



ISC2TM

YOUR CYBERSECURITY CAREER BLUEPRINT

High-demand roles — and how to get there

INSIDE

Why cybersecurity?	3
What is the employment outlook?.....	4
Which role is right for you?	5
Cloud Security	6
Cybersecurity Leadership	7
Entry-level Cybersecurity	9
Governance, Risk and Compliance	11
Network Security.....	13
Security Operations	13
Software Security	16
Next steps	17

WHY CYBERSECURITY?

Around the world, organizations are investing an increasing amount of time, money and talent to detecting and mitigating cyberattacks. The result is a boom in demand for skilled cybersecurity professionals.

Whether you're just starting out in your professional career or looking to do something new, here are four reasons to plan your future in cybersecurity.

1. Work where life lands you with near limitless employment potential.

Whether you feel the itch to travel and experience different cultures or want to stick closer to home, cybersecurity will take you there. The demand opens near limitless opportunities for skilled professionals around the globe.

2. Choose any industry that intrigues you. Every industry needs skilled cybersecurity professionals to protect their networks, data and online transactions. It's not just government agencies, healthcare and financial institutions dealing with bad actors, even sectors that haven't traditionally focused resources on cybersecurity now find themselves under threat.

3. Work in the area of cybersecurity that interests you most. There are many different career pathways in cybersecurity. This dynamic, rapidly evolving field offers the opportunity to model your career to match your interests.

4. Find job security in a field that's future-proof. Cybersecurity is expected to see continued extensive job growth in the long term. By 2025, 3.5 million job openings are expected in the field.¹ And with technological advances showing no sign of slowing, the need will continue in the years ahead.



¹ Cybersecurity Ventures, Cybersecurity Jobs Report



WHAT IS THE EMPLOYMENT OUTLOOK?

Demand for cybersecurity talent will continue to grow as organizations struggle to protect their critical assets from threat actors around the world. Currently, the world needs 3.4 million more cybersecurity professionals to meet global demand.²

Cybersecurity is a broad discipline that attracts people with a diverse set of experiences. It's easy to focus on the technical aspects and believe that lacking an IT background is a dealbreaker for those hoping to enter the field. However, just over half (55%) of participating cybersecurity professionals transitioned from an IT role. Among those who didn't get into cybersecurity via IT, 21% started their careers in another field, 13% got into cybersecurity after receiving a cybersecurity education and 8% explored cybersecurity on their own.³

These findings demonstrate that there are many pathways for professionals to enter the field.

²[2022 Cybersecurity Workforce Study](#)

³[Cybersecurity Career Pursuers Study](#)

WHICH ROLE IS RIGHT FOR YOU?

As you explore careers in cybersecurity, you'll find that it's not a homogeneous field limited to a handful of roles. Rather, cybersecurity covers a variety of functions and responsibilities, and is reliant on teams with diverse skills, experiences and ideas.

If you're unsure where to start your journey, become an ISC2 Candidate. As the world's largest association of cybersecurity professionals, we'll guide you every step of the way as your partner throughout your entire career.

This eBook is designed to help you identify cybersecurity job roles that fit your interests. For each area of focus, you'll find information to help guide you on your journey.



Cloud Security



Cybersecurity Leadership



Entry-level Cybersecurity



Governance, Risk and Compliance



Network Security



Security Operations



Software Security



CLOUD SECURITY

As more critical data and assets move to the cloud, they've become prime targets for cybercriminals. Organizations worldwide need cloud security professionals who understand the evolving complexities to identify and mitigate security risks and opportunities for errors. Today, most are operating under a multicloud strategy that uses two or more cloud service providers.

Cloud security job roles include these and more:

- Cloud Architect
- Security Architect
- Security Analyst
- Security Engineer
- Enterprise Architect

[Learn More](#)



CERTIFICATION

Certified Cloud Security Professional (CCSP)

[CCSP](#) demonstrates that you have the advanced vendor-neutral knowledge and technical skills to design, manage and secure data, applications and infrastructure in any cloud environment. It positions you as an authority in cloud security, highly proficient in staying on top of the latest technologies, developments and threats.

CONTINUING PROFESSIONAL DEVELOPMENT



ISC2 Cloud Security Certificates

[ISC2 Cloud Security Certificates](#) focus on vendor-neutral cloud security principles and practices to help you stand out in the field. Online on-demand certificates include:

- Cloud Basics
- Moving to the Cloud
- Working in the Cloud



ISC2 Security Engineering Certificates

[ISC2 Security Engineering Certificates](#) demonstrate your knowledge of designing protocols and mechanisms to protect critical data and assets against cyberthreats.

Online on-demand certificates include:

- System Security Engineering Planning and Design
- System Security Engineering Foundations
- System Security Engineering Operation



ISC2 Cloud Security Skill-Builders

Acquire valuable skills as you pursue a career in cloud security with [ISC2 Cloud Security Skill-Builders](#), short-format learning created by industry experts, available on demand. Get up to speed on cloud computing today and the latest mitigation strategies for emerging information and security risk.



\$137,100
average CCSP
U.S. salary



“Adding the CCSP to my LinkedIn profile brought an almost immediate increase in contact requests. It also opened a whole range of new opportunities to me.”

Calvert Marshall, Security/Architecture Consultant, Basel, Switzerland



CYBERSECURITY LEADERSHIP

Today's cybersecurity leaders embed security across operations, rapidly respond to threats and advise senior leaders. They stay in front of cybersecurity trends from a technical standpoint, implement security planning into broader organizational objectives and build a strong security and risk-based culture. With the many challenges of the role come substantial rewards, personally, professionally and financially.

Cybersecurity leadership job roles include these and more:

- Chief Information Officer
- Chief Information Security Officer
- Chief Technology Officer
- Compliance Manager/Officer
- Directory of Security

[Learn More](#)



CERTIFICATION

Certified Information Systems Security Professional

[CISSP](#) demonstrates you're a leader with the knowledge to design, implement and manage a best-in-class cybersecurity program in any environment. It's the most globally recognized standard of achievement in the industry.



Information Systems Security Architecture Professional

[ISSAP](#) demonstrates that you have the advanced knowledge and skills to develop, design and analyze security solutions and provide risk-based guidance to meet organizational goals.



Information Systems Security Engineering Professional

[ISSEP](#) demonstrates that you have the advanced knowledge and skills to incorporate security into projects, applications, business processes and information systems.



Information Systems Security Management Professional

[ISSMP](#) demonstrates that you have deep management and leadership skills and the advanced knowledge to establish, present and govern information security programs.



\$140,230
average CISSP
U.S. salary

“CISSP is recognized worldwide as the gold standard. The whole premise of it is not just passing the exam but demonstrating you have the verifiable experience to perform at a high level.”

Angus Macrae, Head of Cybersecurity, King's Service Centre, Cornwall, England

CONTINUING PROFESSIONAL DEVELOPMENT



ISC2 CISO Leadership Certificates

Prepare for the path to excellence from an executive management point of view with [ISC2 CISO Leadership certificates](#).

- Introduction to NIST Cybersecurity Framework
- Building a High-Performing Cybersecurity Team
- Purple Team Playbook
- Gaining Support for Your Security Program
- Incident Management: Preparation and Response



ISC2 Healthcare Certificates

Gain the knowledge and skills to navigate a complex regulatory environment with [ISC2 Healthcare certificates](#).

- Healthcare Essentials: Information Security in Healthcare Settings
- Privacy and Security for Healthcare Organizations
- Risk Management and Risk Assessment in a Healthcare Setting



ISC2 Cybersecurity Leadership Skill-Builders

Acquire valuable skills as you pursue a career in cybersecurity leadership with [ISC2 Cybersecurity Leadership Skill-Builders](#), short-format learning created by industry experts, available on demand. Gain key perspectives on the fundamental concepts of cybersecurity and their realworld applications for executive- and board-level planning and decision-making.



Executive Leadership Courses

Innovate, lead and transform cybersecurity across your organization with [ISC2 Executive Leadership Courses](#), created by industry experts and available on demand. Broaden your skill set and break through barriers with actionable strategies that deliver measurable results both you and the board can get behind.



Managing Zero Trust Data Risk Courses

[ISC2 Managing Zero Trust Data Risk Courses](#) cover the principles and requirements necessary to manage enterprise risks in a zero trust environment. Online on-demand courses include:

- Zero Trust Risk Management and Response
- Security within Zero Trust
- Communication for Zero Trust



NEXT STEPS:



Become an
ISC2 Candidate



Get
Certified



Keep
Learning



[Find Out More](#)



ENTRY-LEVEL CYBERSECURITY

If you thrive on solving problems, are driven to help people and are excited at the prospect of working in a constantly evolving field, you already have a lot in common with today's cybersecurity workforce. Cybersecurity professionals say the most important way to enter the field successfully is through certification, which they point to as an achievement and a proof point that validates their skills.

Entry-level cybersecurity job roles include these and more:

- Security Analyst
- Industrial Controls Analyst
- Risk Analyst
- Incident Responder
- Forensic specialist/analyst

[Learn More](#)



CERTIFICATION

Certified in Cybersecurity (CC)

[CC](#) is a great fit for:

- IT professionals
- Career-changers
- College students or recent graduates
- Executives seeking foundational knowledge in cybersecurity

As part of our [One Million Certified in Cybersecurity](#) pledge to help close the workforce gap, ISC2 Candidates gain access to free Official ISC2 Online Self-Paced Training and a free exam for CC.



\$84,440
average CC
U.S. salary

**“I’m switching career paths to move into cybersecurity.
Certified in Cybersecurity is a great way to demonstrate my knowledge.”**

Eric Turner, Cybersecurity Analyst, First Merchants Bank, Daleville, IN

CONTINUING PROFESSIONAL DEVELOPMENT



ISC2 Certificates

[ISC2 Certificates](#) turn a laser focus on specific subject matters. And with courseware created on the hottest topics by cybersecurity's most respected certifying body, you're assured the most current and relevant content.



ISC2 Skill-Builders

Acquire valuable skills as you pursue a career in cybersecurity with [ISC2 Skill-Builders](#), short-format learning created by industry experts, available on demand.



ISC2 Courses

Demonstrate your knowledge of the latest cybersecurity principles and best practices with [ISC2 Courses](#), created by industry experts and available online. Access practical learning with actionable strategies that deliver measurable results for organizations around the globe.



NEXT STEPS:



Become an
ISC2 Candidate



Get
Certified



Keep
Learning



Earn Advanced
Certifications

[Find Out More](#)



GOVERNANCE, RISK AND COMPLIANCE

Governance, risk and compliance (GRC) cybersecurity professionals play a vital role in organizations, aligning IT goals with objectives as they manage cyber risks and achieve regulatory needs. They enable key stakeholders to make informed decisions around data security and privacy. GRC experts help ensure organizations operate in a transparent, responsible and compliant manner while mitigating risks.

GRC job roles include these and more:

- Cybersecurity Compliance Officer
- GRC Architect
- Cybersecurity Risk and Compliance Project Manager
- Cybersecurity Risk and Controls Analyst
- Enterprise Risk Manager

[Learn More](#)



CERTIFICATION

Certified in Governance, Risk and Compliance (CGRC)

[CGRC](#) demonstrates that you have the knowledge and skills to integrate governance, performance management, risk management and regulatory compliance within the organization. It shows you're able to use various international frameworks to manage risk and authorize and maintain information systems.



CONTINUING PROFESSIONAL DEVELOPMENT

ISC2 Risk Management Certificates

[ISC2 Risk Management Certificates](#) provide an understanding of how to assess and analyze risk, while taking a deeper dive into standards and risk methods to ensure cybersecurity practitioners are ready for success. Online on-demand certificates include:

- Conducting Practical Risk Analysis
- Exploring Risk Standards
- Practical Risk Methods



\$118,980
average CGRC
U.S. salary

CONTINUING PROFESSIONAL DEVELOPMENT



ISC2 Governance, Risk and Compliance Skill-Builders

Acquire valuable skills as you pursue a career in cloud security with [ISC2 Governance, Risk and Compliance Skill-Builders](#), short-format learning created by industry experts, available on demand. Learn how aligning IT goals and objectives while managing cyber risks and achieving regulatory needs supports informed choices around data security and privacy.



ISC2 Governance, Risk and Compliance Courses

Demonstrate your understanding of the latest strategies to assess risk and ensure regulatory compliance with [ISC2 Governance, Risk and Compliance Courses](#), created by industry experts and available on demand. Learn about the components, activities and functions of frameworks and why they are important in cybersecurity.



NEXT STEPS:



Become an ISC2 Candidate

>



Get Certified

>



Keep Learning



[Find Out More](#)

“I immediately got a raise and promotion after earning CGRC certification. I also gained the knowledge and skills needed to perform my job as a security analyst.”

Ernest Blankson, Senior Risk Advisor, Administrative Office of the United States Courts, Washington, D.C., USA



NETWORK SECURITY

Network security professionals protect the confidentiality, integrity and availability of information across the network. They're expert at applying strategies, processes and technologies that guard against unauthorized access and harm. Primary responsibilities in this role include configuring and maintaining firewalls, VPNs, LANs, email and web protocols; testing hardware and software for potential vulnerabilities; and setting security policies and protocols.

Network security job roles include these and more:

- Network Security Engineer
- Network Security Designer
- Network Security Manager
- Network Defense Analyst
- Network Cyber Planner Analyst
- Network Cyber Planner

[Learn More](#)



CERTIFICATION

Systems Security Certified Practitioner (SSCP) [SSCP](#) demonstrates you have the knowledge and skills to implement, monitor and administer IT infrastructure using information security policies

and procedures. You're key to protecting the confidentiality, integrity and availability of data for individuals and organizations.

CONTINUING PROFESSIONAL DEVELOPMENT

ISC2 Certificates

[ISC2 Certificates](#) turn a laser focus on specific subject matters. And with courseware created on the hottest topics by cybersecurity's most respected certifying body, you're assured the most current and relevant content.



ISC2 Network Security Skill-Builders

Acquire valuable skills as you pursue a career in network security with [ISC2 Network Security Skill-Builders](#), short-format learning created by industry experts, available on demand. Become versed in the fundamentals of threat detection and incident response, including security orchestration, automation and response.



\$98,530
average SSCP
U.S. salary



“The SSCP has helped tremendously by deepening my knowledge of information security and has given me new opportunities to further my career within my organization.”

Adam Gorecki, Information Systems Security Analyst, Mountain View County, Alberta, Canada



SECURITY OPERATIONS

Security operations professionals are the first to sound the alarm on intrusion attempts by bad actors. Organizations rely on them for security monitoring, security incident management, vulnerability management, security device management and network flow monitoring. Security operations teams are responsible for maintaining the overall security posture of an organization's systems, network and data.

Security operations job roles include these and more:

- Incident Responder
- Security Investigator
- Advanced Security Analyst
- SOC Manager
- Security Engineer/Architect

[Learn More](#)



CERTIFICATION

Systems Security Certified Practitioner (SSCP)

[SSCP](#) demonstrates you have the knowledge and skills to implement, monitor and administer IT infrastructure using information security policies and procedures. You're key to protecting the confidentiality, integrity and availability of data for individuals and organizations.



CONTINUING PROFESSIONAL DEVELOPMENT

ISC2 Security Administration and Operations Certificates

[ISC2 Security Administration and Operations Certificates](#) focus on the knowledge and skills needed to install, administer and troubleshoot security solutions. Online on-demand certificates include:

- Responding to a Breach
- Malware Analysis
- Crowdsourced Security
- Cryptography



ISC2 Security Operations Skill-Builders

Acquire valuable skills as you pursue a career in security operations with [ISC2 Security Operations Skill-Builders](#), short-format learning created by industry experts, available on demand.



\$98,530
average SSCP
U.S. salary

SECURITY OPERATIONS



ISC2 Protecting Data Using Zero Trust Courses

Our [ISC2 Protecting Data Using Zero Trust Courses](#) cover the principles and requirements necessary to transition from traditional perimeter-based security to a security operating model focused on granular trust relationships. Online on-demand courses include:

- Defining the Boundaries of Zero Trust
- Vulnerability Management in Zero Trust
- Continuous Monitoring and Incident Response for Zero Trust

[Learn More](#)



NEXT STEPS:



Become an
ISC2 Candidate



Get
Certified



Keep
Learning



[Find Out More](#)

“Earning the SSCP has completely elevated my career. If you’re considering this certification, pursue it all the way. It shows that you’re serious about cybersecurity and positions you to deliver expert consultation and analysis to your organization and community.”

Kresan Govender, Information Security Officer (Card and Payments), Standard Bank Group, Johannesburg, South Africa



SOFTWARE SECURITY

Software security professionals protect the entire software development lifecycle (SDLC) — from planning, design and release to maintenance, updates and replacement. They're internationally recognized for being highly skilled in authentication, authorization and auditing throughout the SDLC using established best practices, policies and procedures.

Software security job roles include these and more:

- Software Architect
- Software Engineer
- Software Developer
- Software Program Manager
- Penetration Tester

[Learn More](#)



CERTIFICATION

Certified Secure Software Lifecycle Professional (CSSLP)

[CSSLP](#) demonstrates that you have the advanced knowledge and technical skills

to effectively design, develop and implement security practices within each phase of the software lifecycle.

CONTINUING PROFESSIONAL DEVELOPMENT

ISC2 Certificates

[ISC2 Certificates](#) turn a laser focus on specific subject matters. And with courseware created on the hottest topics by cybersecurity's most respected certifying body, you're assured the most current and relevant content.



ISC2 Software Security Skill-Builders

Acquire valuable skills as you pursue a career in software security with [ISC2 Software Security Skill-Builders](#), short-format learning created by industry experts, available on demand. Learn how to apply best practices throughout the software development lifecycle, from design and implementation to testing and deployment.



\$119,350
average CSSLP
U.S. salary



“The CSSLP has brought me numerous job offers from international companies around the world. Being a member of ISC2 has also been valuable, providing access to useful benefits and development resources.”

Reimo Reisberg, Lead Developer, Helmes, Tallinn, Estonia

NEXT STEPS



Step 1:

Become an ISC2 Candidate

Begin your journey by joining ISC2, the world's leading cybersecurity professional organization, more than 600,000 members, associates and candidates strong. You'll gain access to exclusive benefits, including free online self-paced training and a free exam for Certified in Cybersecurity, our premier entry-level certification.

Additional benefits include:

- 20% savings on online certification training courses
- Discount pricing for ISC2 events and industry events, including ISC2 Security Congress
- ISC2 Local Chapters – join or start one
- Discounted learning resources
- Volunteer opportunities
- Peer-to-peer networking and exchange of best practices
- Professional recognition and award programs
- And more!

[Sign up now.](#) Your first year is free — no cost to you.*

Step 2:

Get certified

Explore [our portfolio](#) to learn how certification can support you at every step of your career.

ISC2 cybersecurity certifications are recognized worldwide as the highest standard of excellence in the cybersecurity profession.



All ISC2 certifications require paid work experience, with the exception of Certified in Cybersecurity.

If you don't yet have the experience, you can become an [Associate of ISC2](#) after successfully passing the exam.

Then you can work toward earning the experience needed for the certification.



*If you choose to renew after the first year, U.S. \$50 due annually.

Step 3: Keep learning

Cybersecurity never stands still — it's a constantly evolving field that requires continuing professional education.



Stay in front of the hottest topics and trends impacting cybersecurity as you prepare for certification with [ISC2 Skill-Builders](#), short-format learning created by industry experts, available on demand.



Available to you anytime, anywhere, [ISC2 Certificates](#) will advance your skills in areas employers are seeking to move your cybersecurity career forward and provide pathways towards gaining the competencies you need for the journey to ISC2 Certification.

All [ISC2 Certificates](#) turn a laser focus on the subject matter. Learning is quick, averaging just 3.5 hours per certificate to complete. And with courseware created on the hottest topics by cybersecurity's most respected certifying body, you're assured the most current and relevant content.



[ISC2 Courses](#) offer deeper-level learning, created by industry experts and available on demand. Broaden your skill set and break through barriers with actionable strategies that deliver measurable results.

[Become an ISC2 Candidate](#)



About ISC2

ISC2 is an international nonprofit membership association focused on inspiring a safe and secure cyber world. Best known for our acclaimed Certified Information Systems Security Professional (CISSP®) certification, we offer a portfolio of credentials that are part of a holistic, pragmatic approach to security. Our association of candidates, associates and members, more than 675,000 strong, is made up of certified cyber, information, software and infrastructure security professionals who are making a difference and helping to advance the industry. Our vision is supported by our commitment to educate and reach the general public through our charitable foundation – [The Center for Cyber Safety and Education™](#). For more information on ISC2, visit [ISC2.org](#).

