytical thinking and innovation           |
| 3.  | Critical thinking and analysis               |
| 4.  | Complex problem-solving                      |
| 5.  | Systems analysis and evaluation              |
| 6.  | Reasoning, problem-solving and ideation      |
| 7.  | Troubleshooting and user experience          |
| 8.  | Leadership and social influence              |
| 9.  | Creativity, originality and initiative       |
| 10. | Active learning and learning strategies      |
| 11. | Emotional intelligence                       |
| 12. | Resilience, stress tolerance and flexibility |
| 13. | Quality control and safety awareness         |
| 14. | Instruction, mentoring and teaching          |
| 15. | Technology design and programming            |

إحصائية رقمية عن 15 قطاع  
صناعي (النقل - الصحة - التعليم -  
التصنيع المتقدم - التعدين والمعادن -  
الزيت والغاز، الخ) توضّح اهم  
المهارات والتقنيات المستقبلية  
والوظائف المترجمة في القطاع  
والوظائف الواعدة والعوائق الحالية  
(الشريحة توضّح قطاع التعدين  
والمعادن)

## B. Top 15 skills for 2025

|    |  |
|----|--|
| 1  | Analytical thinking and innovation           |
| 2  | Active learning and learning strategies      |
| 3  | Complex problem-solving                      |
| 4  | Critical thinking and analysis               |
| 5  | Creativity, originality and initiative       |
| 6  | Leadership and social influence              |
| 7  | Technology use, monitoring and control       |
| 8  | Technology design and programming            |
| 9  | Resilience, stress tolerance and flexibility |
| 10 | Reasoning, problem-solving and ideation      |
| 11 | Emotional intelligence                       |
| 12 | Troubleshooting and user experience          |
| 13 | Service orientation                          |
| 14 | Systems analysis and evaluation              |
| 15 | Persuasion and negotiation                   |

### Specialized skill

1. Product Marketing
2. Digital Marketing
3. Software Development Life Cycle (SDLC)
4. Business Management
5. Advertising
6. Human Computer Interaction
7. Development Tools
8. Data Storage Technologies
9. Computer Networking
10. Web Development
11. Management Consulting
12. Entrepreneurship
13. Artificial Intelligence
14. Data Science
15. Retail Sales
16. Technical Support
17. Social Media
18. Graphic Design
19. Information Management

أهم  
المهارات  
العامة  
والخاصة  
في  
وظائف  
المستقبل



## ↗ Increasing demand

|    |   |
|----|---|
| 1  | Data Analysts and Scientists                  |
| 2  | AI and Machine Learning Specialists           |
| 3  | Big Data Specialists                          |
| 4  | Digital Marketing and Strategy Specialists    |
| 5  | Process Automation Specialists                |
| 6  | Business Development Professionals            |
| 7  | Digital Transformation Specialists            |
| 8  | Information Security Analysts                 |
| 9  | Software and Applications Developers          |
| 10 | Internet of Things Specialists                |
| 11 | Project Managers                              |
| 12 | Business Services and Administration Managers |
| 13 | Database and Network Professionals            |
| 14 | Robotics Engineers                            |
| 15 | Strategic Advisors                            |
| 16 | Management and Organization Analysts          |
| 17 | FinTech Engineers                             |
| 18 | Mechanics and Machinery Repairers             |
| 19 | Organizational Development Specialists        |
| 20 | Risk Management Specialists                   |

## ↘ Decreasing demand

|    |   |
|----|---|
| 1  | Data Entry Clerks                                     |
| 2  | Administrative and Executive Secretaries              |
| 3  | Accounting, Bookkeeping and Payroll Clerks            |
| 4  | Accountants and Auditors                              |
| 5  | Assembly and Factory Workers                          |
| 6  | Business Services and Administration Managers         |
| 7  | Client Information and Customer Service Workers       |
| 8  | General and Operations Managers                       |
| 9  | Mechanics and Machinery Repairers                     |
| 10 | Material-Recording and Stock-Keeping Clerks           |
| 11 | Financial Analysts                                    |
| 12 | Postal Service Clerks                                 |
| 13 | Sales Rep., Wholesale and Manuf., Tech. and Sci.Prod. |
| 14 | Relationship Managers                                 |
| 15 | Bank Tellers and Related Clerks                       |
| 16 | Door-To-Door Sales, News and Street Vendors           |
| 17 | Electronics and Telecoms Installers and Repairers     |
| 18 | Human Resources Specialists                           |
| 19 | Training and Development Specialists                  |
| 20 | Construction Laborers                                 |

أكثر 20  
وظيفة  
واحدة  
يكثر عليها  
(الطلب)  
وأكثر 20  
وظيفة  
مراجعة  
(يقل عليها  
الطلب)

Source

Future of Jobs Survey 2020, World Economic Forum.

FIGURE 9

Estimated share of workers at risk of unemployment, by sub-industry

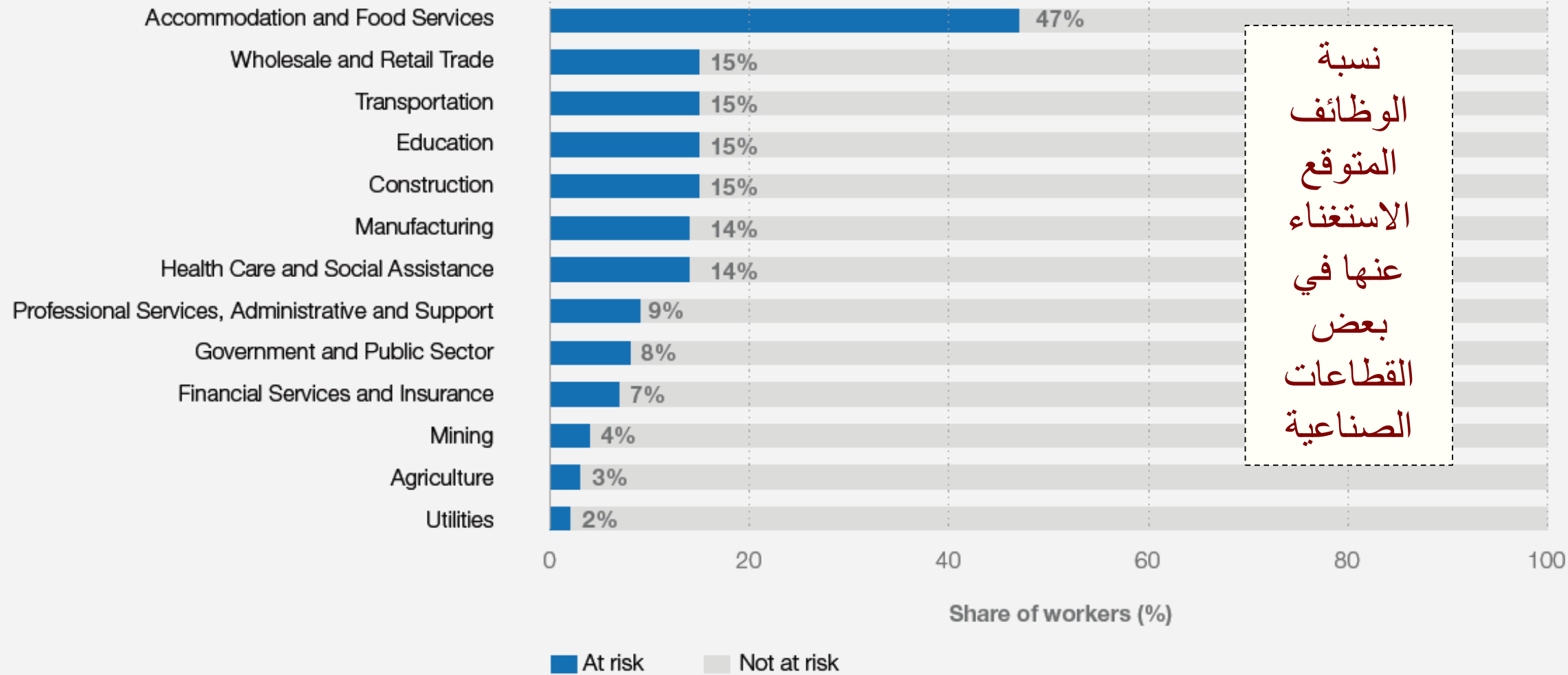


FIGURE 18

Technologies likely to be adopted by 2025 (by share of companies surveyed)

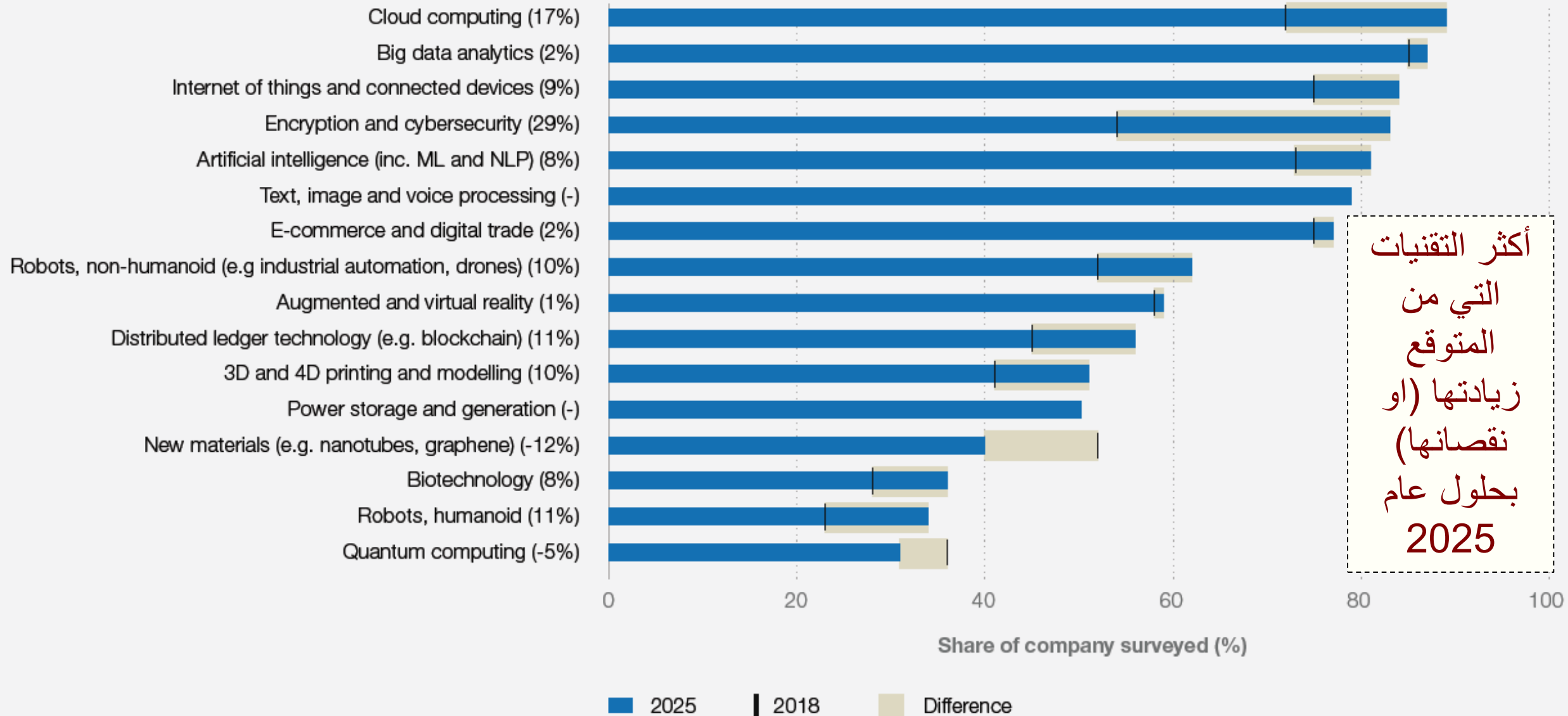
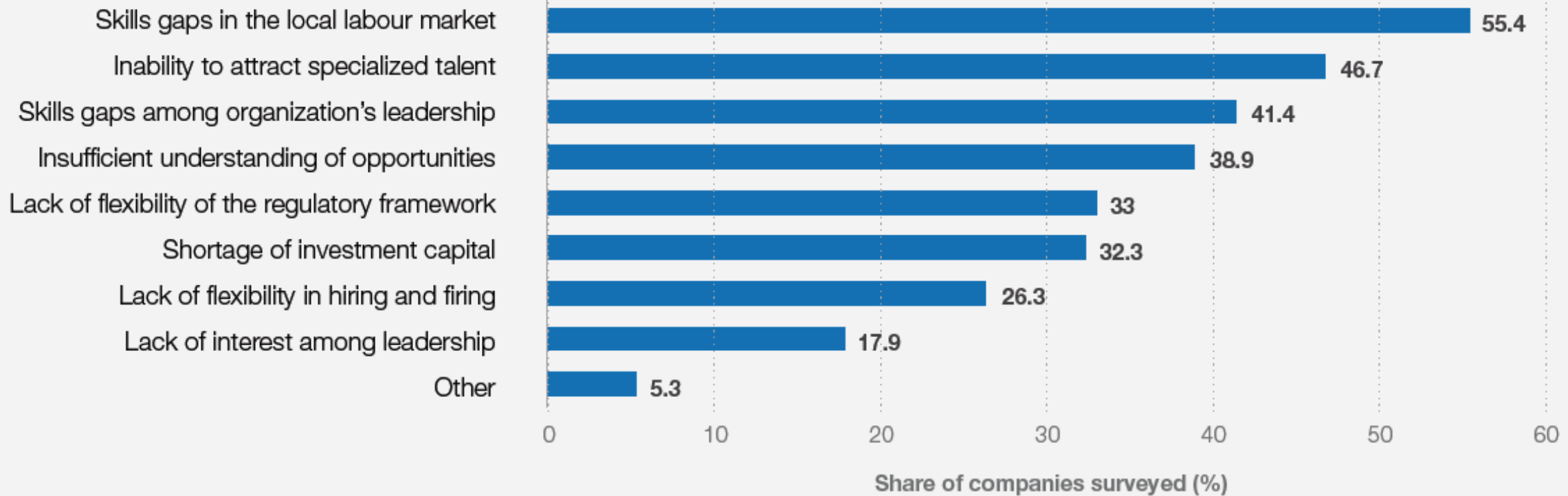


FIGURE 26

Perceived barriers to the adoption of new technologies

أهم عوائق تفعيل التقنيات الحديثة في سوق العمل (نقص المهارات وضعف القدرة على استقطاب الخبراء)



Source

Future of Jobs Survey 2020, World Economic Forum.

أكثر المهام الواعدة في وظائف المستقبل

## Care Economy

## Cloud Computing

- 1 Site Reliability Engineer
- 2 Platform Engineer
- 3 Cloud Engineer
- 3 DevOps Engineer
- 5 Cloud Consultant
- 6 DevOps Manager

## Content Production

- 1 Social Media Assistant
- 2 Social Media Coordinator
- 3 Content Specialist
- 4 Content Producer
- 5 Content Writer
- 6 Creative Copywriter

## Data and AI

- 1 Artificial Intelligence Specialist
- 2 Data Scientist
- 3 Data Engineer
- 4 Big Data Developer

## Marketing

- 1 Growth Hacker
- 2 Growth Manager
- 3 Digital Marketing Specialist
- 4 Digital Specialist
- 5 Ecommerce Specialist
- 6 Commerce Manager
- 6 Head Of Digital
- 8 Digital Marketing Consultant
- 9 Digital Marketing Manager
- 10 Chief Marketing Officer

## Engineering

- 1 Python Developer
- 2 Full Stack Engineer
- 2 Javascript Developer
- 4 Back End Developer
- 5 Frontend Engineer
- 5 Software Developer Dotnet
- 7 Development Specialist
- 8 Technology Analyst



## Product Development

- 1 Product Owner
- 2 Quality Assurance Tester
- 3 Agile Coach
- 4 Software Quality Assurance Engineer
- 5 Product Analyst
- 6 Quality Assurance Engineer
- 6 Scrum Master
- 8 Digital Product Manager
- 9 Delivery Lead



## Sales

- 1 Customer Success Specialist
- 2 Sales Development Representative
- 3 Commercial Sales Representative
- 4 Business Development Representative
- 5 Customer Specialist
- 6 Partnerships Specialist
- 7 Chief Commercial Officer
- 8 Head Of Partnerships
- 9 Enterprise Account Executive
- 10 Business Development Specialist
- 11 Chief Strategy Officer
- 12 Head Of Business Development

# Engineering and Cloud Computing

## Emerging Jobs

- 1 Site Reliability Engineer / Cloud Computing /
- 2 Python Developer / Engineering /
- 3 Full Stack Engineer / Engineering /
- 3 Javascript Developer / Engineering /
- 5 Back End Developer / Engineering /
- 6 Frontend Engineer / Engineering /
- 6 Software Developer Dotnet / Engineering /
- 8 Platform Engineer / Cloud Computing /
- 9 Development Specialist / Engineering /
- 10 Cloud Engineer / Cloud Computing /
- 10 DevOps Engineer / Cloud Computing /
- 12 Cloud Consultant / Cloud Computing /
- 13 DevOps Manager / Cloud Computing /
- 14 Technology Analyst / Engineering /

## Top 10 Skills

- 1 Development Tools
- 2 Web Development
- 3 Data Storage Technologies
- 4 Software Development Life Cycle (SDLC)
- 5 Computer Networking
- 6 Human Computer Interaction
- 7 Technical Support
- 8 Digital Literacy
- 9 Business Management
- 10 Employee Learning & Development

الوظائف الواعدة وأهم 10 مهارات خاصة بها  
في 7 قطاعات تشمل:

- Care Economy
- Data and AI
- Green Economy
- People and Culture
- Product Development
- Sales, Marketing and Content
- Engineering and Cloud Computing

# The Unbounded University:

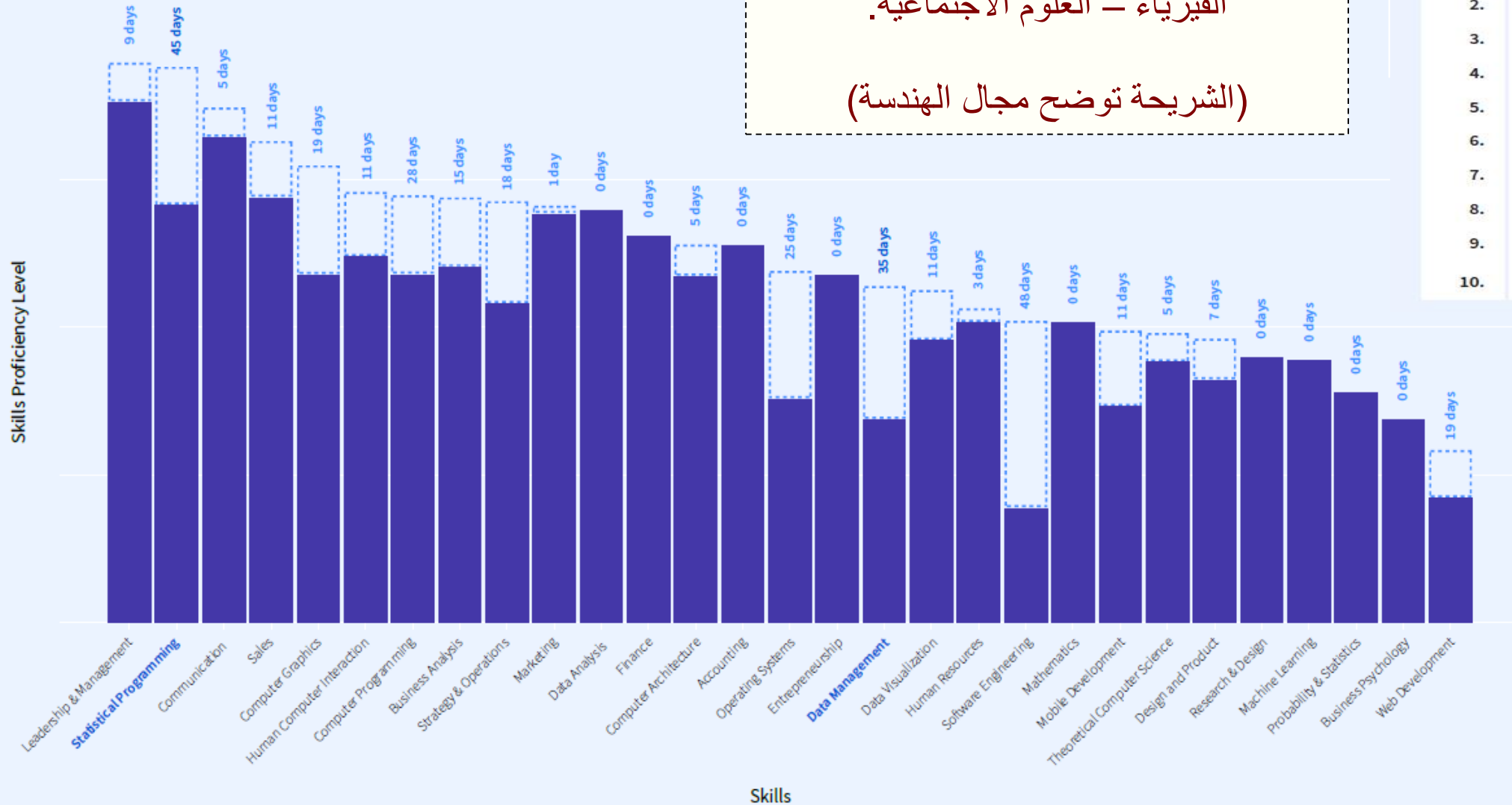
Unlocking Opportunities  
Through Online Learning

**coursera** for campus

- تقرير شركة كورسيرا (Coursera) عن التعليم عن بعد وكيف يمكن ان تستفيد الجامعات منه لتقليص الفجوة بين التعليم وسوق العمل، ويشمل:
- مخرجات الطالب التعليمية وتقليص فجوة التوظيف
  - التعليم المدمج – Blended Learning
  - التعليم طويل الأجل – Lifelong Learning

كورسيرا Coursera منصة تعليم عن بعد تضم أكثر من 70 مليون متعلم حول العالم

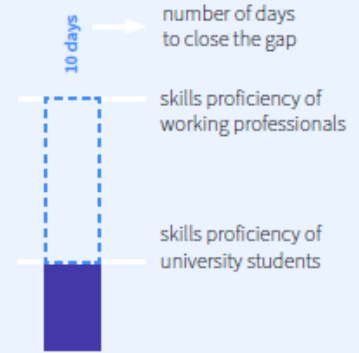
# Engineering Skills Gaps



نسبة الفجوة في مهارات بعض المجالات التعليمية مقارنة بحاجة سوق العمل: مجال علم الاحياء – الأعمال – الحاسب – التعليم – الهندسة – الصحة – الرياضيات والاحصاء – الفيزياء – العلوم الاجتماعية.  
(الشريحة توضح مجال الهندسة)

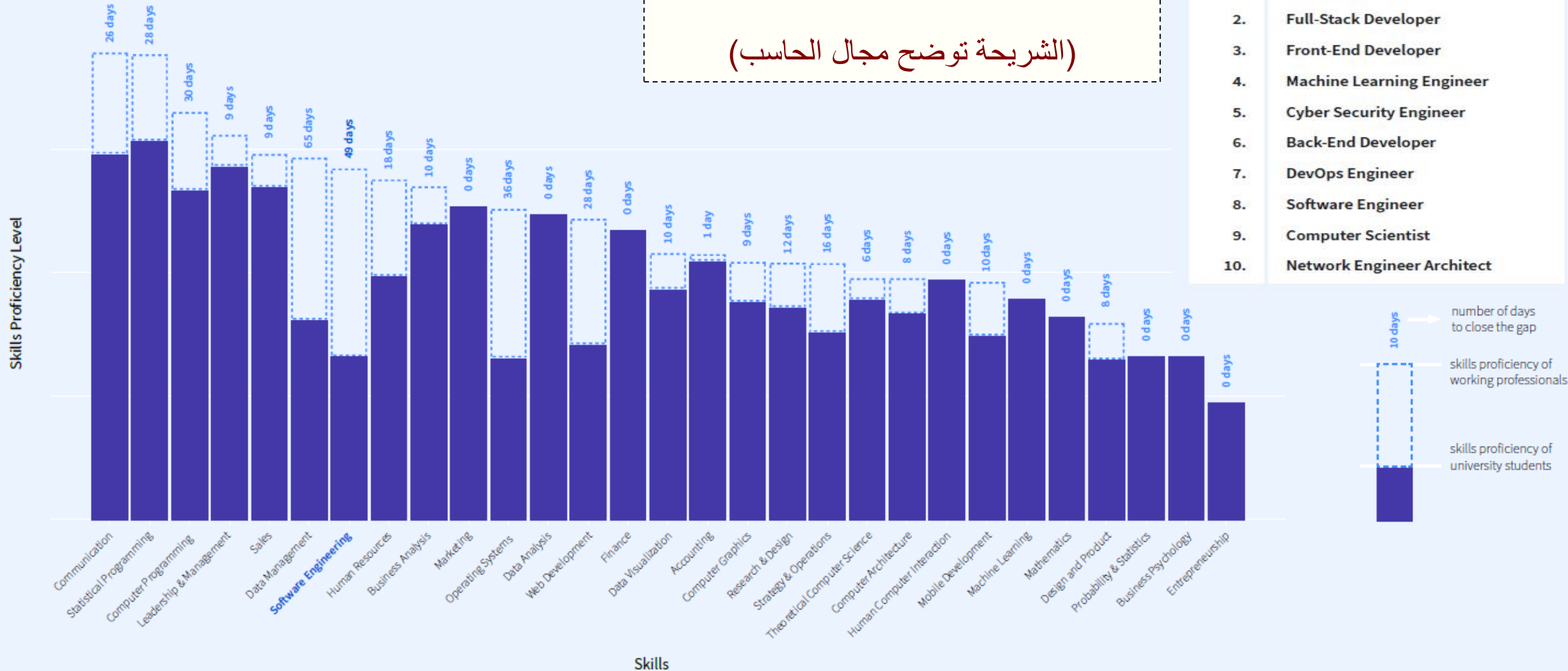
## Engineering students' intended careers

| Rank | Engineering                   |
|------|-------------------------------|
| 1.   | Solutions Engineer            |
| 2.   | Electrical Engineer           |
| 3.   | Mechanical Engineer           |
| 4.   | Structural Materials Engineer |
| 5.   | Civil Engineer                |
| 6.   | Automotive Engineer           |
| 7.   | Automation Engineer           |
| 8.   | Mechatronics Engineer         |
| 9.   | Mechanical Design Engineer    |
| 10.  | Petroleum Engineer            |





# Computer Science Skills Gaps



نسبة الفجوة في مهارات بعض المجالات:  
 مجال علم الاحياء – الأعمال – الحاسب –  
 التعليم – الهندسة – الصحة – الرياضيات  
 والاحصاء – الفيزياء – العلوم الاجتماعية.

(الشريحة توضح مجال الحاسب)

## Computer science students' intended careers

| Rank | Computer Science           |
|------|----------------------------|
| 1.   | Cloud Architect            |
| 2.   | Full-Stack Developer       |
| 3.   | Front-End Developer        |
| 4.   | Machine Learning Engineer  |
| 5.   | Cyber Security Engineer    |
| 6.   | Back-End Developer         |
| 7.   | DevOps Engineer            |
| 8.   | Software Engineer          |
| 9.   | Computer Scientist         |
| 10.  | Network Engineer Architect |

## المصادر

تقرير مستقبل الوظائف 2020 – منتدى الاقتصاد العالمي – أكتوبر 2020  
The Future of Jobs Report 2020 | World Economic Forum

تقرير الجامعة غير المحدودة: فتح الفرص من خلال التعليم عن بعد –  
2021 – Coursera  
The Unbounded University: Unlocking Opportunities  
through Online Learning