

IT Certification Roadmap

Learn more about CompTIA Certifications by visiting: comptia.org/en-us/certifications/



Certifications validate expertise in your chosen career.

BEGINNER/NOVICE

- CO **CompTIA A+**
- CO **CompTIA Project+**
- CO **CompTIA Tech+**
- CI Certified CyberOps Associate
- IS CC
- LP Security Essentials

- CO **CompTIA A+**
- CO **CompTIA Project+**
- CO **CompTIA Tech+**
- AWS Cloud Practitioner
- LF LFCA
- LP Linux Essentials
- LP Web Development Essentials
- MS Microsoft Certified: Fundamentals
- VM VCTA

- CO **CompTIA A+**
- CO **CompTIA Project+**
- CO **CompTIA Tech+**
- IT ITIL Foundation
- PR PRINCE2 Agile Foundation
- PR PRINCE2 Project Management Foundation

- CO **CompTIA Project+**
- CO **CompTIA Tech+**
- CL CCA
- AWS AI Practitioner
- IBM Data Analyst Professional
- MS Microsoft Certified: Fundamentals**
- MS MOS: Microsoft Office Specialist

- CO **CompTIA Project+**
- AD ACP
- LP Open Source Essentials
- PY PCEP

INTERMEDIATE

- CO **CompTIA AutoOps+**
- CO **CompTIA Linux+**
- CO **CompTIA Network+**
- CO **CompTIA Server+**
- AWS Solutions Architect - Associate
- AWS CloudOps Engineer - Associate
- CI CCNA
- CI CCST
- CIW JavaScript Specialist

- DT Cloud Infrastructure Design - Proven Professional
- DT Cloud Services Design - Proven Professional
- DT Networking - Proven Professional
- DT PowerEdge - Proven Professional
- GO Cloud Engineer - Associate
- LF LCFS
- LP LPIC-1
- MDB MongoDB Associate Atlas Administrator

- MS Microsoft 365 Certified: Endpoint Administrator Associate
- MS Microsoft Certified: Azure Network Engineer Associate
- MS Microsoft Certified: Azure Developer Associate
- MS Windows Server Hybrid Administrator Associate
- OT COA
- RH RHCSA
- SF Salesforce Certified Platform Administrator
- SU SCA
- SU SCDS
- VM VCP

- CO **CompTIA Network+**
- CO **CompTIA Security+**
- AR CCMP
- HD DAST
- IT ITIL Managing Professional
- PM CAPM
- PR PRINCE2 Agile Practitioner
- PR PRINCE2 Project Management Practitioner

- CO **CompTIA Linux+**
- CO **CompTIA Security+**
- AP Apple Certified iOS App Development with Swift
- AWS Certified Developer - Associate
- C++ CPE
- C++ CLE
- MDB MongoDB Associate Developer
- OR Oracle Certified Professional, Java SE 8 Programmer
- PY PCAP

- CO **CompTIA Network+**
- CO **CompTIA Security+**
- CI CCNA
- CI CCST
- CN CFR
- CP CCSA
- DT Data Protection Design - Proven Professional
- EC CEH
- EC CND
- EC CCT
- INE eJPT
- GI GICSP
- GI GSEC
- IP CIPM
- IS CGRC
- IS SSCP
- IT ITIL Managing Professional
- M2 CSP: Security Principles
- MS Security Operations Analyst Associate
- MS Security Operations Analyst Associate
- SA SCF

- CO **CompTIA Data+**
- CO **CompTIA DataSys+**
- CO **CompTIA Linux+**
- CO **CompTIA Security+**
- AWS Certified Data Engineer - Associate
- CIW AI Data Science Specialist
- CN CDSP
- DT Data Engineering Optimize - Proven Professional
- DT Data Science Optimize - Proven Professional
- DT Data Science Foundations - Proven Professional
- GO Google Data Practitioner - Associate
- INE eJDS
- IN CAP
- IBM IBM Machine Learning Professional
- IP AIGP
- MS Azure Database Administrator Associate
- MS Power BI Data Analyst Associate
- MDB MongoDB Associate Data Modeler
- MDB MongoDB Associate Atlas Administrator
- MDB MongoDB Associate DBA
- OR Oracle AI Database Administration Certified Associate
- SAS SAS Certified Specialist: Visual Business Analytics
- TA Salesforce Certified Tableau Data Analyst
- TA Salesforce Certified Tableau Server Administrator

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- CO **CompTIA Security+**
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- PM CAPM
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- PR PRINCE2 Project Management Practitioner

- CO **CompTIA Linux+**
- CO **CompTIA Security+**
- AP Apple Certified iOS App Development with Swift
- AWS Certified Developer - Associate
- C++ CPE
- C++ CLE
- MDB MongoDB Associate Developer
- OR Oracle Certified Professional, Java SE 8 Programmer
- PY PCAP

ADVANCED

- CO **CompTIA CySA+**
- CO **CompTIA PenTest+**
- CO **CompTIA SecAI+**
- CO **CompTIA SecOT+**
- AS CRTP
- CI CCNP
- CIW Web Security Professional
- CP CCSE
- EC CCSE
- EC CPENT
- EC CHFI
- GI GX-FA
- GI GPYC
- GI GCAD
- GI GCPN
- GI GCED
- GI GCIH
- GI GPEN
- GI GSCL

- CO **CompTIA Cloud+**
- AWS Solutions Architect - Professional
- AWS DevOps Engineer - Professional
- CI CCNP
- EC CCSE
- GI GCAD
- GI GCPN
- GO Cloud Database Engineer
- GO Cloud Security Engineer
- GO Cloud Network Engineer
- HP HPE GreenLake Cloud Services
- HP HPE Aruba Networking Certified Professional

- IT ITIL Transformation
- PM PMP

- CO **CompTIA SecAI+**
- AWS Generative AI Developer - Professional
- AWS Machine Learning Engineer - Associate
- CL CCP
- GI GMLE
- GO Data Engineer
- GO Data Advanced Analytics Professional
- GO Professional Machine Learning Engineer
- GO Professional Data Engineer
- IBM IBM Data Science Professional
- IN CAP
- MS Agentic AI Business Solutions Architect
- TA Salesforce Certified Tableau Architect

- AD ACE
- AWS DevOps Engineer Professional
- C++ CLA
- C++ CPA

- GO Security Operations Engineer
- GO Cloud Security Engineer
- IA CCOA
- IA CRISC
- INE eCPPT
- INE eCDFP
- INE eCIR
- M2 CISSO
- M2 CCSSM
- M2 CAICSO
- MS Cybersecurity Architect Expert
- OS OSCP+
- OS OSWE
- OS OSTH
- SA SCP
- ZS ZDTE
- WS WCA

- LP CKAD
- LP LPIC-2
- MS Azure Solutions Architect
- RH RHCCD
- RH RHCE
- SF Salesforce Certified System Architect
- SU SCE
- VM VCAP

- GO DevOps Engineer
- IS CSSLP
- PY PCPP

EXPERT

- CO **CompTIA SecurityX** (Formerly known as CASP+)*
- AWS Security - Specialty
- CI CCIE
- CP CCSM
- EC CCISO
- GI GWAPT
- IA CGEIT
- IA AAIR
- IA AAISM
- IA CISA
- IA CISM
- INE eWPTX
- IS CCSP
- IS ISSAP
- IS ISSMP
- IS CISSP

- CO **CompTIA CloudNetX**
- AWS Advanced Networking - Specialty
- CI DevNet Specialist
- CI CCIE
- GO Professional Cloud Architect
- GI GWAPT
- HP HPE Aruba Networking Certified Expert
- IS CCSP
- LP LPIC-3
- M2 CCSO
- MS DevOps Engineer Expert
- RH RHCA
- VM VCDX

- CO **CompTIA CloudNetX**
- IT ITIL Master
- SC CSP-SM

- CO **CompTIA DataAI**
- AWS Machine Learning - Specialty
- IA AAIR
- IA AAISM
- IN CAP
- OR Oracle Certified Professional Oracle Database Security Expert
- SAS SAS Certified Professional: AI and Machine Learning
- SAS SAS Certified Data Scientist

- AD ACM
- SC CSP-SM
- C++ CPP

- IT ITIL Master
- LP LPIC-3
- M2 CCSO
- M2 CPTE
- OR Oracle Certified Professional Oracle Database Security Expert
- OS OSCE3
- OS OSEE
- OS OSAI+
- SA SCM

Cybersecurity

Infrastructure and Cloud

IT Service Management

Data & AI

Software Development

<p>CO CompTIA Certifications</p> <p>BEGINNER/NOVICE CompTIA A+ CompTIA Tech+ CompTIA Project+</p> <p>INTERMEDIATE CompTIA AutoOps+ CompTIA Data+ CompTIA DataSys+ CompTIA Linux+ CompTIA Network+ CompTIA Security+ CompTIA Server+ CompTIA Security+</p> <p>ADVANCED CompTIA Cloud+ CompTIA CySA+ CompTIA PenTest+ CompTIA SecAI+ CompTIA SecOT+</p> <p>EXPERT CompTIA CloudNetX CompTIA DataAI CompTIA SecurityX</p> <p>AD Adobe ACE: Adobe Certified Expert ACE: Adobe Certified Master</p> <p>AP APPLE Apple Certified iOS App Development with Swift</p> <p>AS Altered Security CRTP: Certified Red Team Professional</p> <p>AR Association of Change Management CCMP: Certified Change Management Professional</p> <p>AWS Amazon Web Services AWS Cloud Practitioner AWS Solutions Architect - Associate AWS CloudOps Engineer - Associate AWS Certified Developer - Associate AWS Certified Solutions Architect - Professional AWS Certified DevOps Engineer - Professional AWS Certified AI Developer - Professional AWS Certified Machine Learning Engineer - Associate</p> <p>CI CIW CIW Data Science Specialist CIW JavaScript Specialist</p> <p>CI Cisco Systems CCNP: Cisco Certified Network Professional CCSP: Cisco Certified CyberOps Associate CCSA: Cisco Certified Support Technician CCNA: Cisco Certified Network Associate</p> <p>CL CLOUDERA CCA: Cloudera Certified Associate CCP: Cloudera Certified Professional</p> <p>C++ C++ Institute C++: Certified Entry-Level Programmer C++: Certified Entry-Level Programmer</p> <p>ADVANCED C++: Certified Associate Programmer C++: Certified Associate Programmer</p> <p>EXPERT C++: Certified Professional Programmer C++: Certified Professional Programmer</p> <p>CN Cert Nexus CNR: Certified Information Systems Security Practitioner</p> <p>CP CheckPoint CCSA: Certified Security Administrator CCSE: Certified Security Expert</p> <p>EXPERT CCSM: Check Point Certified Security Master</p> <p>DT Dell Technologies Dell Technologies Data Engineering Optimize - Proven Professional Dell Technologies Cloud Infrastructure Design - Proven Professional Dell Technologies Cloud Services Design - Proven Professional Dell Technologies Networking - Proven Professional Dell Technologies PowerEdge - Proven Professional Dell Technologies Data Science Optimize - Proven Professional Dell Technologies Data Science Foundations - Proven Professional</p> <p>EC EC Council CEH: Certified Ethical Hacker CND: Certified Network Defender CCT: Certified Cyber Technician</p> <p>ADVANCED CCSE: Certified Cloud Security Engineer CPENT: Penetration Testing Professional CHFI: Certified Incident Responder</p> <p>EXPERT CCISO: Certified Chief Information Security Officer</p> <p>INE INE eJPT: Junior Penetration Tester eJPC: Junior Data Scientist</p> <p>ADVANCED eCDFP: Certified Digital Forensics Professional eCIR: Certified Incident Responder</p> <p>EXPERT eWPTX: Web Application Penetration Tester (extreme)</p>	<p>GI GIAC GSEC: GIAC Security Essentials GCISSP: Global Industrial Cyber Security Professional Certification</p> <p>ADVANCED GCISSP: GIAC Experienced Forensics Analyst GPYC: GIAC Python Coder GCSD: GIAC Cloud Security Architecture and Design GCISSP: GIAC Cloud Penetration Tester GCEH: GIAC Certified Enterprise Defender GCIH: GIAC Certified Incident Handler GMLE: GIAC Machine Learning Engineer GPEN: GIAC Penetration Tester GSLC: GIAC Security Leadership</p> <p>EXPERT GWSPT: GIAC Web Application Penetration Tester</p> <p>GO Google Google Cloud Engineer - Associate Google Data Practitioner - Associate</p> <p>ADVANCED Google Data Engineer Google Security Operations Engineer Google Cloud Database Engineer Google Data Advanced Analytics Professional Google Cloud Network Engineer Google DevOps Engineer Google Professional Machine Learning Engineer Google Professional Data Engineer</p> <p>EXPERT Professional Cloud Architect</p> <p>HD HDI Global Certification LAKS: IT Desktop Advanced Support Technician</p> <p>HP Hewlett-Packard HPE GreenLake Cloud Services HPE Aruba Networking Certified Professional</p> <p>IA ISACA CCOIA: Certified Cybersecurity Operations Analyst CRISC: Certified in Risk and Information Systems Control</p> <p>EXPERT CISPT: Certified in the Governance of Enterprise IT AIBR: Advanced in AI Risk AAISM: Advanced in AI Security Management CISM: Certified Information Systems Auditor CISM: Certified Information Security Manager</p> <p>IP IAPP AIGP: AI Governance Professional CIPM: Certified Information Privacy Manager</p> <p>IBM IBM (Coursera) IBM Data Analyst Professional IBM Machine Learning Professional</p> <p>IN Informa Essentials Essentials Analytics Professional - Essentials</p> <p>IS ISC2 CRISC: Governance, Risk and Compliance Certification SSCP: Systems Security Certified Practitioner</p> <p>EXPERT CAP: Certified Analytics Professional - Pro CAP: Certified Analytics Professional - Expert</p> <p>C++ C++ Institute C++: Certified Entry-Level Programmer C++: Certified Entry-Level Programmer</p> <p>ADVANCED C++: Certified Associate Programmer C++: Certified Associate Programmer</p> <p>EXPERT C++: Certified Professional Programmer C++: Certified Professional Programmer</p> <p>IT ITIL ITIL Foundation ITIL Managing Professional ITIL Specialist</p> <p>ADVANCED ITIL Transformation</p> <p>EXPERT ITIL Master</p> <p>LF The Linux Foundation LFCA: Linux Foundation Certified IT Associate</p> <p>INTERMEDIATE LFCS: Linux Foundation Certified SysAdmin</p> <p>ADVANCED CKAD: Certified Kubernetes Application Developer</p> <p>LP Linux Professional Institute LPIC-1: Linux Essentials LPIC-2: Linux Essentials LPIC-3: Linux Essentials</p> <p>EXPERT LPIC-3: Linux Essentials</p> <p>EXPERT VCPX: VMware Certified Design Expert</p> <p>MS Microsoft Microsoft Certified: Fundamentals MOS: Microsoft Office Specialist Microsoft 365 Certified: Endpoint Administrator Associate Microsoft Certified: Azure Network Engineer Associate Microsoft Certified: Azure Database Administrator Associate Microsoft Certified: Power BI Data Analyst Associate Microsoft Certified: Azure Developer Associate Microsoft Certified: Windows Server Hybrid Administrator Associate</p> <p>ADVANCED Microsoft Certified: Azure Solutions Architect Solutions Architect Microsoft Certified: Agentic AI Business Solutions Architect</p> <p>EXPERT Microsoft Certified: DevOps Engineer Expert</p> <p>MDB MongoDB MongoDB Associate Developer MongoDB Associate Data Modeler MongoDB Associate Atlas Administrator MongoDB Associate DBA (Database Administrator)</p> <p>OR Oracle Oracle Certified Professional, Java SE 8 Programmer Oracle Certified Professional Oracle Database Administration Certified Associate</p> <p>OS OffSec OSCP+: OffSec Certified Professional OSTH: Foundational Threat Hunting</p> <p>OSCE3: OffSec Certified Expert3 OSCE: Advanced Windows Exploitation OSAI - Advanced AI Red Teaming</p> <p>OT OpenStack Kubernetes Certified Openstack Administrator</p> <p>PM PMI PMP: Project Management Professional PMP: Project Management Professional</p> <p>PR PRINCE2 PRINCE2 Agile Foundation PRINCE2 Project Management Foundation PRINCE2 Project Management Practitioner</p> <p>PY Python Institute PCAP: Certified Associate Python Programmer PCPP: Certified Professional Python Programmer</p> <p>RH Red Hat RHCSA: Red Hat Certified System Administrator RHCE: Red Hat Certified Engineer RHCA: Red Hat Certified Architect</p> <p>SA SABSA SCSP: SABSA Chartered Foundation SCSP: SABSA Chartered Practitioner SCM: SABSA Chartered Master</p> <p>SF Salesforce Salesforce Certified Platform Administrator Salesforce Certified System Architect</p> <p>SAS SAS Certified Specialist Visual Business Analytics Learning SAS Certified Data Scientist</p> <p>SC Scrum Alliance Scrum Alliance Certified Scrum Professional ScrumMaster</p> <p>SU SUSE SUSE Certified Administrator SCDS: SUSE Certified Deployment Specialist SCE: SUSE Certified Engineer</p> <p>TA Tableau Salesforce Certified Tableau Data Analyst Salesforce Certified Tableau Server Administrator Salesforce Certified Tableau Architect</p> <p>VM VMware VMCP-2: VMware Certified Technical Associate VCP: VMware Certified Professional VCPX: VMware Certified Advanced Professional VCPX: VMware Certified Design Expert</p> <p>WS Wireshark Wireshark Certified Analyst</p> <p>ZS Zscaler ZDTE: Zscaler Digital Transformation Engineer</p>
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Digital literacy certifications validating end user skills include IC3 and ECDL/ICDL

*CASP+ renamed SecurityX November 2024 | **Microsoft offers several fundamental certifications that cover a wide range of their technology solutions.