

CompTIA®

Battle Cards

+
**unlock
potential**

CompTIA Overview
The Computing Technology Industry Association (CompTIA) is the tech-forward community of the \$5 trillion IT ecosystem, and the global hub for the more than 35 million professionals who design, deploy, manage and secure the technology that powers the modern economy. Through collaboration, education, certifications, advocacy and market research, CompTIA advances the industries and careers that rely on tech.

Mission
To deliver IT talent to the global workforce.
Vendor-Neutral Certifications
CompTIA certifications are mapped to skills and competencies needed for job roles versus vendor specific technology.
Vendor neutrality helps IT professionals develop learning agility. By having mastered baseline skills, CompTIA-certified IT professionals are equipped to learn and apply new information quickly.
Value of Certification
Gaining industry-recognized certifications can help learners differentiate themselves in a challenging job market. It's essential to validate skills and add valuable credentials to a resume or advance in an IT career. CompTIA certifications can assist with:
<ul style="list-style-type: none"> • A competitive edge in a highly technical job market • Heightened career advancement opportunities
High-stakes Exam
<ul style="list-style-type: none"> • An extraordinarily high level of rigor is employed in developing CompTIA certifications. • Each question created undergoes multiple layers of quality assurance and thorough psychometric statistical validation. • CompTIA certifications are ISO/ANSI accredited.

For the Candidate:

- Competitive Edge: **91%** of employers believe IT certifications play a key role in the hiring process and are a reliable predictor of a successful employee.*
- Job Satisfaction: **76%** of CompTIA certified IT pros are satisfied with their job.**

For Corporate/Government:

- Valuable Employees: **82%** of employers recognize that certified employees are valuable to their organizations.***
- Solid Foundation: **92%** of military supervisors regard certification as important in setting a baseline of expertise among staff.****

Job Role Focused Certifications
CompTIA certifications, which are developed by IT professionals, validate skills and competencies needed for identified job roles.

Resources:

- Website: [CompTIA.org](https://www.comptia.org)
- Partner Portal: [Partners.CompTIA.org](https://partners.comptia.org)
- CompTIA Blog: [CompTIA.org/blog](https://www.comptia.org/blog)
- Trends and Analysis (Industry): [CompTIA.org/resources](https://www.comptia.org/resources)

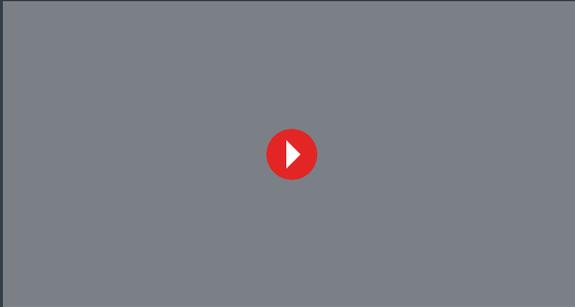
Benefits Learners/Professionals	Enterprise/Employer	Government
<p>CompTIA certifications are the best way to future-proof a career in the IT industry. Certifications validate knowledge and skills required by employers to ensure their staff can get the job done.</p> <p>By the numbers:</p> <ul style="list-style-type: none"> • 97% of employers value certifications enough to provide support for IT employees obtaining IT certification. • 76% of CompTIA-certified IT pros are satisfied with their job • Three of the “Top 10 Certifications That Help IT Workers Get Jobs” are CompTIA certifications, according to The Dice Report. 	<p>IT pros need to keep their skills current in a constantly evolving industry. CompTIA certifications ensure skills meet the needs of the industry and organization. Save time and resources by using certifications to evaluate candidates. Feel confident that your staff has the competencies to get the job done.</p> <p>By the numbers:</p> <ul style="list-style-type: none"> • Loyal workforce: 84% of IT professionals stay with their employer after getting CompTIA certified. • Certified staff benefit • 85% more confidence: Certifications create trust and a can-do attitude. • 58% more knowledge: Certifications improve expertise. • 53% more ability: Certified staff outperform non-certified staff in job-critical tasks. 	<p>Certifications below are updated regularly and aligned to NICE Workforce Framework.</p> <p>Government employees can verify their cyber knowledge and skills and fulfill government directives like FISMA and DoD 8570/8140.</p> <ul style="list-style-type: none"> • CompTIA A+ • CompTIA Network+ • CompTIA Security+ • CompTIA Cybersecurity Analyst (CySA+) • CompTIA Advanced Security Practitioner (CASP+)

Sources:

- * CompTIA Employer Perceptions of IT Training and Certification
- ** CompTIA 2nd Annual IT Career Insights
- ***CompTIA 2nd Annual IT Career Insights Study
- ****CompTIA IT Training and Certification: Insights and Opportunities Study
- *****CompTIA Military Career Path

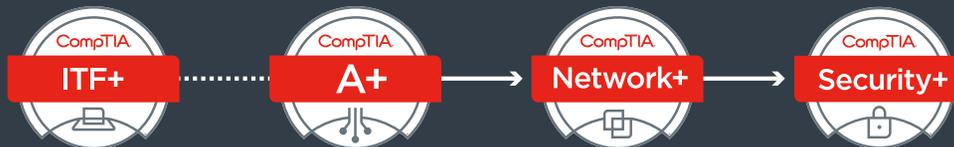
JUN 2020

Learn more about CompTIA



- Entry-level certifications for foundational IT knowledge
- For candidates with 0 – 3 years of education and/or experience

CORE SKILLS CERTIFICATIONS



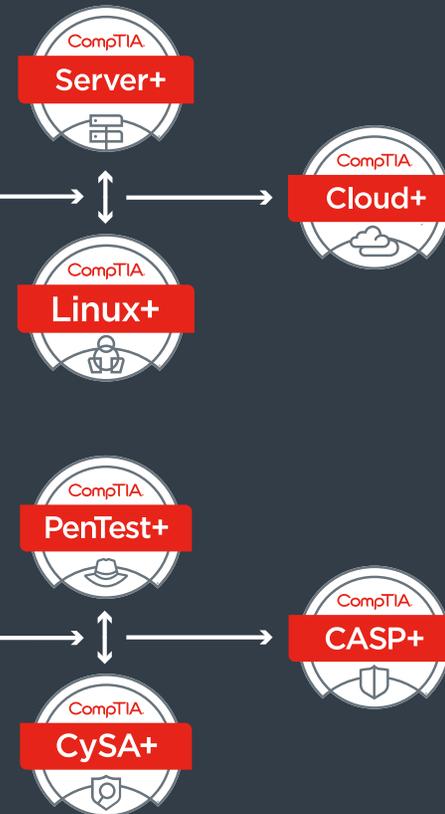
PROFESSIONAL SKILLS



- Specialized professional skills
- CompTIA's professional certifications cover versatile skillsets that help take careers to the next level

- Early to mid-career level certifications
- For candidates who have at least 18 months of general IT experience, and at least 9 months in their field of expertise

INFRASTRUCTURE PATHWAY



CYBERSECURITY PATHWAY

- Mid-career to advanced level certifications
- For candidates who have at least 3 years of hands-on information security or related experience

CompTIA **IT Fundamentals (ITF+)** (FC0-U61)

CompTIA ITF+ Intro

ITF+ is an introduction to basic IT knowledge and skills that helps professionals decide if a career in IT is right for them. It also helps organizations prepare non-technical teams for digital transformation.

VALUE Prop 1 (Career Changer/Student)

ITF+ provides an opportunity to explore all aspects of IT job roles. Learners gain digital literacy skills and are inspired to pursue a career in IT.

VALUE Prop 2 (Employer)

ITF+ is a certification that establishes an IT foundation necessary in preparation for digital transformation, and on-the-job success. It is appropriate for both non-technical and technical staff.

Key Differentiators:

- ITF+ establishes an IT education framework for students in middle school and high school.
- It's the only pre-career certification for students or career changers that validates a competency in information technology to help determine if IT is the right career path.
- It's the only certification that covers all areas of IT foundations, making it ideal for non-technical professionals.

Who would benefit from ITF+?

- Students considering a career in IT
- Professionals working in fields that require a broad understanding of IT
- Marketing, sales and operations staff in IT-based organizations

Resources:

- ITF+ additional information:
[CompTIA.org/certifications/it-fundamentals](https://www.comptia.org/certifications/it-fundamentals)
- Recommended Pathways:
[CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts:
<https://bit.ly/2JgDuAj>

Renewal:

The CompTIA IT Fundamentals+ certification is considered good for life and does not need to be renewed.



Competitors	Talking Points / ITF+ Advantages
Microsoft Technology Associate (MTA)	<ul style="list-style-type: none"> • ITF+ has a broad focus that allows entry to multiple IT-related paths. • ITF+ is 1 single exam with multiple choice; however, the knowledge, skills and abilities (KSAs) in MTA are spread out over 8 exams.
IC3 Digital Literacy Certification (IC3)	<ul style="list-style-type: none"> • IC3 prepares for digital skills only, while ITF+ prepares for digital skills as well as IT-readiness. • One ITF+ exam represents concepts covered in two IC3 certifications requiring a total of 4 IC3 exams.
European Computer Driving License (ECDL)	<ul style="list-style-type: none"> • ECDL requires an extensive time commitment - 12 exams to earn the credential. • One ITF+ exam represents concepts covered in five or more ECDL exams.

Skills and Competencies Acquired:

- Install software
- Establish basic network connectivity
- Identify/prevent basic security risks
- Explain troubleshooting theory and preventative maintenance of devices

CompTIA IT Fundamentals (ITF+) (FC0-U61)

How Does CompTIA Compare?

				
Certification	ITF+	Microsoft Technology Associate	IC3 Digital Literacy Certification	European Computer Driving License/ International Computer Driving License
Number of Exams	Single, multiple choice exam	8 exams	3 multiple choice exams	Modular set of 17 exams
Exam Focus	Pre-career assessment of competency for IT	Microsoft-specific content	End users who lack IT training	End user skills
Experience Level	Pre-IT career & Non-IT pros	Students interested in an on-ramp to a career requiring technical expertise in Microsoft products and services	Non-IT pros	Non-IT pros
Vendor Neutral	Yes	No	Yes	Yes

[Learn more about ITF+](#)



CompTIA A+ (220-1101 & 220-1102 Core Series)

CompTIA A+ Intro
 CompTIA A+ certified professionals are proven problem solvers. They support today's core technologies from security to networking to virtualization and more. CompTIA A+ is the industry standard for launching IT careers into today's digital world.

VALUE Prop 1 (Career Changer/Student)
 CompTIA A+ is the industry standard entry-level certification that proves IT knowledge in networking, security, IoT technology, cloud-based storage, hardware and more. It also develops problem-solving skills required in entry-level technical support careers.

VALUE Prop 2 (Employer)
 CompTIA A+ ensures help desk technicians and IT support specialists have skills required to perform entry-level job tasks and support a hybrid workforce. It is trusted by employers around the world to identify the go-to person in end point management & technical support roles. A+ is also the building block towards meaningful career progression.

Accredited by ANSI to show compliance with the ISO 17024 Standard. It is also approved by the DoD for Directive 8140/8570.01-M.

By the Numbers:

- **More than 337K** job postings by US employers for tech support specialists in last 12 months.
- **43K** U.S. IT job ads posted annually include A+ as a job requirement.
- **Over 1.2 million** active A+ certified professionals.

Additional Selling Points:

- CompTIA certifications mean proven competency on the job.
- CompTIA performance certifications validate the skills associated with a particular job or responsibility.

Resources:

- Average Salary:
 - Glassdoor.com (<https://s.comptia.org/3v031dk>): IT Support Specialist
 - UK ITJobsWatch.co.uk (<https://s.comptia.org/3Kmf803>): IT Support Specialist
- A+ Additional Information: [CompTIA.org/certifications/a](https://s.comptia.org/certifications/a)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://s.comptia.org/certifications/which-certification)
- Posts: <https://bit.ly/32Hmnzo>

Job Roles:

- IT Support Specialist
- Helpdesk Technician
- Field Technician
- Tier I Support Specialist
- Desktop Support Specialist
- Associate Network Engineer
- Systems Support Technician
- Junior Systems Administrator

Companies that Endorse A+:

- BlueCross BlueShield
- Dell
- HP
- Intel
- Nissan
- Ricoh

Benefits:

Candidate: CompTIA A+ opens many avenues for career development. IT- certified pros can end up working in cybersecurity, network engineering, network administration, business analysis or data analytics.

Employers: Certified employees are trusted by employers around the world as the go-to person in end point management & technical support roles.

Skills and Competencies Acquired:

- Install and configure end-user devices and software
- Address connectivity problems
- Perform basic cybersecurity mitigations
- Troubleshoot common problems to diagnose and resolve issues
- Demonstrate basic knowledge of scripting, the cloud, and virtualization.

Key Differentiators:

- A+ is the only industry recognized credential with performance- based items to prove pros can think on their feet to perform critical IT support tasks in the moment.
- CompTIA A+ assess hands-on, real world troubleshooting skills. With available hands-on training to performance based items on certification exam, candidates know how to find the problem and fix it.
- A+ is regularly revised by IT experts to ensure that it validates core skills and abilities demanded in the workplace.

CompTIA A+ (220-1101 & 220-1102 Core Series)

CompTIA A+ Competitive Landscape

CompTIA A+ Alternatives	
 Microsoft Microsoft MCSA & MTA Infrastructure	These certifications are retiring as part of their overhaul of their certification program; MTA is retiring June 2022.
 Other industry certifications	Programs like CCNA indirectly compete with CompTIA A+, but they do not test the same entry-level skills.
 Training but not testing	<p>Some learners will train for their CompTIA A+ certification to develop the skills for the job, but never sit for the exam. Though they may complete the training, the only way for hiring managers to be able to validate candidates' knowledge is through completion of their certification exam, this is why CompTIA certifications are a requirement for many IT professionals.</p> <p>CompTIA certification exams are considered high-stakes exams, which means there is an extraordinarily high level of rigor put into their development, undergoing multiple layers of quality assurance and psychometric statical validation. This is how CompTIA certifications earn the ANSI/ISO 17024 accreditation and approved by the DoD for Directive 8140/8570.01-M.</p>
 Trying to skip CompTIA A+	More and more, candidates are skipping CompTIA A+ and going straight to more advanced certifications like CompTIA Security+. If candidates are already working in the job, this might work, but it can also mean learners might be missing key foundational skills needed to pass these more advanced certifications.

[Learn more about A+](#)



CompTIA Network+ (N10-008)

CompTIA Network+ Intro

CompTIA Network+ validates the technical skills needed to securely establish, maintain and troubleshoot the essential networks that businesses rely on.

The new CompTIA Network+ focuses on foundational networking tools and technologies used to create secure networks and guarantee the availability of critical business information.

VALUE Prop 1 (Career Changer/Student)

CompTIA Network+ certifies a professional-level understanding of the latest best practices and foundational networking tools and technologies, including network architecture, high availability, wireless standards and technologies. It is the building block of a successful career in IT Infrastructure.

VALUE Prop 2 (Employer)

CompTIA Network+ validates candidates have the technical and hands-on networking skills needed to create secure networks and guarantee the availability of critical business information that drive business objectives.

Accredited by ANSI to show compliance with the ISO 17024 Standard. It is also approved by the DoD for Directive 8140/8570.01-M

Key Differentiators:

- Network+ prepares candidates to support the network regardless of the platform.
- It forms the foundation professionals need before specializing in a vendor solution.
- Network+ is created by networking professionals who support all vendors so it teaches IT Pros how to support business needs demanded in the workplace.

By the Numbers:

- **12%** job growth expected for Network & Computer Systems Administrators, 2012 – 2022, according to the Bureau of Labor Statistics.
- **28%** of organizations say they have a shortage of network security specialists. (Cybersecurity Skills Shortage: A State of Emergency, ESG)
- Over **520k** Network+ certified professionals.
- Network+ is recognized as one of the top 10 most widely-held certs worldwide (Global Knowledge Report 2020)

Skills and Competencies Acquired:

- Implement enterprise-level wired and wireless network solutions
- Identify and troubleshoot network performance issues
- Harden networks against threats to mitigate security vulnerabilities

Resources:

- Average Salary
- U.S. Network Field Engineer: Glassdoor.com (<https://bit.ly/2RrR3BH>)
- UK Network Field Engineer: ITJobsWatch.co.uk (<https://bit.ly/355KfO2>)
- Network+ Additional Information: [CompTIA.org/certifications/network](https://www.comptia.org/certifications/network)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: <https://bit.ly/2pdQAaH>

Competitors	Talking Points / Network+ Advantages
Cisco CCNA Vendor-specific	<ul style="list-style-type: none"> • Unlike CCNA, CompTIA Network+ prepares IT pros to support the network regardless of the platform rather than just maintaining a single vendor's products. • CompTIA Network+, unlike Cisco, covers essential skills at the depth needed for early networking jobs. CCNA is so broad that it doesn't cover the depth of knowledge needed to set a firm foundation for networking expertise. • Trends including multi-vendor architecture, multi-vendor interoperability, & white box networking make it increasingly likely IT pros will encounter more than just Cisco appliances and IOS in the workplace.

Companies that Endorse Network+:	Job Roles:
<ul style="list-style-type: none"> • Apple (Consultants) • Blue Cross Blue Shield • Cisco Academy • HP / Dell • Konica Minolta • Lenovo 	<ul style="list-style-type: none"> • Junior Network Administrator • Datacenter Support Technician • Network Engineer • System Administrator • NOC Technician • Telecommunications Technician • Cable Technician
<ul style="list-style-type: none"> • Microsoft MSSA • Motorola • New York State- Office of Technology • NY City Union • Pomeroy 	<ul style="list-style-type: none"> • Ricoh • Sharp • Verizon • Xerox

CompTIA Network+ (N10-008)

How does CompTIA Compare?

		
Certification	Network+	CCNA Vendor-specific
Performance-based Questions	Yes	Yes
Exam Length	1 exam, 90 minutes	1 exam, 90 min.
Experience Level	Early career	Early career
Exam Focus	Covers networking technologies across all vendors & solutions	Covers networking for only Cisco products & solutions.
Prerequisites	CompTIA A+ &/or a minimum of 9 months networking experience recommended	1-3 years experience

[Learn more about Network+](#)



CompTIA Security+ (SY0-701)

CompTIA Security+ Intro
 CompTIA Security+ is a global certification that validates the foundational cybersecurity skills necessary to perform core security functions and pursue an IT security career.

VALUE Prop 1 (Career Changer/Student)

The new CompTIA Security+ (SY0-701) represents the latest and greatest in cybersecurity, covering the most in-demand skills related to current threats, automation, zero trust, IoT, risk – and more. Once certified, you'll understand the core skills needed to succeed on the job – and employers will notice too.

VALUE Prop 2 (Employer)

CompTIA Security+ validates core knowledge required of any cybersecurity role, and emphasizing vendor-neutral, hands-on practical skills, ensuring the security professional is better prepared to problem solve a wider variety of today's complex issues.

Accredited by ANSI to show compliance with the ISO 17024 Standard.

Skills and Competencies Acquired:

- Assess the security posture of an enterprise environment and recommend and implement appropriate security solutions.
- Monitor and secure hybrid environments, including cloud, mobile, Internet of Things (IoT), and operational technology.
- Operate with an awareness of applicable regulations and policies, including principles of governance, risk, and compliance.
- Identify, analyze, and respond to security events and incidents.

Job Roles:

- Security Specialist
- Security Administrator
- Systems Administrator
- Help Desk Analyst
- Security Analyst
- Security Engineer

- Key Differentiators:**
- **Launch a Successful Cybersecurity Career.** Develop a core foundation of essential skills, paving the way for a fulfilling career. More job roles use Security+ for baseline cybersecurity skills than any other certification in the industry.
 - **Assess On-the-Job Skills.** Security+ is the most widely adopted ISO/ANSI-accredited early career cybersecurity certification on the market with hands-on, performance-based questions on the certification exam. These practical questions assess your ability to effectively problem solve in real-life situations and demonstrate your expertise to potential employers immediately.
 - **Embrace the Latest Trends.** Understand and use the most recent advancements in cybersecurity technology, terms, techniques, and tools. By acquiring early career skills in the latest trends such as automation, zero trust, risk analysis, operational technology, and IoT, you will be well-equipped to excel in the ever-evolving cybersecurity landscape.

- Resources:**
- Average Salary:
 - U.S. Security Administrator: Glassdoor.com (<https://bit.ly/3EA8pDX>)
 - UK Security Administrator: ITJobsWatch.co.uk (<https://bit.ly/3ZkPoiv>)
 - Security+ Additional Information: CompTIA.org/security
 - Recommended Pathways: (<https://bit.ly/42DCNb6>)
 - Blog Posts: (<https://bit.ly/3sS2d7R>)

Competitors	Talking Points / Security+ Advantages
ISC2 Systems Security Certified Practitioner (SSCP)	<ul style="list-style-type: none"> • Both SSCP and Security+ cover baseline security skills and are vendor-neutral; however, Security+ includes performance-based questions to validate hands-on skills. • SSCP requires working experience before taking the exam while Security+ does not. • Security+ is listed in 10% of cybersecurity job ads while SSCP is only listed in 3%.
GIAC Security Essentials (GSEC)	<ul style="list-style-type: none"> • Both GSEC and Security+ cover baseline security skills, are vendor-neutral, and include performance-based questions to validate hands-on skills. • Security+ is listed in 10% of cybersecurity job ads while GSEC is only listed in 3%. • GSEC costs nearly 5x more.

Organizations That Helped Develop Security+:	By the Numbers:
<ul style="list-style-type: none"> • Blue Chip Talent • Brotherhood Mutual • Contentful • Cyber Warfare Tactics LLC • Deakin University • Deloitte • Fidelis Risk Advisory • Fidelity Investments • Five9 • General Dynamics IT (GDIT) • Growth Arbor • Johns Hopkins University Applied Physics Laboratory • L3Harris • Linford and Company LLC • Lippert Components • Microsoft • MindPoint Group • Nationwide • Organon • SecureWorks • SenseOn • SS&C Technologies • U.S. Navy Center for Information Dominance • Washington State Patrol • Wells Fargo • Zoom 	<ul style="list-style-type: none"> • There are over 700,000 Security+ certified professionals. • 24% of the total employed cybersecurity workforce in the U.S. are Security+ certified.

CompTIA Security+ (SY0-701)

How does CompTIA compare?

					
Certification	CompTIA Security+	IS2 Systems Security Certified Practitioner (SSCP)	GIAC Security Essentials (GSEC)	EC-Council Certified Ethical Hacker (CEH)	IS2 Certified in Cybersecurity
Performance-Based Questions	Yes	No	Yes	No	No
Vendor Neutral	Yes	Yes	Yes	Yes	Yes
Experience Level	Early Career	Early career	Early career	Early career	Entry level
Exam Focus	Baseline cybersecurity skills, core cybersecurity knowledge	Security administrator job role	Security administrator job role	Pen testing and ethical hacking	Cybersecurity terms and concepts
Training Products	Full suite of online test prep tools, LOT, books	Self-paced online, LOT, courseware, mobile toolkit	In-person training and online	Online review course and answers database, courseware	Self-paced online, LOT

[Learn more about Security+](#)



CompTIA PenTest+ (PTO-002)

CompTIA PenTest+ Intro

CompTIA PenTest+ is the most comprehensive cybersecurity exam covering all red team activities and is designed for cybersecurity professionals tasked with penetration testing and vulnerability management.

VALUE Prop 1 (Student)

PenTest+ is a unique exam that demonstrates hands-on skills and knowledge of the most relevant pen testing skills for the cloud, hybrid environments, web applications, customized systems (IoT), and traditional on-premises that employers seek to improve the overall resiliency of enterprise networks.

VALUE Prop 2 (Employer)

PenTest+ validates the most up-to-date skills and competencies needed to determine the resiliency of any network. It focuses on the latest pen testing techniques, attack surfaces, vulnerabilities management, post-delivery, and compliance tasks that are ideal for your company's red team employees to develop a robust security strategy that meets business objectives.

Accredited by ANSI to show compliance with the ISO 17024 Standard. It is also approved by the DoD for Directive 8140/8570.01-M.

Key Differentiators:

- PenTest+ is the most comprehensive exam covering all penetration testing stages. It uses both performance-based and knowledge-based questions to ensure all stages are addressed.
- PenTest+ is the only exam on the market to include all aspects of vulnerability management covering hands-on vulnerability assessment, scanning, and analysis, including planning, coping, and managing weaknesses, not just exploiting them.
- PenTest+ is the most current penetration testing exam covering the latest techniques against expanded attack surfaces, such as cloud, hybrid environments, web applications, customized systems (IoT), and traditional on-premises.

Skills and Competencies Acquired:

- Plan and scope a penetration testing engagement
- Understand legal and compliance requirements
- Perform vulnerability scanning and penetration testing using appropriate tools and techniques, and then analyze the results
- Produce a written report containing proposed remediation techniques, effectively communicate results to the management team, and provide practical recommendations

By the Numbers:

- The U.S. Bureau of Labor Statistics predicts that information security analysts will be the fastest-growing job category, with **31%** overall growth between 2019 and 2029.
- The penetration testing market is expected to grow **22%** from 2020 to 2025.

Resources:

- Average Salary:
 - U.S. Penetration Tester: Indeed.com (<https://indeedhi.re/2KN2Zdv>)
 - UK Penetration Tester: ITJobsWatch.co.uk (<https://bit.ly/2XyFh9K>)
- PenTest+ Additional Information: [CompTIA.org/certifications/pentest](https://www.comptia.org/certifications/pentest)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: <https://bit.ly/2WvfkaJ>

Competitors	Talking Points / PenTest+ Advantages
EC-Council Certified Ethical Hacker (CEH)	<ul style="list-style-type: none"> • CEH assesses vulnerability tools, such as scanners, but NOT vulnerability management like PenTest+. • CEH does NOT cover soft skills, such as business processes, project flow, best practices and professionalism in penetration testing. PenTest+ cover both technical and soft skills. • CEH only covers penetration testing job roles, while PenTest+ covers two job roles, both pen testing and vulnerability assessment and management.
GIAC Penetration Tester (GPEN)	<ul style="list-style-type: none"> • Unlike GPEN, PenTest+ is based upon cybersecurity industry survey results, providing a heightened real-world applicability compared to other certs.
Offensive Security Certified Professional (OSCP)	<ul style="list-style-type: none"> • OSCP tests at an advanced level of experience and costs 2X as much. • OSCP is a 24 hour "capture the flag" exam making PenTest+ both cost and time efficient.

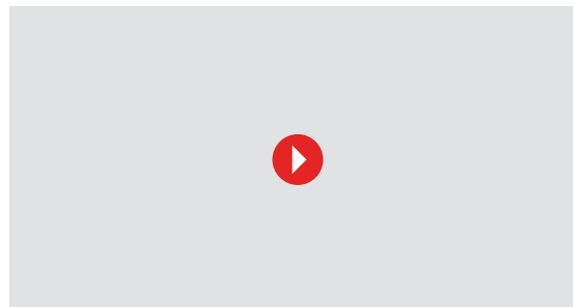
Companies that Endorse PenTest+:	Job Roles:
<ul style="list-style-type: none"> • Paylocity • SecureWorks • Jon Hopkins University Applied Physics Laboratory • Ricoh • U.S. Navy Center for Information Dominance 	<ul style="list-style-type: none"> • Penetration Tester • Security Consultant • Cloud Penetration Tester • Web App Penetration Tester • Cloud Security Specialist • Network & Security Specialist • Information Security Engineer • Security Analyst

CompTIA PenTest+ (PTO-002)

How does CompTIA Compare?

				
Certification	PenTest+	EC-Council Certified Ethical Hacker (CEH)	GIAC Penetration Tester (GPEN)	Offensive Security Certified Professional (OSCP)
Performance-based Questions	Yes	No. Second exam required, CEH Practical	No	Yes
Exam Length	1 exam, 90 questions, 165 minutes	1 exam, 4 hours	1 exam, 3 hours	1 exam, 24 hours
Experience Level	Intermediate	Beginner / Intermediate	Intermediate	Intermediate / Advanced
Exam Focus	Penetration testing and vulnerability management	Penetration testing	Penetration testing from a business-value	Real World-based with a lab and submitted report
Prerequisites	Network+, Security+ or equivalent knowledge. Minimum of 3-4 years of hands-on experience working in a security consultant or penetration tester job role.	CEH Training, 2 years information security experience, Endorsement	None	Must first complete the Penetration Testing with Kali Linux training course (self-paced)

[Learn more about PenTest+](#)



CompTIA CySA+ (CS0-003)

CompTIA CySA+ Intro

CompTIA Cybersecurity Analyst (CySA+) is an IT workforce certification that assesses the security analyst and incident response analyst skills needed to prevent, detect and respond to cybersecurity threats on networks and devices.

VALUE Prop 1 (Student)

CompTIA CySA+ proves candidates can detect and analyze indicators of malicious activity using the most up-to-date methods and tools, such as threat intelligence, security information and event management (SIEM), endpoint detection and response (EDR) and extended detection and response (XDR). IT pros gain unique skills sought after by organizations to protect and defend their networks.

VALUE Prop 2 (Employer)

CompTIA CySA+ qualifies employees to proactively monitor, identify and respond to cybersecurity threats, vulnerabilities and attacks. It is an internationally targeted validation of information security analyst skills and knowledge, making it ideal for any organization's blue team employees tasked with ensuring the protection of applications and systems across the organization.

Accredited by ANSI to show compliance with the ISO 17024 Standard.

Skills and Competencies Acquired:

- Detect and analyze indicators of malicious activity
- Understand threat hunting and threat intelligence concepts
- Use industry tools to mitigate attacks, threats & vulnerabilities
- Perform incident response
- Understand reporting and communication

Job Roles:

- Security Analyst
- Security Operations Center (SOC) Analyst
- Incident Response Analyst
- Vulnerability Management Analyst
- Security Engineer
- Threat Hunter

Key Differentiators:

- **Proactively Monitor and Detect.** Demonstrate skills in detecting and analyzing indicators of malicious activity using the most up-to-date methods and tools, such as threat intelligence, security information and event management (SIEM), endpoint detection and response (EDR) and extended detection and response (XDR).
- **Respond to Threats, Attacks, and Vulnerabilities.** Prove knowledge of incident response and vulnerability management processes and highlight the communication skills critical to security analysis and compliance.
- **Demonstrate Competency of Current Trends.** Show knowledge of current trends that affect the daily work of security analysts, such as cloud and hybrid environments.

Resources:

- Average Salary:
 - U.S. Security Analyst: Glassdoor.com (<https://bit.ly/44Zwznx>)
 - UK Security Analyst: ITJobsWatch.co.uk (<https://bit.ly/3lcq4Us>)
- CompTIA CySA+ Additional Information: ([CompTIA.org/CySA](https://www.comptia.org/CySA))
- Recommended Pathways: (<https://bit.ly/42DCNb6>)
- Blog Posts: (<https://bit.ly/2N1JO12>)

Competitors	Talking Points / CySA+ Advantages
EC-Council Certified Security Analyst (ECSA)	<ul style="list-style-type: none"> • ECSA is a continuation of CEH and goes beyond the foundational ethical hacking skill set. CySA+ is not as advanced as ECSA because CySA+ is also focused heavily on vulnerability management, unlike ECSA. • CySA+ includes hands-on, performance-based assessments as well as multiple-choice questions, while ECSA is multiple choice only. • CySA+ costs only 1/3 of the price of ECSA and has more job roles associated with the exam.
GIAC Continuous Monitoring Certification (GMON)	<ul style="list-style-type: none"> • CySA+ includes hands-on, performance-based assessments as well as multiple-choice questions, while GMON is multiple choice only. • CySA+ and GMON both cover the core security analyst job role. CySA+ is hands-on, nearly 5x less expensive and covers additional job roles, such as application security analyst and incident response.
ISACA Certified Information Systems Auditor (CISA)	<ul style="list-style-type: none"> • CISA is for IT auditors and audit managers to validate their ability to assess vulnerabilities and institute IT controls for an organization. CySA+ covers more domains and is for security analysts who will audit as a part of their role. • CySA+ is available year-round. CISA is only available three times a year through ISACA. • CySA+ has performance-based questions and is half the cost of CISA • CySA+ maps to seven job roles in the U.S. DoD 8570.01-M approved job categories, including Auditor. CISA only maps to two categories.

Companies that Endorse CompTIA CySA+:

- Amazon Web Services
- Bank of Montreal (BMO)
- Booz Allen Hamilton
- Deloitte
- Fidelity Investments
- General Dynamics IT (GDIT)
- Microsoft
- U.S. Department of Defense
- U.S. Navy
- Visa
- Zoom

By the Numbers:

- Information security analyst is one of the fastest growing U.S. job categories, with 35% growth expected between 2021 and 2031.¹
- On average, there are over 30K job openings specifically looking for qualified cybersecurity analysts in the U.S. every year.²

¹ Bureau of Labor Statistics, Occupational Outlook 2023, Information Security Analysts ² Cyberseek 2023, Cybersecurity Analyst Career Pathway

CompTIA CySA+ (CS0-003)

How does CompTIA compare to alternatives?

				
Certification	CompTIA CySA+	EC-Council Certified Security Analyst (ECSA)	GIAC Continuous Monitoring Certification (GMON)	ISACA Certified Information Systems Auditor (CISA)
Performance-based Questions	Yes	No	No	No
Experience Level	Intermediate	Intermediate	Intermediate	Advanced
Exam Focus	Security analytics, intrusion detection and response	Pentesting methodology	Defensible security and continuous security monitoring	Auditing and vulnerability assessment
Training Products	Full suite of online test prep tools, live online training, books	Self-paced and live online training, courseware, mobile toolkit	In-person training and online	Online review course and answers database, courseware

[Learn more about CySA+](#)



CompTIA Project+ (PKO-005)

CompTIA Project+ Intro

CompTIA Project+ gives IT professionals hands-on project management skills to coordinate small - to medium-sized projects using waterfall and agile methodologies.

VALUE Prop 1 (Career Changers/Student)

Project+ certifies that IT professionals have the skills needed to succeed within a project team, hit deadlines and meet compliance goals in order to drive business outcomes.

VALUE Prop 2 (Employers)

Project+ is ideal for professionals who need to manage smaller, less complex projects. It provides candidates with a more expansive skillset to oversee IT projects that meet goals and drive business outcomes.

Skills and Competencies Acquired:

- Manage the project life cycle.
- Coordinate small-to-medium-size projects.
- Establish a communication plan, manage resources and maintain documentation
- Support the completion of larger projects within an IT environment.

Key Differentiators:

- Project+ is the only baseline IT project management certification aimed at providing IT pros with the knowledge to coordinate projects and communicate with teams as part of other job duties.
- Project+ is now mapped to Jr. Project Manager and Project Coordinator job roles that could lead to full time employment after successfully certifying.
- The new exam includes performance-based and multiple-choice questions to identify the employees who can do the job.

Renewal:

The CompTIA Project+ certification is considered good for life and does not need to be renewed.



By the Numbers:

- **20%** of IT hiring managers request project management skills in their IT job openings.
- A report by the Project Management Institute (PMI) on the talent situation for project management professionals reveals there will be a need for around **25 million** new project management professionals by 2030.
- Over **86K** and growing Project+ certified professionals.

Project Management is one of the most in-demand skill sets.

Resources:

- Average Salary:
 - U.S. Junior IT Project Manager: Glassdoor.com (<https://s.CompTIA.org/3cyJfLu>)
 - UK Junior IT Project Manager: ITJobsWatch.co.uk (<https://s.CompTIA.org/3v4MUqx>)
- Project+ Additional Information: [CompTIA.org/certifications/project](https://s.CompTIA.org/certifications/project)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://s.CompTIA.org/certifications/which-certification)
- Posts: <https://bit.ly/2C5Cjic>

Competitors	Talking Points / Project+ Advantages
PMI CAPM	<ul style="list-style-type: none"> • CAPM is intended for entry-level project managers or those starting a project management career. • Follows specific PMI management methodology. • Leads into the more rigorous PMP exam.
PMI PMP	<ul style="list-style-type: none"> • PMP follows one specific methodology. • PMP is designed for full-time project managers who manage medium to large scale enterprise projects, whereas Project+ is for IT Pros who manage small to medium sized projects (which may be outside of other job duties). • Unlike Project+, PMP has extensive requirements, including: <ul style="list-style-type: none"> • 4,500 hours leading and directing projects, • a post-secondary degree and • 35 hours of project management education
Axelos PRINCE2 Foundation	<ul style="list-style-type: none"> • Prince2 focuses on a process-based project management method for enterprise management, recognized largely within the UK industry for a pathway for career project managers

Compared to Other Certifications:

1. Project+ covers a high-level introduction to Agile as part of one of the objectives. If a candidate would like to focus on Scrum, he/she would take Scrum Alliance's Certified Scrum Master certification.
2. Project+ is cost and time-efficient given its exam length.

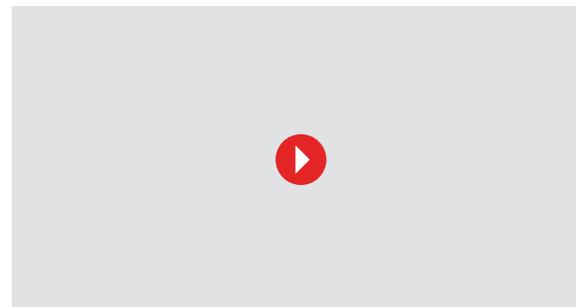
Job Roles:	Organizations that contributed to the development of Project+:
<ul style="list-style-type: none"> • Junior IT project manager • Project coordinator • SCRUM masters • Level II help desk technicians • Development leads • Product owners • Associate/business analysts • QA leads • Project control analysts (PMO team members) 	<ul style="list-style-type: none"> • Accenture • Advantage Health • Canon • Dell • Fayetteville College • Fuji Xerox • GDIT • HP • John Hopkin Applied Physics Lab • KirkpatrickPrice • Microsoft • U.S. Army • U.S. Department of the Interior • U.S. Navy • Western Governors University

CompTIA Project+ (PKO-005)

How does CompTIA Compare to Alternatives?

			
	Project+	PMI CAPM	Axelos PRINCE2 Foundation
Certification	Project+	PMI CAPM	Axelos PRINCE2 Foundation
Vendor-neutral	Yes	Yes	Yes
Performance-based Questions	Yes	No	No
Exam Length	1 exam, 90 questions, 90 minutes	1 exam, 150 questions, 3 hours	1 exam, 60 questions, 60 min
Experience Level	Entry	Entry	Entry
Exam Focus	IT Project Management Small- to medium-sized projects	Enterprise Management Medium- to large projects following PMI methodology	Enterprise Management Medium- to large projects following PRINCE2 framework
Prerequisites	No prerequisite, but at least 6–12 months of hands-on experience managing projects in an IT environment	Secondary degree (high school diploma, associate's degree or equivalent) and 23 hours of project management education	No prerequisites, but must have some understanding of Project Management

[Learn more about Project+](#)



CompTIA Cloud Essentials+ (CL0-002)

CompTIA Cloud Essentials+ Intro

CompTIA Cloud Essentials+ ensures that IT Professionals and other business decision makers who either work for cloud service providers - or who may need to guide their organization in the utilization of cloud services – have the skills they need.

Skills and Competencies Acquired:

- Explain cloud principles, identify cloud networking concepts and storage techniques, and understand cloud design aspects
- Comprehend the financial aspects of engaging a cloud provider, as well as the business aspects of managing vendor relationships in cloud adoptions
- Explain aspects of operating within the cloud, such as data management, availability, and monitoring
- Understand how DevOps plays a role in cloud environments, such as with provisioning or API integration
- Understand risk management concepts related to cloud services and identify the importance and impacts of compliance in the cloud

Resources:

- Average Salary:
 - U.S. Business Analyst: Glassdoor.com (<https://bit.ly/342bNUf>)
 - UK Business Analyst: ITJobsWatch.co.uk (<https://bit.ly/2pwq7W3>)
- Cloud Essentials+ Additional Information: [CompTIA.org/certifications/cloud-essentials](https://www.comptia.org/certifications/cloud-essentials)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: <https://bit.ly/2JLnd6M>

VALUE Prop 1 (Career Changer/Student)

Cloud Essentials+ demonstrates learners ability to function within any company, regardless of what cloud platform they are using, in order to participate in creating assessments and make business decisions regarding cloud products and services.

VALUE Prop 2 (Employer)

Cloud Essentials+ certification validates that both technical and non-technical staff are prepared to evaluate and make decisions related to the cloud that will ultimately increase efficiency, manage costs, and reduce security risks.

Cloud Essentials+ Advantages:

- Cloud Essentials+ is the ONLY vendor-neutral cloud business certification.
- It's job-focused and aligned with employers needs.
- It's current with today's cloud environment- the technology and how it works.
- Cloud Essential+ should be viewed as a foundation to vendor specific certifications such as:
 - AWS Certified Cloud Practitioner
 - MTA Cloud Fundamentals
 - Azure Fundamentals

Cloud Essentials+ ensures the fundamental principles of business decisions are well understood within any cloud platform.

Key Differentiators:

- It ensures an ability to analyze information using business principles to make cloud product and service decisions.
- It has strong coverage of business principles including creating cloud assessments based on financial and business aspects.
- Covers a broad range of technology options, setting a solid foundation for vendor-specific certifications.

By the Numbers:

- **#1** concern of today's organizations regarding their IT Pros is a lack of business acumen, according to Quartz.
 - **Solution:** Cloud Essentials+ helps fill this unmet need in the market.
- **90%** of all companies have moved at least some work to the cloud and need decision makers, analysts, and process owners who understand cloud principles from a business and operations perspective.

Objection	Response
Candidate: I don't think I want to be in management.	Whether or not you choose to manage people, understanding how cloud business decisions are made gives you perspective, a potential "voice at the table" on the decisions that impact your job, and makes you more valuable to employers.
Candidate: It isn't listed in the job role.	Business skills are a benefit in any job and certifying in those skills demonstrates a pro-active desire and competency for professional growth and upward-moving positions.
Employer: I think my people already make good business decisions.	The benefit to Cloud Essentials is that it ensures your staff is solid in their cloud-specific business decisions, as opposed to having general business acumen. It is also ideal for employees who may have a very strong technical background, but do not have a business degree.



Renewal:

The CompTIA Cloud Essentials+ certification is considered good for life and does not need to be renewed.

Learn more about Cloud Essentials+

