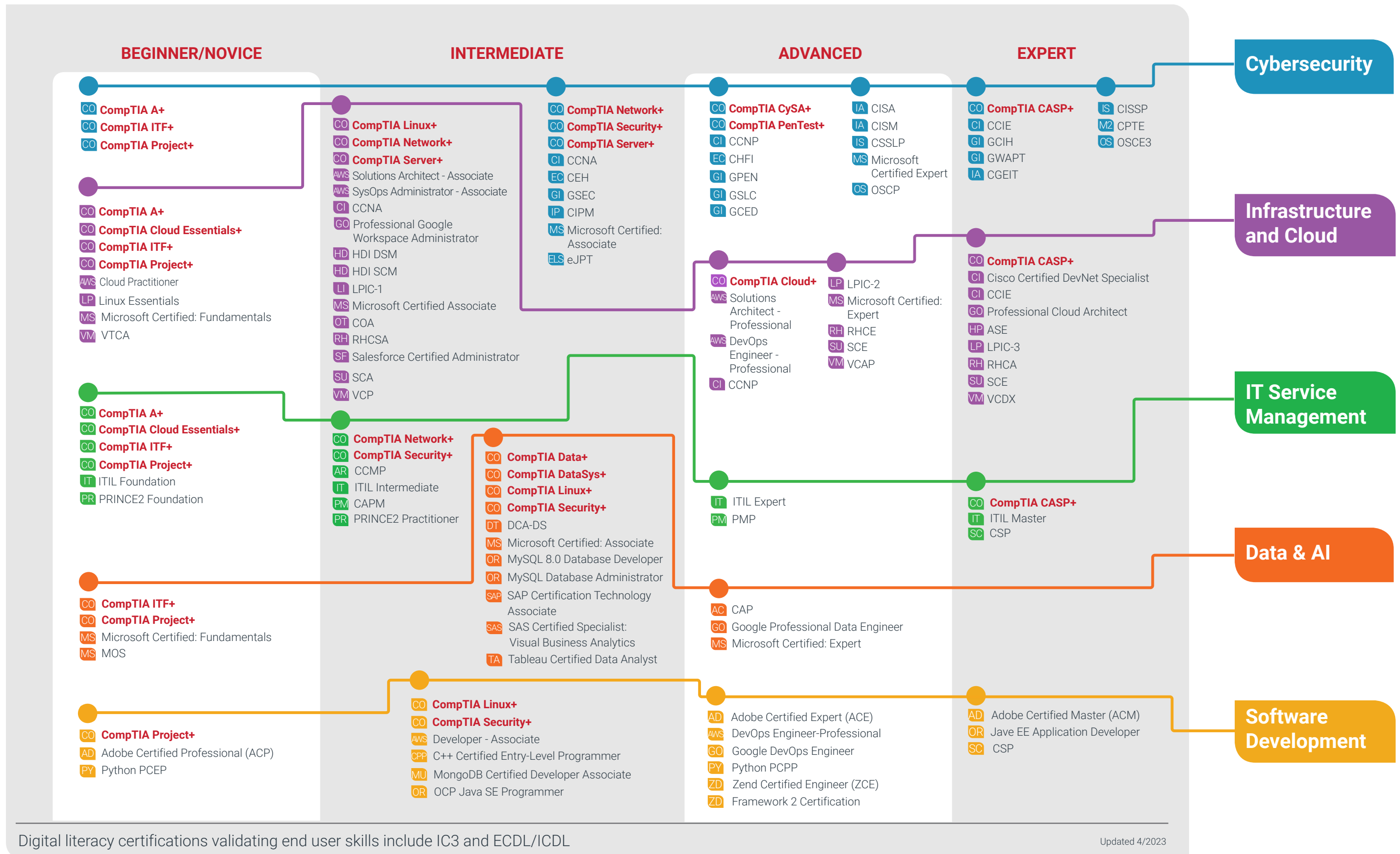# IT Certification Roadmap

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 ITF+**
- CO **CompTIA Project+**

INTERMEDIATE
- CO **CompTIA Network+**
- CO **CompTIA Security+**
- CO **CompTIA Server+**
- CI CCNA
- EC CEH
- GI GSEC
- IP CIPM
- MS Microsoft Certified: Associate
- ELS eJPT

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

- IA CISA
- IA CISM
- IS CSSLP
- MS Microsoft Certified Expert
- OS OSCP

EXPERT
- CO **CompTIA CASP+**
- CI CCIE
- GI GCIH
- GI GWAPT
- IA CGEIT

- IS CISSP
- M2 CPTE
- OS OSCE3

Infrastructure and Cloud

BEGINNER/NOVICE
- CO **CompTIA A+**
- CO **CompTIA Cloud Essentials+**
- CO **CompTIA ITF+**
- CO **CompTIA Project+**
- AWS Cloud Practitioner
- LP Linux Essentials
- MS Microsoft Certified: Fundamentals
- VM VTCA

INTERMEDIATE
- CO **CompTIA Linux+**
- CO **CompTIA Network+**
- CO **CompTIA Server+**
- AWS Solutions Architect - Associate
- AWS SysOps Administrator - Associate
- CI CCNA
- GO Professional Google Workspace Administrator
- HD HDI DSM
- HD HDI SCM
- LI LPIC-1
- MS Microsoft Certified 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

- LP LPIC-2
- MS Microsoft Certified: Expert
- RH RHCE
- SU SCE
- VM VCAP

EXPERT
- CO **CompTIA CASP+**
- CI Cisco Certified DevNet Specialist
- CI CCIE
- GO Professional Cloud Architect
- HP ASE
- LP LPIC-3
- RH RHCA
- SU SCE
- VM VCDX

IT Service Management

BEGINNER/NOVICE
- CO **CompTIA A+**
- CO **CompTIA Cloud Essentials+**
- CO **CompTIA ITF+**
- CO **CompTIA Project+**
- IT ITIL Foundation
- PR PRINCE2 Foundation

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

ADVANCED
- IT ITIL Expert
- PM PMP

EXPERT
- CO **CompTIA CASP+**
- IT ITIL Master
- SC CSP

Data & AI

BEGINNER/NOVICE
- CO **CompTIA ITF+**
- 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 Microsoft Certified: Associate
- OR MySQL 8.0 Database Developer
- OR MySQL Database Administrator
- SAP SAP Certification Technology Associate
- SAS SAS Certified Specialist: Visual Business Analytics
- TA Tableau Certified Data Analyst

ADVANCED
- AC CAP
- GO Google Professional Data Engineer
- MS Microsoft Certified: Expert

Software Development

BEGINNER/NOVICE
- CO **CompTIA Project+**
- AD Adobe Certified Professional (ACP)
- PY Python PCEP

INTERMEDIATE
- CO **CompTIA Linux+**
- CO **CompTIA Security+**
- AWS Developer - Associate
- CPP C++ Certified Entry-Level Programmer
- MU MongoDB Certified Developer Associate
- OR OCP Java SE Programmer

ADVANCED
- AD Adobe Certified Expert (ACE)
- AWS DevOps Engineer-Professional
- GO Google DevOps Engineer
- PY Python PCPP
- ZD Zend Certified Engineer (ZCE)
- ZD Framework 2 Certification

EXPERT
- AD Adobe Certified Master (ACM)
- OR Jave EE Application Developer
- SC CSP

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

Updated 4/2023

Microsoft provides three certification paths. Please visit Microsoft's webpage for a full list of their offerings: https://bit.ly/3tJYm8Z

CO CompTIA Certifications

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

INTERMEDIATE
CompTIA Data+
CompTIA DataSys+
CompTIA Linux+
CompTIA Network+
CompTIA Security+
CompTIA Server+

ADVANCED
CompTIA Cloud+
CompTIA CySA+: Cybersecurity Analyst
CompTIA PenTest+

EXPERT
CompTIA CASP+: CompTIA Advanced Security Practitioner

AC Analytics Certification Board

ADVANCED
ACB: Certified Analytics Professional (CAP)

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

CI Cisco Systems

INTERMEDIATE
CCNA: Cisco Certified Network Associate

ADVANCED
CCNP: Cisco Certified Network Professional

EXPERT
CCDS: Cisco Certified DevNet Specialist
CCIE: Cisco Certified Internetwork Expert

CPP CPP Institute

INTERMEDIATE
CPP: 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: Certified Enterprise Defender
GPEN: GIAC Penetration Tester
GSLC: Security Leadership
GWAPT: GIAC Web Application Penetration Tester

EXPERT
GCIH: GIAC Certified Incident Handler

GO Google

INTERMEDIATE
GO: Professional Google Workspace Administrator

ADVANCED
GO: Google DevOps Engineer
GO: Google Professional Data Engineer

EXPERT
GO: Professional Cloud Architect

HD HDI Global Certification

INTERMEDIATE
HDI DSM: HDI Desktop Support Manager
HDI SCM: HDI Support Center Manager

HP Hewlett-Packard

EXPERT
ASE: Accredited Systems Engineer

IP IAPP

INTERMEDIATE
CIPM: Certified Information Privacy Manager

IA ISACA

ADVANCED
CISA: Certified Information Systems Auditor
CISM: Certified Information Security Manager

EXPERT
CGEIT: Certified in the Governance of Enterprise IT

IS (ISC)²

ADVANCED
CSSLP: Certified Secure Software Lifecycle Professional

EXPERT
CISSP: Certified Information Systems Security Professional

IT ITIL

BEGINNER/NOVICE
ITIL Foundations

INTERMEDIATE
ITIL Intermediate

ADVANCED
ITIL Expert

EXPERT
ITIL Master

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 MS Microsoft

BEGINNER/NOVICE:
Microsoft Certified: Fundamentals
Microsoft Office Specialist

INTERMEDIATE:
Microsoft Certified: Associate

ADVANCED:
Microsoft Certified: Expert

MU MongoDB University

INTERMEDIATE
MongoDB Certified Developer Associate

OR Oracle

INTERMEDIATE
OCP: Java SE Programmer

EXPERT
OCPJAD: Java EE Application Developer

OS Offensive Security

ADVANCED
OSCP: Offensive Security Certified Professional

EXPERT
OSCE3: Offensive Security Certified Expert 3

OT OpenStack

INTERMEDIATE
COA: Certified OpenStack Administrator

PM PMI

INTERMEDIATE
CAPM: PMI Certified Associate in Project Management

ADVANCED
PMP: PMI Project Professional

PR PRINCE2

BEGINNER/NOVICE
PRINCE2 Foundation

INTERMEDIATE
PRINCE2 Practitioner

PY Python Institute

BEGINNER/NOVICE
Python PCEP

ADVANCED
Python PCPP

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

EXPERT
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

ZD Zend

ADVANCED
Zend Certified Engineer (ZCE)
Framework 2 Certification

Certification Criteria
CompTIA reviews developments in the IT certification landscape and adjusts the IT Certifications Roadmap as necessary.

To be included in the IT Certifications Roadmap, a certification must meet at least 60% (3 out of 5) of the following criteria.

- **Acceptable Development Standards:** Developed based on processes established by a standards body. (For example: ISO/ANSI.)

- **Training Industry Recognition:** Third-party training products are available to prepare individuals for the certification. (For example: books, ebooks, videos, bootcamps, practice tests)

- **IT Industry Recognition – Media:** Cited in industry publications either online or in print. (For example: SC Magazine, PC World, and surveys from respected journals)

- **IT Industry Recognition – Authority:** Cited by Subject Matter Experts in the IT industry. (For example: SMEs that work regularly with CompTIA, recognition from other certification bodies)

- **Employer Recognition:** Cited in jobs ads and postings for positions in targeted job roles. Data should be available from an objective, third party organization (e.g., Burning Glass or Indeed.com).

CompTIA