

Official CompTIA Certifications

Cyber Studies Institute (Pty) Ltd is a proud official authorized partner of CompTIA. Here you can read more about our official CompTIA courses. All these courses include the latest updated course material that will lead to the official CompTIA Certifications.

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.

Value of CompTIA 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:

A competitive edge in a highly technical job market

Heightened career advancement opportunities

Benefits of a CompTIA Certification

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.

By the numbers:

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.

The CompTIA Career Pathways

The CompTIA Career Pathways follow a hierarchy of skills needed for a career in infrastructure, cybersecurity, or data and analytics; each certification builds upon the skills from the previous one. CompTIA certifications reflect the current job roles of IT professionals, so it makes sense for learners to earn certifications and gain the knowledge and hands-on skills currently being used in the workforce.

CompTIA pathway to jobs




Infrastructure Pathway	Cybersecurity Pathway	Data and Analytics Pathway
IT infrastructure is the bedrock of IT operations and necessary for any business to function.	The CompTIA Cybersecurity Career Pathway helps technical specialists achieve cybersecurity mastery, from beginning to end.	The Data and Analytics Pathway helps professionals learn to store, manage, and secure data where it can be reviewed and analyzed.





CompTIA CERTIFICATION PORTFOLIO

DATA

CERTIFICATION	COMPETENCIES	JOB ROLES
	<ul style="list-style-type: none"> • Mining data • Manipulating data • Visualizing and reporting data • Applying basic statistical methods • Analyzing complex datasets while adhering to governance and quality standards throughout the entire data life cycle 	<ul style="list-style-type: none"> • Data Analyst • Business Intelligence Analyst • Reporting Analyst • Marketing Analyst • Clinical Analyst • Business Data Analyst • Operations Analyst
	<ul style="list-style-type: none"> • Compare and contrast database structure types • Explain database implementation, testing, and deployment phases • Explain the purpose of monitoring and reporting for database management and performance • Explain data security concepts as well as the purpose of governance and regulatory compliance • Explain the importance of disaster recovery and restore best practices and processes 	<ul style="list-style-type: none"> • Database Administrator • Task-Oriented Database Administrator • Application Database Administrator • Cloud Database Administrator • Database Manager • Database Designer




	<ul style="list-style-type: none"> • Understand and implement data science operations and processes. • Apply mathematical and statistical methods appropriately and understand the importance of data processing and cleaning, statistical modeling, linear algebra and calculus concepts. • Apply machine-learning models and understand deep-learning concepts. • Utilize appropriate analysis and modeling methods and make justified model recommendations. • Demonstrate understanding of industry trends and specialized data science applications 	<ul style="list-style-type: none"> • Data Scientist • Quantitative Analyst • Machine Learning Engineer/ Specialist • Computer & Information Research Scientist
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CORE CERTIFICATIONS


CERTIFICATION	COMPETENCIES	JOB ROLES
	<ul style="list-style-type: none"> • Install software • Establish basic network connectivity • Identify/prevent basic security risks • Explain troubleshooting theory and preventative maintenance of devices 	<ul style="list-style-type: none"> • Sales Associate • Account Manager • Marketing Specialist • Customer Support
	<ul style="list-style-type: none"> • Install and configure end-user devices and software • Connect devices to networks • Perform basic cybersecurity mitigations • Troubleshoot common problems to diagnose and resolve issues • Demonstrate basic knowledge of scripting, the cloud, and virtualization 	<ul style="list-style-type: none"> • IT Support Specialist • Helpdesk Technician • Field Technician • Tier I Support Specialist • Desktop Support Specialist • Associate Network Engineer • Systems Support Technician • Junior Systems Administrator
	<ul style="list-style-type: none"> • Implement enterprise-level wired and wireless network solutions • Identify and troubleshoot network performance issues • Harden networks against threats to mitigate security vulnerabilities 	<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"> • 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 	<ul style="list-style-type: none"> • Security Specialist • Security Administrator • Systems Administrator • Help Desk Analyst • Security Analyst • Security Engineer



	<ul style="list-style-type: none"> • Identify, analyze, and respond to security events and incidents 	
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INFRASTRUCTURE CAREER PATHWAY



CERTIFICATION	COMPETENCIES	JOB ROLES
	<ul style="list-style-type: none"> • Configure and manage software, storage and process and services • Understand best practices for permissions and authentication, firewalls, and file management • Create simple shell scripts and execute basic BASH scripts, version control using Git, and orchestration processes • Analyze system properties and processes and troubleshoot user, application and hardware issues 	<ul style="list-style-type: none"> • Linux Administrator • Junior Cloud Engineer • Junior DevOps Support Engineer • Technical Support Specialist • Systems Administrator • Network Administrator • Web Administrator/ Developer • Cybersecurity Engineer • Linux Engineer
	<ul style="list-style-type: none"> • Install, configure, and manage server hardware and server operating systems • Implement proper server hardening and security controls • Successfully troubleshoot common server problems • Demonstrate an understanding of key disaster recovery, high availability, and backup concepts 	<ul style="list-style-type: none"> • Systems Administrator • Data Center Technician • Server Administrator • Network Administrator • Field Service Technician or Engineer • IT Technician • Data Center Engineer
	<ul style="list-style-type: none"> • Understand cloud architecture and design • Deploy cloud services and solutions • Successfully maintain, secure, and optimize a cloud environment • Troubleshoot common issues related to cloud management 	<ul style="list-style-type: none"> • Sr. Systems Administrator • Systems Engineer • Cloud Engineer • Sr. Network Administrator • Sr. Network Engineer • Cloud Specialist • Cloud Project Manager

CYBERSECURITY CAREER PATHWAY

CERTIFICATION	COMPETENCIES	JOB ROLES
	<ul style="list-style-type: none"> • 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 	<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

	<ul style="list-style-type: none"> • Leverage intelligence and threat detection techniques • Analyze and interpret data • Identify and address vulnerabilities • Suggest preventative measures • Effectively respond to and recover from incidents 	<ul style="list-style-type: none"> • Security analyst • Threat intelligence analyst • Security engineer • Application security analyst • Compliance analyst • Threat hunter
	<ul style="list-style-type: none"> • Architect, engineer, integrate, and implement secure solutions across complex environments to support a resilient enterprise • Use monitoring, detection, incident response, automation to proactively support ongoing security operations in an enterprise environment • Apply security practices to cloud, on-premises, endpoint, and mobile infrastructure, while considering cryptographic technologies and techniques • Consider the impact of governance, risk, and compliance requirements throughout the enterprise 	<ul style="list-style-type: none"> • Security Architect • Senior Security Engineer • SOC Manager • Security Analyst • IT Cybersecurity Specialist/ INFOSEC Specialist • Cyber Risk Analyst

PROFESSIONAL CERTIFICATIONS

CERTIFICATION	COMPETENCIES	JOB ROLES
	<ul style="list-style-type: none"> • Summarize the properties of project, phases, schedules, roles and responsibilities, and cost controls, as well as identifying the basic aspects of Agile methodology • Predict the impact of various constraint variables and influences through-out the project and explain the importance of risk strategies and activities • Understand appropriate communication methods of influence and use change control processes within the context of a project • Compare and contrast various project management tools and analyze project and partner-centric documentation 	<ul style="list-style-type: none"> • IT Support Manager • Project Coordinator • Business Analyst • IT Project Manager • IT Manager
	<ul style="list-style-type: none"> • 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 relations 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 	<ul style="list-style-type: none"> • Business Development staff that sell cloud services • Technical Sales Specialist • Business Analysts • Business Process Owners • Technical Support Staff

	to cloud services and identify the importance and impacts of compliance in the cloud	
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