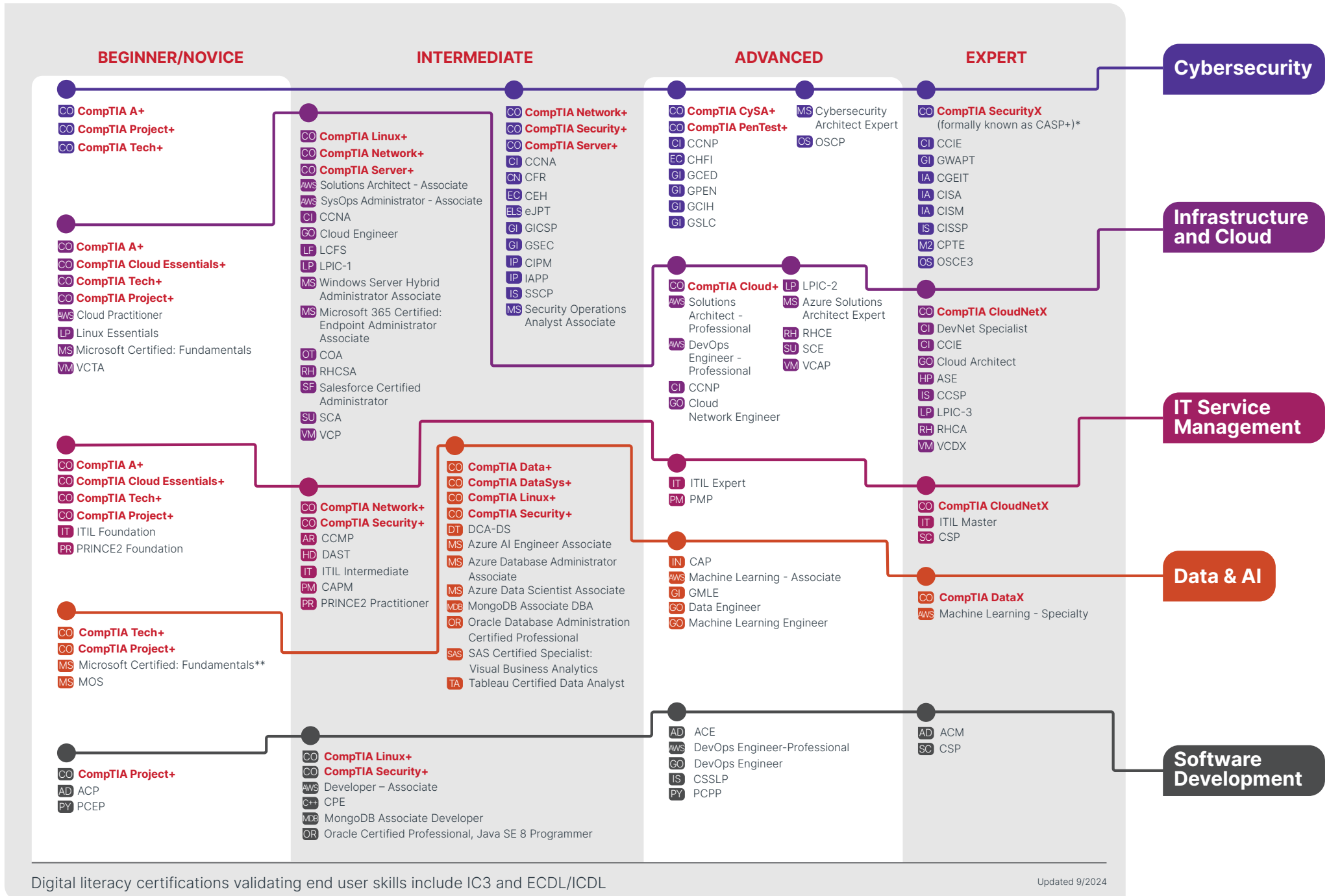# IT Certification Roadmap

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 GCIH
- GI GSLC
- MS Cybersecurity Architect Expert
- OS OSCP

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

Infrastructure and Cloud

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

Intermediate
- 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

Advanced
- 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

Expert
- 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

Beginner/Novice
- CO **CompTIA A+**
- CO **CompTIA Cloud Essentials+**
- CO **CompTIA Tech+**
- CO **CompTIA Project+**
- IT ITIL Foundation
- PR PRINCE2 Foundation

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

Advanced
- IT ITIL Expert
- PM PMP

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

Data & AI

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

Intermediate
- 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
- MDB MongoDB Associate DBA
- OR Oracle Database Administration Certified Professional
- SAS SAS Certified Specialist: Visual Business Analytics
- TA Tableau Certified Data Analyst

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

Expert
- CO **CompTIA DataX**
- AWS Machine Learning - Specialty

Software Development

Beginner/Novice
- CO **CompTIA Project+**
- AD ACP
- PY PCEP

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

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

Expert
- AD ACM
- SC CSP

Digital literacy certifications validating end user skills include IC3 and ECDL/ICDL

Updated 9/2024

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

CO CompTIA Certifications

BEGINNER/NOVICE
CompTIA A+
CompTIA Cloud Essentials+
CompTIA Tech+
CompTIA Project+

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

Cisco Systems

INTERMEDIATE
CCNA: Cisco Certified Network Associate

ADVANCED
CCNP: Cisco Certified Network Professional

EXPERT
CCIE: Cisco Certified Internetwork Expert

C++ C++ Institute

INTERMEDIATE
CPE: C++ Certified Entry-Level Programmer

DT Dell Technologies

INTERMEDIATE
DCA-DS: 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

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

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

IP IAPP

INTERMEDIATE
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

INTERMEDIATE
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: Windows Server Hybrid Administrator Associate
Microsoft Certified: Azure Database Administrator Associate
Microsoft Certified: Azure Data Scientist Associate
Microsoft Certified: Security Operations Analyst Associate

ADVANCED
Microsoft Certified: Azure Solutions Architect Expert
Microsoft Certified: Cybersecurity Architect Expert

MDB MongoDB

INTERMEDIATE
MongoDB Associate Developer
MongoDB Associate DBA (Database Administrator)

OR Oracle

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

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 Programmer

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

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

CompTIA.