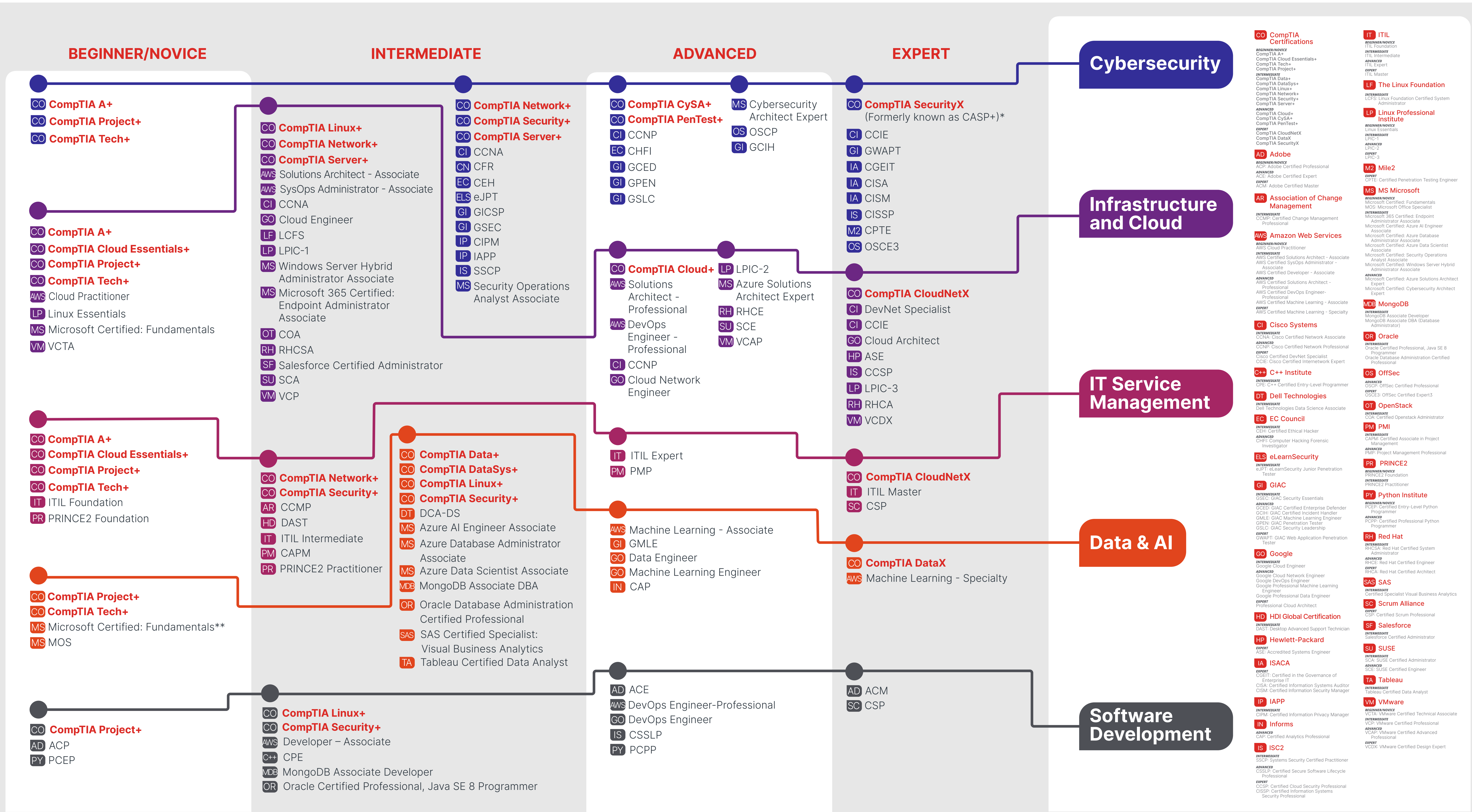# IT Certification Roadmap

Explore the possibilities with the CompTIA Interactive IT Roadmap at **CompTIA.org/CertsRoadmap**

CompTIA®

Certifications validate expertise in your chosen career.

BEGINNER/NOVICE	INTERMEDIATE	ADVANCED	EXPERT	

Cybersecurity

BEGINNER/NOVICE
- CO CompTIA A+
- CO CompTIA Project+
- CO CompTIA Tech+

INTERMEDIATE
- CO CompTIA Network+
- CO CompTIA Security+
- CO CompTIA Server+
- CI CCNA
- CN CFR
- EC CEH
- ELS eJPT
- GI GICSP
- GI GSEC
- IP CIPM
- IP IAPP
- IS SSCP
- MS Security Operations Analyst Associate

ADVANCED
- CO CompTIA CySA+
- CO CompTIA PenTest+
- CI CCNP
- EC CHFI
- GI GCED
- GI GPEN
- GI GSLC

- MS Cybersecurity Architect Expert
- OS OSCP
- GI GCIH

EXPERT
- CO CompTIA SecurityX (Formerly known as CASP+)*
- CI CCIE
- GI GWAPT
- IA CGEIT
- IA CISA
- IA CISM
- IS CISSP
- M2 CPTE
- OS OSCE3

Infrastructure and Cloud

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

- CO CompTIA Linux+
- CO CompTIA Network+
- CO CompTIA Server+
- AWS Solutions Architect - Associate
- AWS SysOps Administrator - Associate
- CI CCNA
- GO Cloud Engineer
- LF LCFS
- LP LPIC-1
- MS Windows Server Hybrid Administrator Associate
- MS Microsoft 365 Certified: Endpoint Administrator Associate
- OT COA
- RH RHCSA
- SF Salesforce Certified Administrator
- SU SCA
- VM VCP

- CO CompTIA Cloud+
- AWS Solutions Architect - Professional
- AWS DevOps Engineer - Professional
- CI CCNP
- GO Cloud Network Engineer

- LP LPIC-2
- MS Azure Solutions Architect Expert
- RH RHCE
- SU SCE
- VM VCAP

- CO CompTIA CloudNetX
- CI DevNet Specialist
- CI CCIE
- GO Cloud Architect
- HP ASE
- IS CCSP
- LP LPIC-3
- RH RHCA
- VM VCDX

IT Service Management

- CO CompTIA A+
- CO CompTIA Cloud Essentials+
- CO CompTIA Project+
- CO CompTIA Tech+
- IT ITIL Foundation
- PR PRINCE2 Foundation

- CO CompTIA Network+
- CO CompTIA Security+
- AR CCMP
- HD DAST
- IT ITIL Intermediate
- PM CAPM
- PR PRINCE2 Practitioner

- IT ITIL Expert
- PM PMP

- CO CompTIA CloudNetX
- IT ITIL Master
- SC CSP

Data & AI

- CO CompTIA Project+
- CO CompTIA Tech+
- MS Microsoft Certified: Fundamentals**
- MS MOS

- CO CompTIA Data+
- CO CompTIA DataSys+
- CO CompTIA Linux+
- CO CompTIA Security+
- DT DCA-DS
- MS Azure AI Engineer Associate
- MS Azure Database Administrator Associate
- MS Azure Data Scientist Associate
- VDB MongoDB Associate DBA
- OR Oracle Database Administration Certified Professional
- SAS SAS Certified Specialist: Visual Business Analytics
- TA Tableau Certified Data Analyst

- AWS Machine Learning - Associate
- GI GMLE
- GO Data Engineer
- GO Machine Learning Engineer
- IN CAP

- CO CompTIA DataX
- AWS Machine Learning - Specialty

Software Development

- CO CompTIA Project+
- AD ACP
- PY PCEP

- CO CompTIA Linux+
- CO CompTIA Security+
- AWS Developer – Associate
- C++ CPE
- VDB MongoDB Associate Developer
- OR Oracle Certified Professional, Java SE 8 Programmer

- AD ACE
- AWS DevOps Engineer-Professional
- GO DevOps Engineer
- IS CSSLP
- PY PCPP

- AD ACM
- SC CSP

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.

Updated 11/2024

Legend

CO CompTIA Certifications
BEGINNER/NOVICE
CompTIA A+
CompTIA Cloud Essentials+
CompTIA Project+
CompTIA Tech+
INTERMEDIATE
CompTIA Data+
CompTIA DataSys+
CompTIA Linux+
CompTIA Network+
CompTIA Security+
CompTIA Server+
ADVANCED
CompTIA Cloud+
CompTIA CySA+
CompTIA PenTest+
EXPERT
CompTIA CloudNetX
CompTIA DataX
CompTIA SecurityX

AD Adobe
BEGINNER/NOVICE
ACP: Adobe Certified Professional
ADVANCED
ACE: Adobe Certified Expert
EXPERT
ACM: Adobe Certified Master

AR Association of Change Management
INTERMEDIATE
CCMP: Certified Change Management Professional

AWS Amazon Web Services
BEGINNER/NOVICE
AWS Cloud Practitioner
INTERMEDIATE
AWS Certified Solutions Architect – Associate
AWS Certified SysOps Administrator – Associate
AWS Certified Developer – Associate
ADVANCED
AWS Certified Solutions Architect – Professional
AWS Certified DevOps Engineer – Professional
AWS Certified Machine Learning – Associate
EXPERT
AWS Certified Machine Learning – Specialty

CI Cisco Systems
INTERMEDIATE
CCNA: Cisco Certified Network Associate
ADVANCED
CCNP: Cisco Certified Network Professional
EXPERT
Cisco Certified DevNet Specialist
CCIE: Cisco Certified Internetwork Expert

C++ C++ Institute
INTERMEDIATE
CPE: C++ Certified Entry-Level Programmer

DT Dell Technologies
INTERMEDIATE
Dell Technologies Data Science Associate

EC EC Council
INTERMEDIATE
CEH: Certified Ethical Hacker
ADVANCED
CHFI: Computer Hacking Forensic Investigator

ELS eLearnSecurity
INTERMEDIATE
eJPT: eLearnSecurity Junior Penetration Tester

GI GIAC
INTERMEDIATE
GSEC: GIAC Security Essentials
ADVANCED
GCED: GIAC Certified Enterprise Defender
GCIH: GIAC Certified Incident Handler
GMLE: GIAC Machine Learning Engineer
GPEN: GIAC Penetration Tester
GSLC: GIAC Security Leadership
EXPERT
GWAPT: GIAC Web Application Penetration Tester

GO Google
INTERMEDIATE
Google Cloud Engineer
ADVANCED
Google Cloud Network Engineer
Google DevOps Engineer
Google Professional Machine Learning Engineer
Google Professional Data Engineer
EXPERT
Professional Cloud Architect

HD HDI Global Certification
INTERMEDIATE
DAST: Desktop Advanced Support Technician

HP Hewlett-Packard
EXPERT
ASE: Accredited Systems Engineer

IA ISACA
ADVANCED
CGEIT: Certified in the Governance of Enterprise IT
CISA: Certified Information Systems Auditor
CISM: Certified Information Security Manager

IP IAPP
BEGINNER/NOVICE
CIPM: Certified Information Privacy Manager

IN Informs
ADVANCED
CAP: Certified Analytics Professional

IS ISC2
INTERMEDIATE
SSCP: Systems Security Certified Practitioner
ADVANCED
CSSLP: Certified Secure Software Lifecycle Professional
EXPERT
CCSP: Certified Cloud Security Professional
CISSP: Certified Information Systems Security Professional

IT ITIL
BEGINNER/NOVICE
ITIL Foundation
INTERMEDIATE
ITIL Intermediate
ADVANCED
ITIL Expert
EXPERT
ITIL Master

LF The Linux Foundation
BEGINNER/NOVICE
LCFS: Linux Foundation Certified System Administrator

LP Linux Professional Institute
BEGINNER/NOVICE
Linux Essentials
INTERMEDIATE
LPIC-1
ADVANCED
LPIC-2
EXPERT
LPIC-3

M2 Mile2
EXPERT
CPTE: Certified Penetration Testing Engineer

MS Microsoft
BEGINNER/NOVICE
Microsoft Certified: Fundamentals
MOS: Microsoft Office Specialist
INTERMEDIATE
Microsoft 365 Certified: Endpoint Administrator Associate
Microsoft Certified: Azure AI Engineer Associate
Microsoft Certified: Azure Database Administrator Associate
Microsoft Certified: Azure Data Scientist Associate
Microsoft Certified: Security Operations Analyst Associate
Microsoft Certified: Windows Server Hybrid Administrator Associate
ADVANCED
Microsoft Certified: Azure Solutions Architect - Expert
Microsoft Certified: Cybersecurity Architect Expert

VDB MongoDB
INTERMEDIATE
MongoDB Associate Developer
MongoDB Associate DBA (Database Administrator)

OR Oracle
INTERMEDIATE
Oracle Certified Professional, Java SE 8 Programmer
Oracle Database Administration Certified Professional

OS OffSec
ADVANCED
OSCP: OffSec Certified Professional
EXPERT
OSCE3: OffSec Certified Expert3

OT OpenStack
INTERMEDIATE
COA: Certified Openstack Administrator

PM PMI
INTERMEDIATE
CAPM: Certified Associate in Project Management
ADVANCED
PMP: Project Management Professional

PR PRINCE2
BEGINNER/NOVICE
PRINCE2 Foundation
INTERMEDIATE
PRINCE2 Practitioner

PY Python Institute
BEGINNER/NOVICE
PCEP: Certified Entry-Level Python Programmer
ADVANCED
PCPP: Certified Professional Python

RH Red Hat
INTERMEDIATE
RHCSA: Red Hat Certified System Administrator
ADVANCED
RHCE: Red Hat Certified Engineer
EXPERT
RHCA: Red Hat Certified Architect

SAS SAS
INTERMEDIATE
SAS Certified Specialist: Visual Business Analytics

SC Scrum Alliance
EXPERT
CSP: Certified Scrum Professional

SF Salesforce
INTERMEDIATE
Salesforce Certified Administrator

SU SUSE
INTERMEDIATE
SCA: SUSE Certified Administrator
ADVANCED
SCE: SUSE Certified Engineer

TA Tableau
INTERMEDIATE
Tableau Certified Data Analyst

VM VMware
BEGINNER/NOVICE
VCTA: VMware Certified Technical Associate
INTERMEDIATE
VCP: VMware Certified Professional
ADVANCED
VCAP: VMware Certified Advanced Professional
EXPERT
VCDX: VMware Certified Design Expert