# ENISA Cybersecurity Skills Conference

## Use Cases – Professional Associations

Clar Rosso

(ISC)$^2$ CEO

# This is (ISC)$^2$

**Largest nonprofit membership association** of certified cybersecurity professionals

CC CISSP CCSP CSSLP SSCP CISSP ISSAP ISSEP ISSMP CAP HCISPP

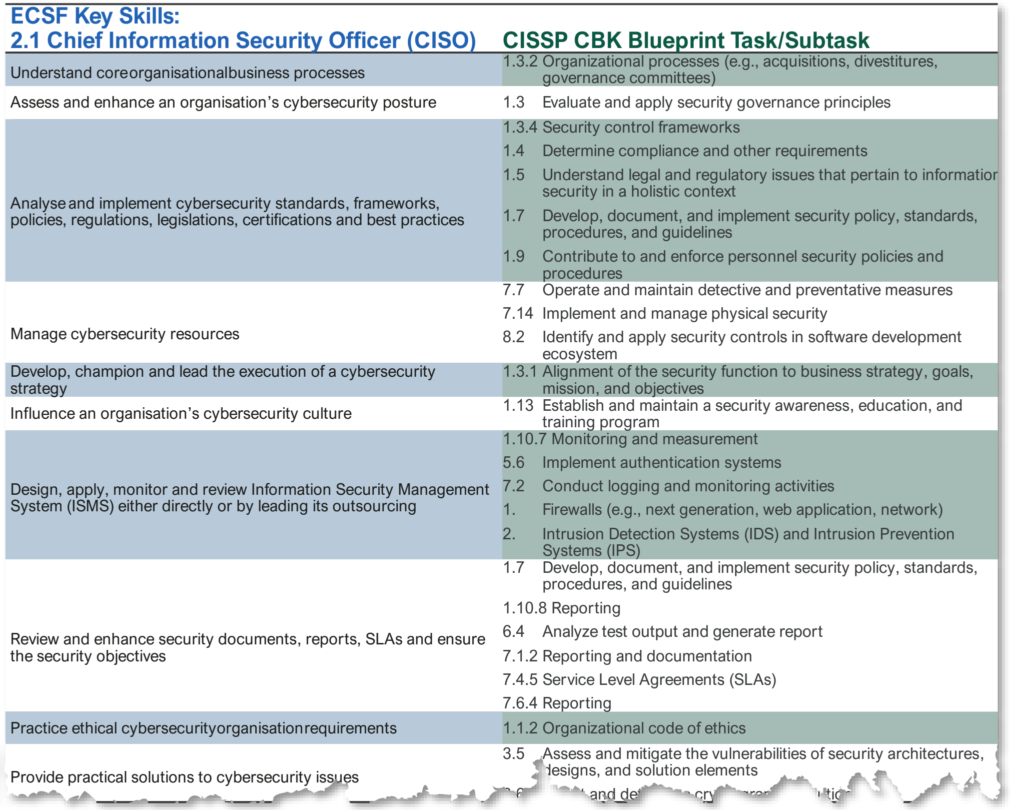
**Work with businesses and governments** to build certifications that meet market needs

Provider of **lifelong professional education**

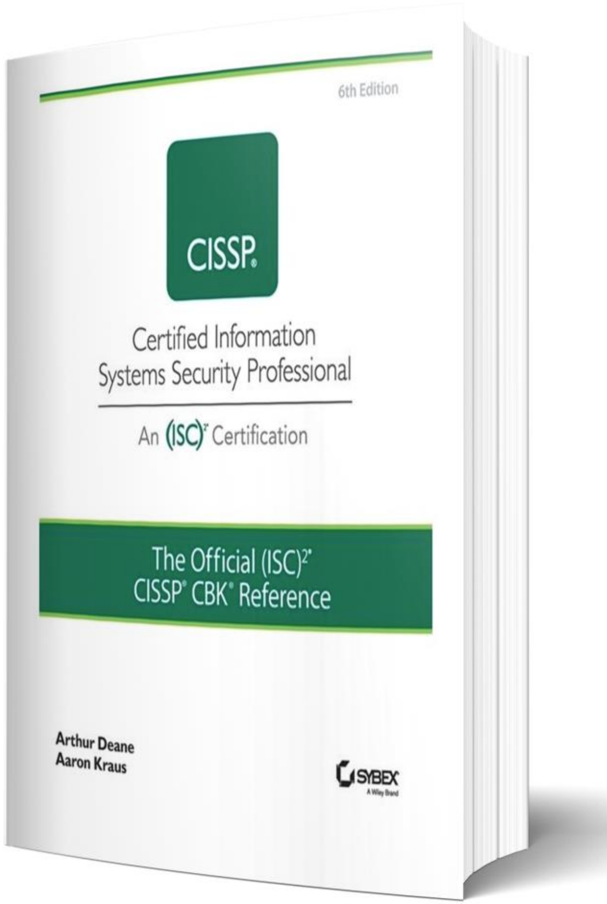
**Global advocate** for ethics, growth and success of the cybersecurity profession

# The European Cybersecurity Skills Framework Aligns Closely With the CISSP Common Body of Knowledge

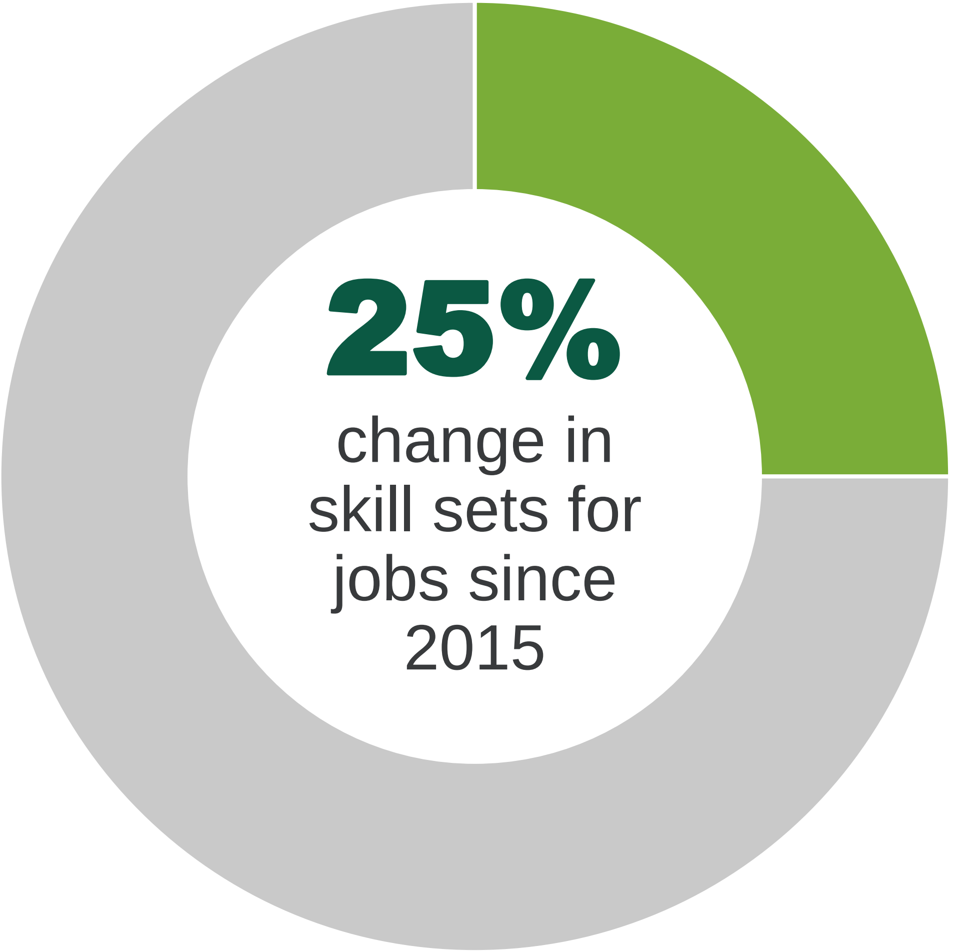
enisa
EUROPEAN UNION AGENCY FOR CYBERSECURITY
European Cybersecurity Skills Framework
ECSF
European Cybersecurity Skills Framework



| ECSF Key Skills:<br>2.1 Chief Information Security Officer (CISO) | CISSP CBK Blueprint Task/Subtask |
|---|---|
| Understand coreorganisationalbusiness processes | 1.3.2 Organizational processes (e.g., acquisitions, divestitures, governance committees) |
| Assess and enhance an organisation's cybersecurity posture | 1.3 Evaluate and apply security governance principles |
| Analyse and implement cybersecurity standards, frameworks, policies, regulations, legislations, certifications and best practices | 1.3.4 Security control frameworks<br>1.4 Determine compliance and other requirements<br>1.5 Understand legal and regulatory issues that pertain to informatior security in a holistic context<br>1.7 Develop, document, and implement security policy, standards, procedures, and guidelines<br>1.9 Contribute to and enforce personnel security policies and procedures |
| Manage cybersecurity resources | 7.7 Operate and maintain detective and preventative measures<br>7.14 Implement and manage physical security<br>8.2 Identify and apply security controls in software development ecosystem |
| Develop, champion and lead the execution of a cybersecurity strategy | 1.3.1 Alignment of the security function to business strategy, goals, mission, and objectives |
| Influence an organisation's cybersecurity culture | 1.13 Establish and maintain a security awareness, education, and training program |
| Design, apply, monitor and review Information Security Management System (ISMS) either directly or by leading its outsourcing | 1.10.7 Monitoring and measurement<br>5.6 Implement authentication systems<br>7.2 Conduct logging and monitoring activities<br>1. Firewalls (e.g., next generation, web application, network)<br>2. Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS) |
| Review and enhance security documents, reports, SLAs and ensure the security objectives | 1.7 Develop, document, and implement security policy, standards, procedures, and guidelines<br>1.10.8 Reporting<br>6.4 Analyze test output and generate report<br>7.1.2 Reporting and documentation<br>7.4.5 Service Level Agreements (SLAs)<br>7.6.4 Reporting |
| Practice ethical cybersecurityorganisationrequirements | 1.1.2 Organizational code of ethics |
| Provide practical solutions to cybersecurity issues | 3.5 Assess and mitigate the vulnerabilities of security architectures, designs, and solution elements<br>3.6 [illegible] and de[illegible] cry[illegible] tio[illegible] |

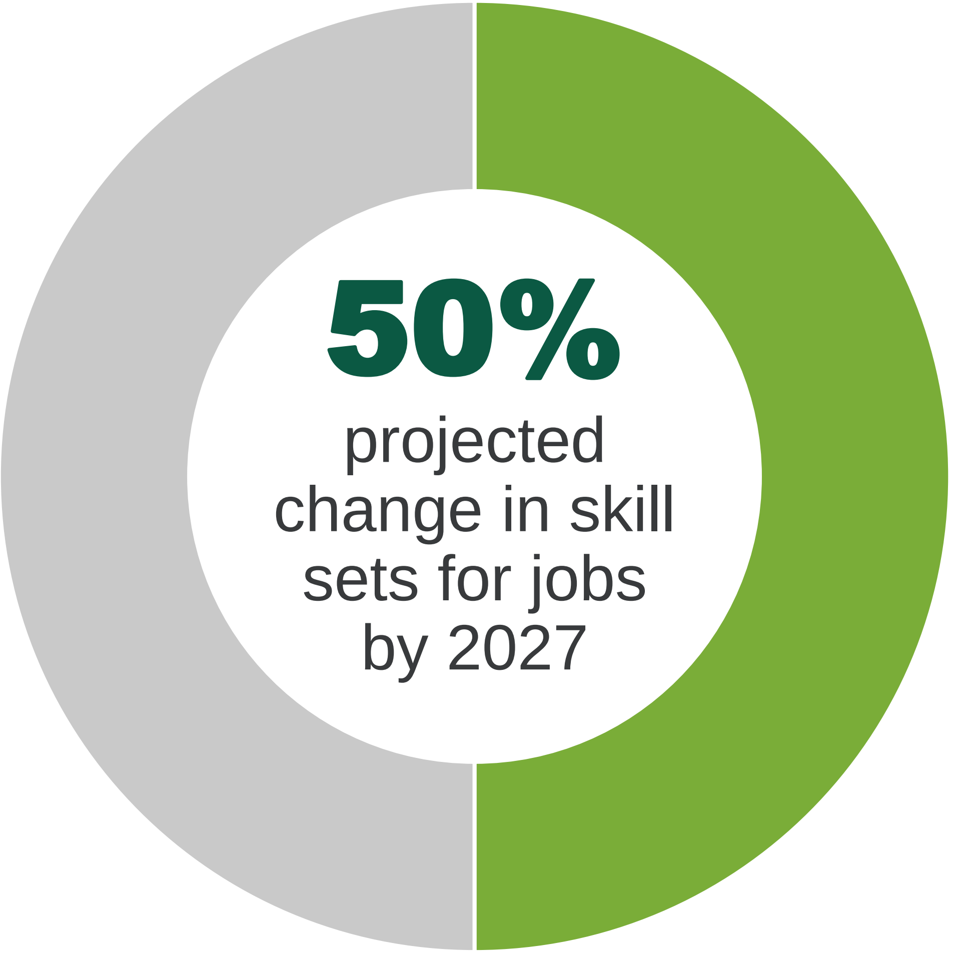

6th Edition
CISSP
Certified Information Systems Security Professional
An (ISC)² Certification
The Official (ISC)² CISSP CBK Reference
Arthur Deane
Aaron Kraus
SYBEX
A Wiley Brand

# Why skills frameworks matter.



**25%**

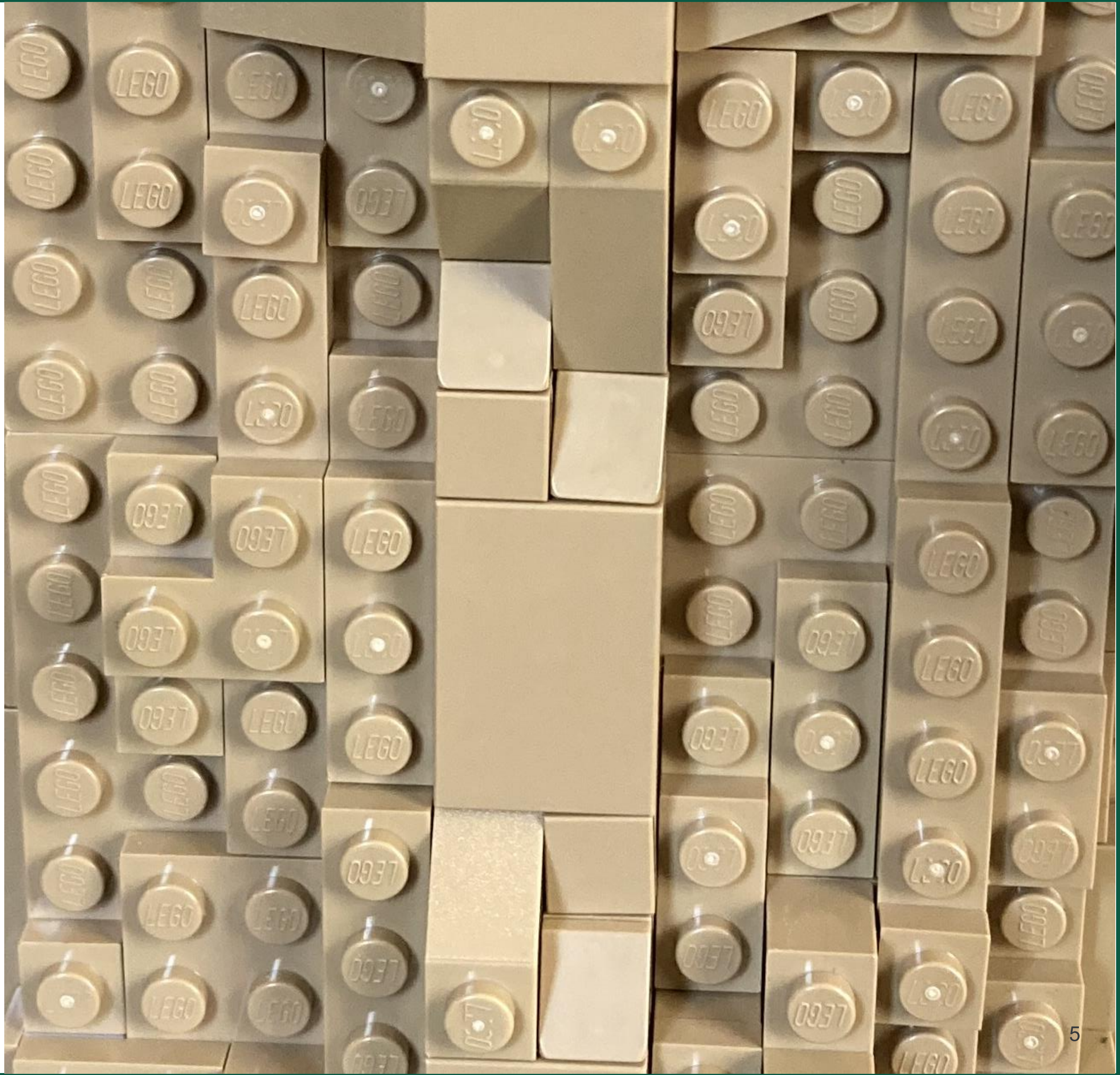
change in skill sets for jobs since 2015



**50%**

projected change in skill sets for jobs by 2027

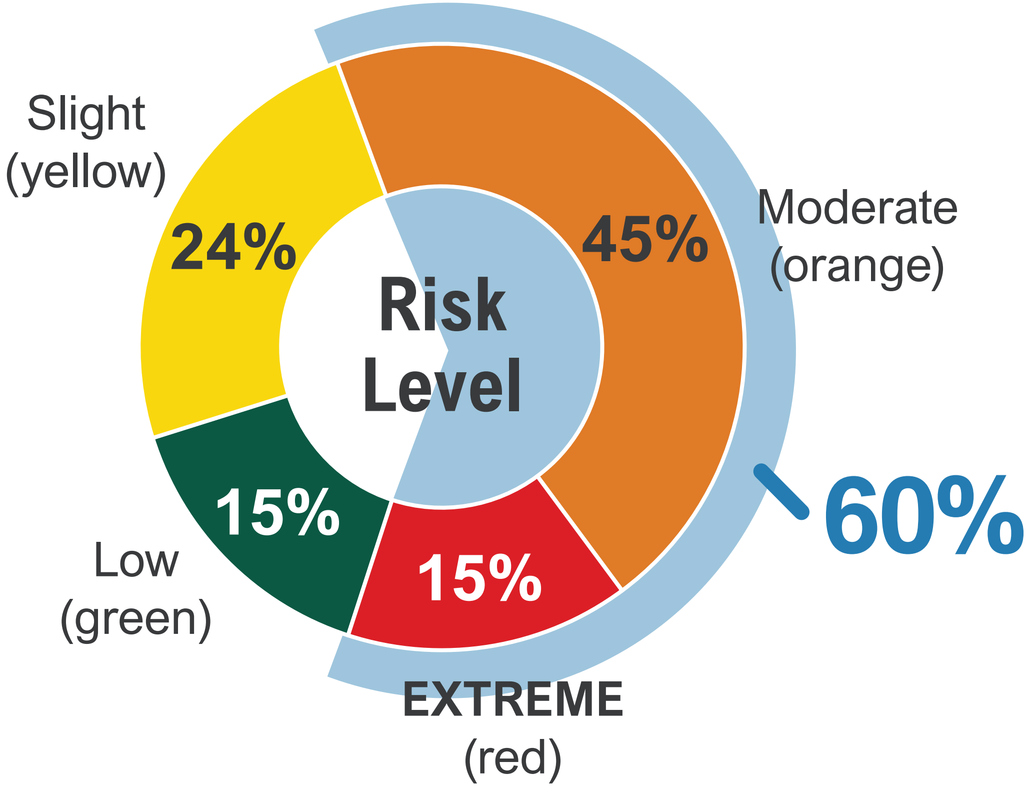
# The Value of Frameworks



# The Value of Frameworks

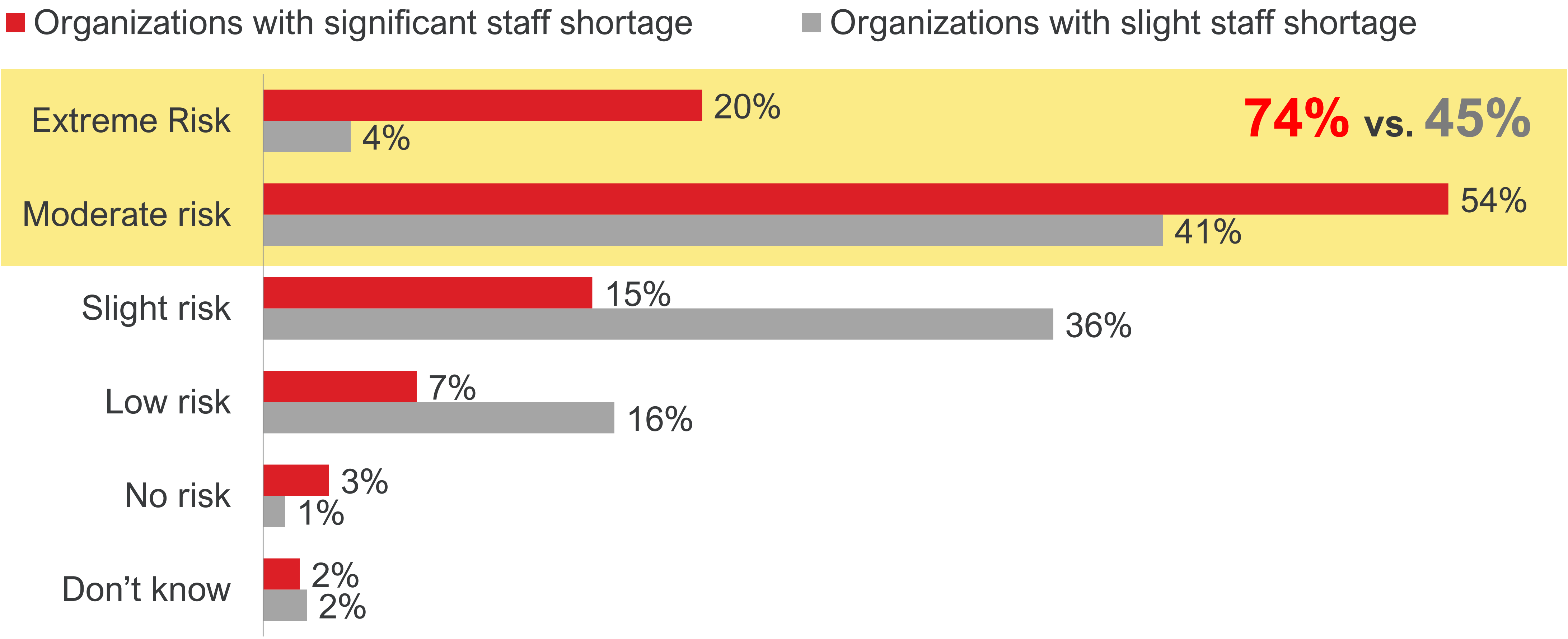
# The Gap Puts Organizations at Risk

**67%** Reported a cybersecurity staffing shortage

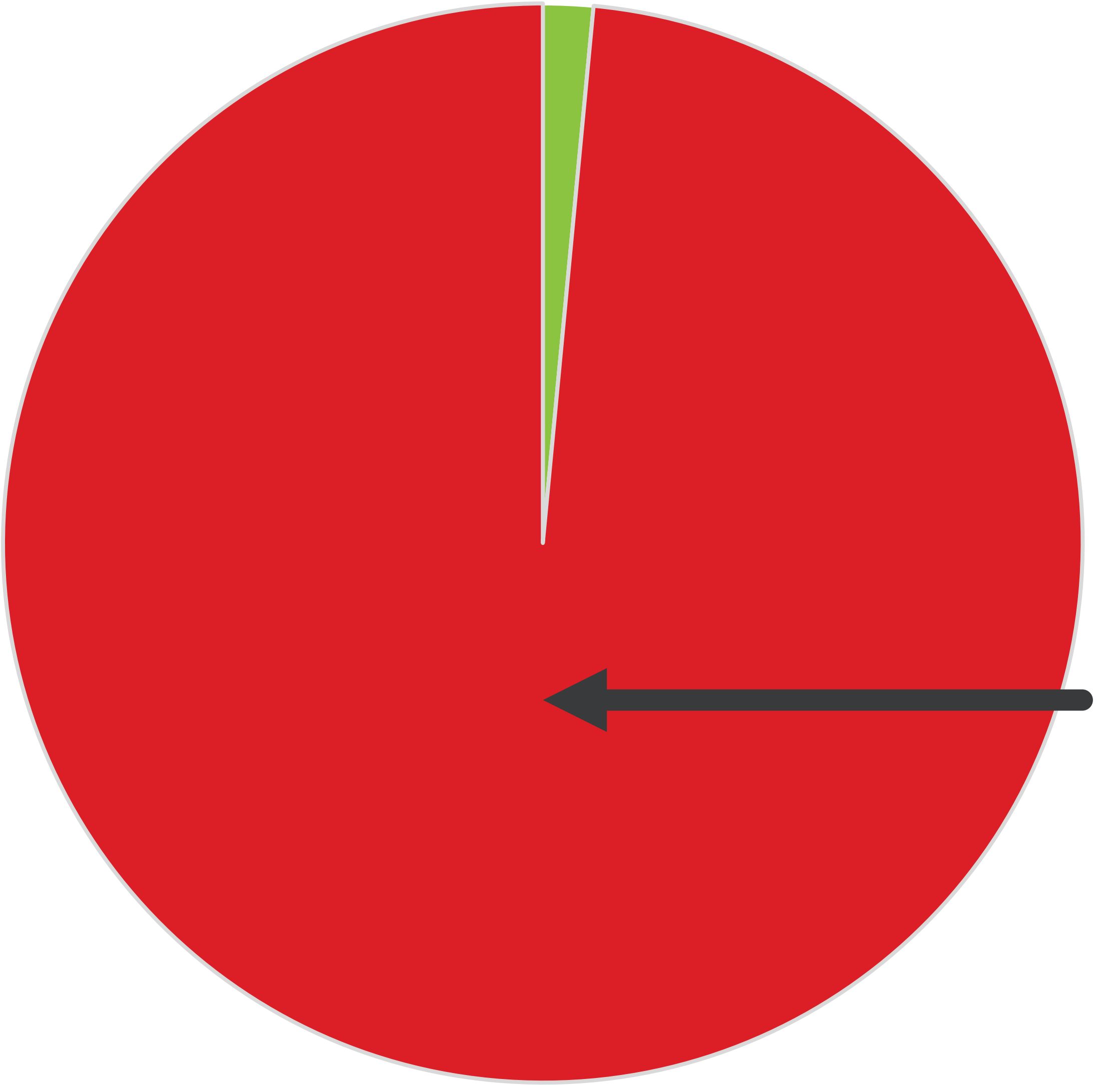


Source: 2021 (ISC)² Cybersecurity Workforce Study.

# … that risk increases substantially when organizations have a significant staff shortage.



Source: A commissioned study conducted by Forrester Consulting on behalf of (ISC)², July 2022



**98.5%**

have no security professionals ***at all!***

# Without Enough Cybersecurity Staff in Europe…

**30%**
Misconfigured systems

**29%**
Slow to patch critical systems

**29%**
Not enough time for proper risk assessment and management

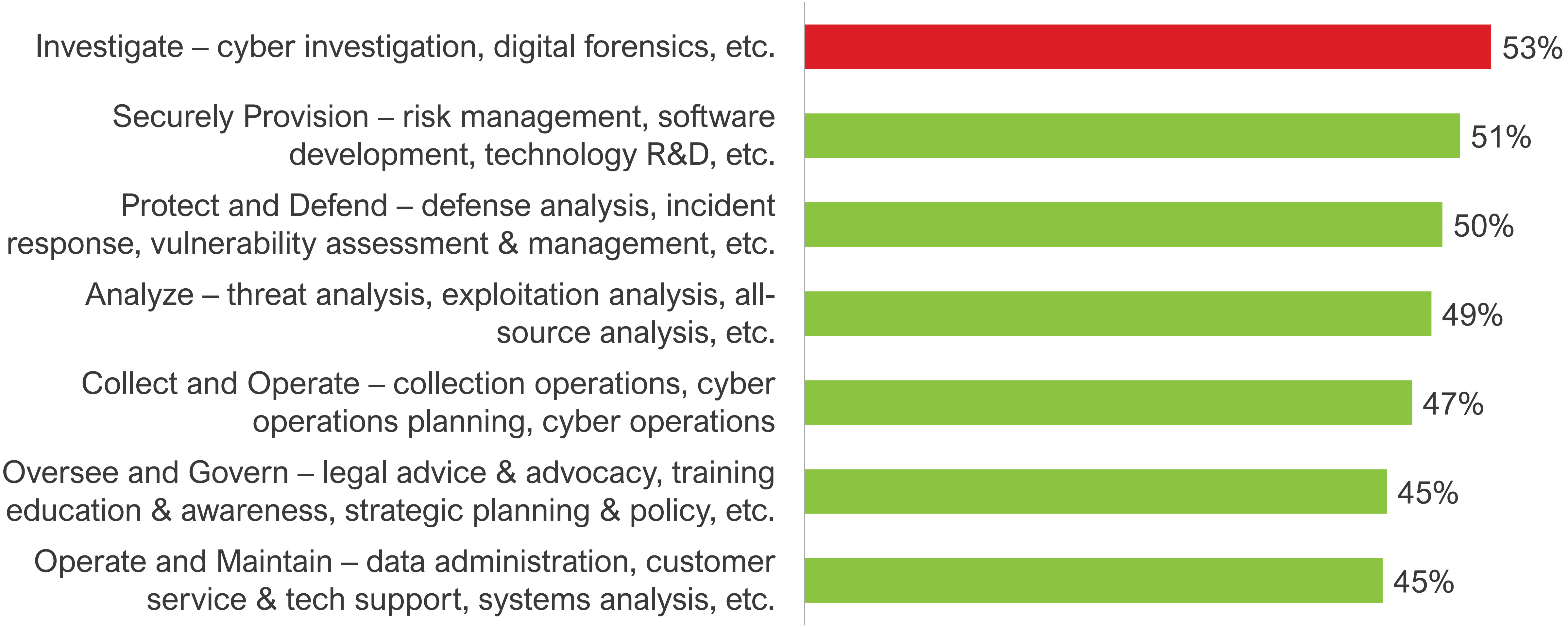
**28%**
Rushed deployments

**27%**
Oversights in process and procedure

**25%**
Incomplete incident investigations

Source: 2021 (ISC)$^2$ Cybersecurity Workforce Study

# Talent gaps exist across all key skills categories, but investigative roles make up the largest

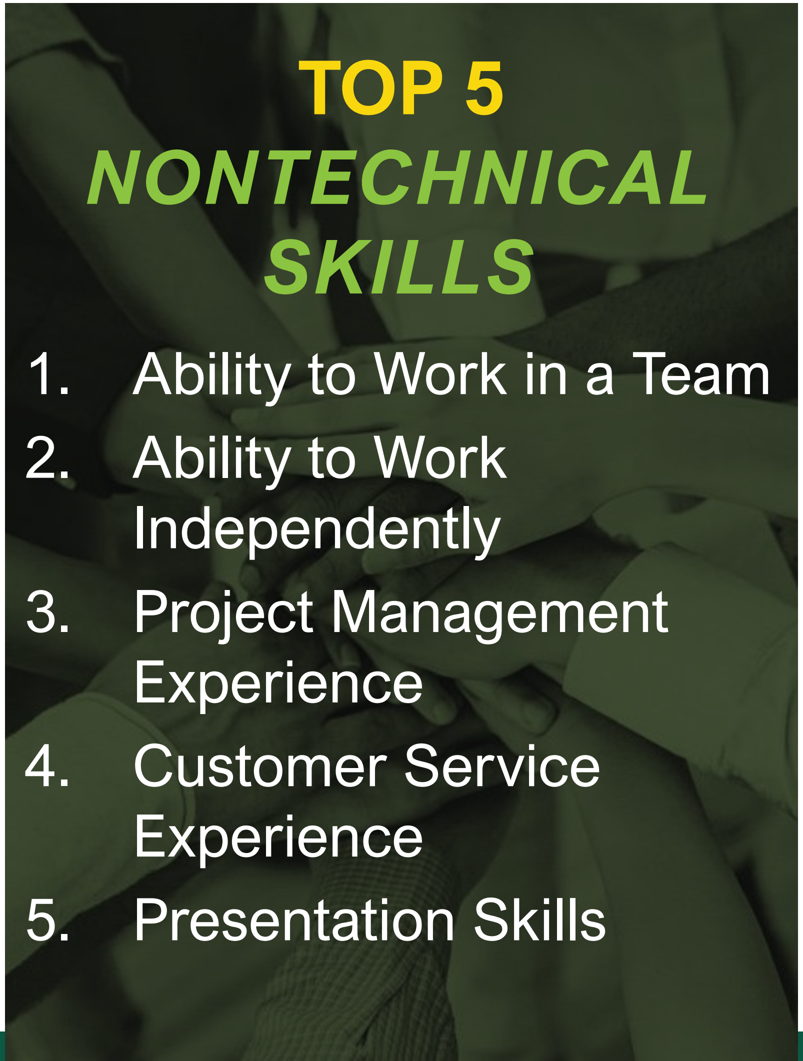


Source: A commissioned study conducted by Forrester Consulting on behalf of (ISC)², July 2022

# Businesses seek these traits when hiring entry and junior-level team members

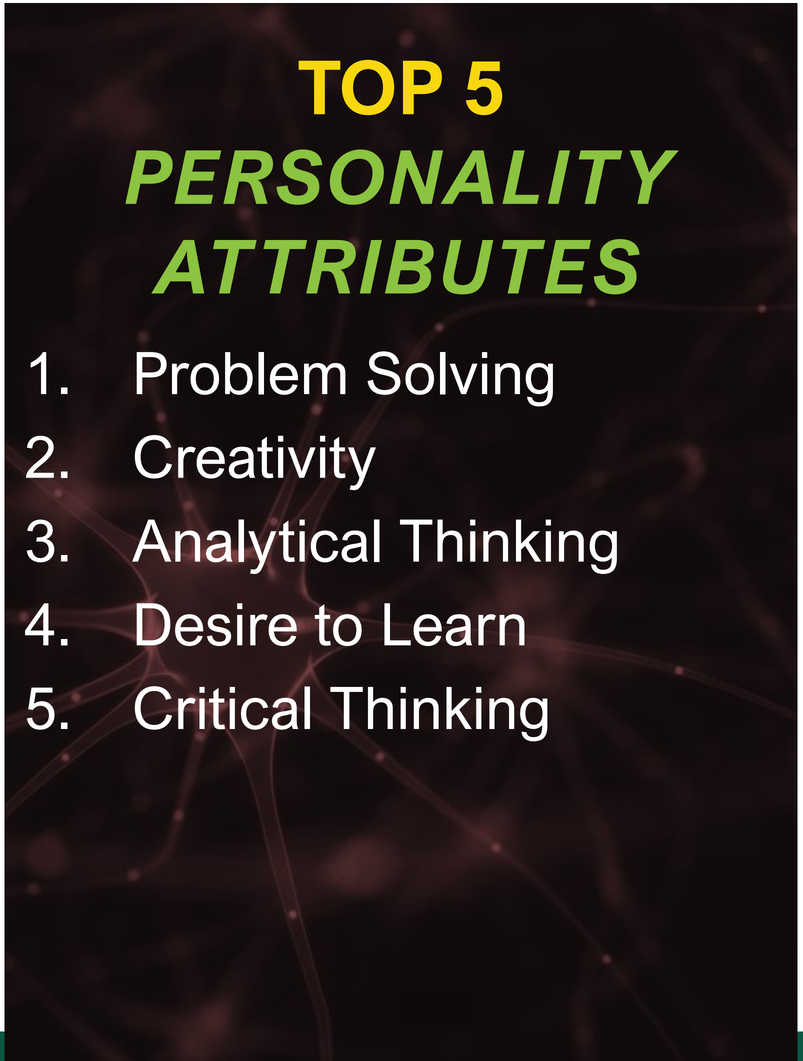
## TOP 5 *TECHNICAL SKILLS*

1. Data Security
2. Cloud Security
3. Secure Software Development
4. Data Analysis
5. Security Administration



## TOP 5 *NONTECHNICAL SKILLS*

1. Ability to Work in a Team
2. Ability to Work Independently
3. Project Management Experience
4. Customer Service Experience
5. Presentation Skills



## TOP 5 *PERSONALITY ATTRIBUTES*

1. Problem Solving
2. Creativity
3. Analytical Thinking
4. Desire to Learn
5. Critical Thinking

## Top 5 Tasks for Entry-Level Staff

(Less than 1 Year of Experience)

| | |
|---|---|
| 35% | Alert and Event Monitoring |
| 35% | Documenting Processes & Procedures |
| 29% | Using Scripting Language |
| 28% | Incident Response |
| 26% | Reporting *(Developing/ Producing Reports)* |

## Top 5 Tasks for Junior-Level Staff

(1–3 Years of Experience)

| | |
|---|---|
| 48% | Information Assurance *(Authentication, Privacy)* |
| 48% | Backup, Recovery, & Business Continuity |
| 47% | Intrusion Detection |
| 47% | Encryption |
| 46% | Penetration Testing |

Source: 2022 (ISC)² Cybersecurity Hiring Managers Report

Certified in Cybersecurity

CC SM

An (ISC)$^2$ Certification

**(ISC)$^2$ Certified in Cybersecurity** certification validates foundational knowledge, skills and abilities to take on entry- and junior-level cybersecurity roles, enabling employers to more confidently build resilient teams across all experience levels.

Candidate (ISC)$^2$

OWN YOUR FUTURE IN CYBERSECURITY

Become an (ISC)$^2$ Candidate

Begin your journey as part of the world's leading cybersecurity professional organization.

Those pursuing or considering a career in cybersecurity can become an **(ISC)$^2$ Candidate** and receive career development advice, networking opportunities, tools, resources, and continuous skill building as they work toward earning an (ISC)$^2$ certification.

1 Million

Certified in Cybersecurity

CC Certified in Cybersecurity An (ISC)$^2$ Certification

Through **(ISC)$^2$ One Million Certified in Cybersecurity**, we've pledged to expand and diversify the cybersecurity workforce by providing free (ISC)$^2$ Certified in Cybersecurity education and exams to one million people worldwide.

# Closing the Gap

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GIAC CERTIFICATIONS

(ISC)²®

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Common mission. Common goals.

**Stronger together.**