

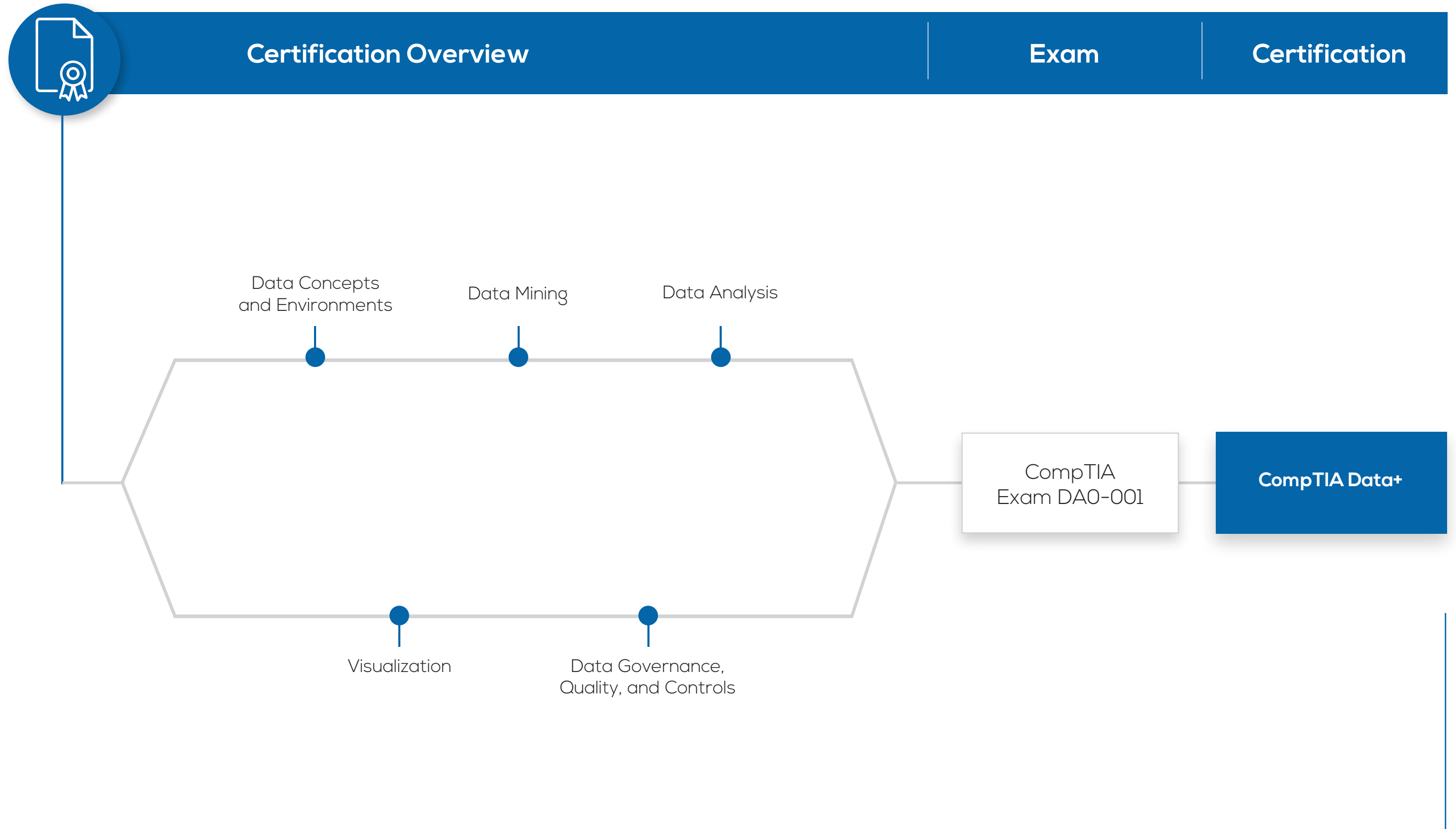
Core Skills	Cybersecurity	Data and Analytics Skills	Infrastructure	Professional Skills
- CompTIA A+ Core 1 - CompTIA A+ Core 2 - CompTIA Network+ - CompTIA Security+ - CompTIA Tech+	- CompTIA Cybersecurity Analyst - CompTIA Pentest+ - CompTIA SecurityX	CompTIA Data+	- CompTIA Cloud+ - CompTIA Linux+ - CompTIA Server+	- CompTIA Cloud Essentials - CompTIA Project+

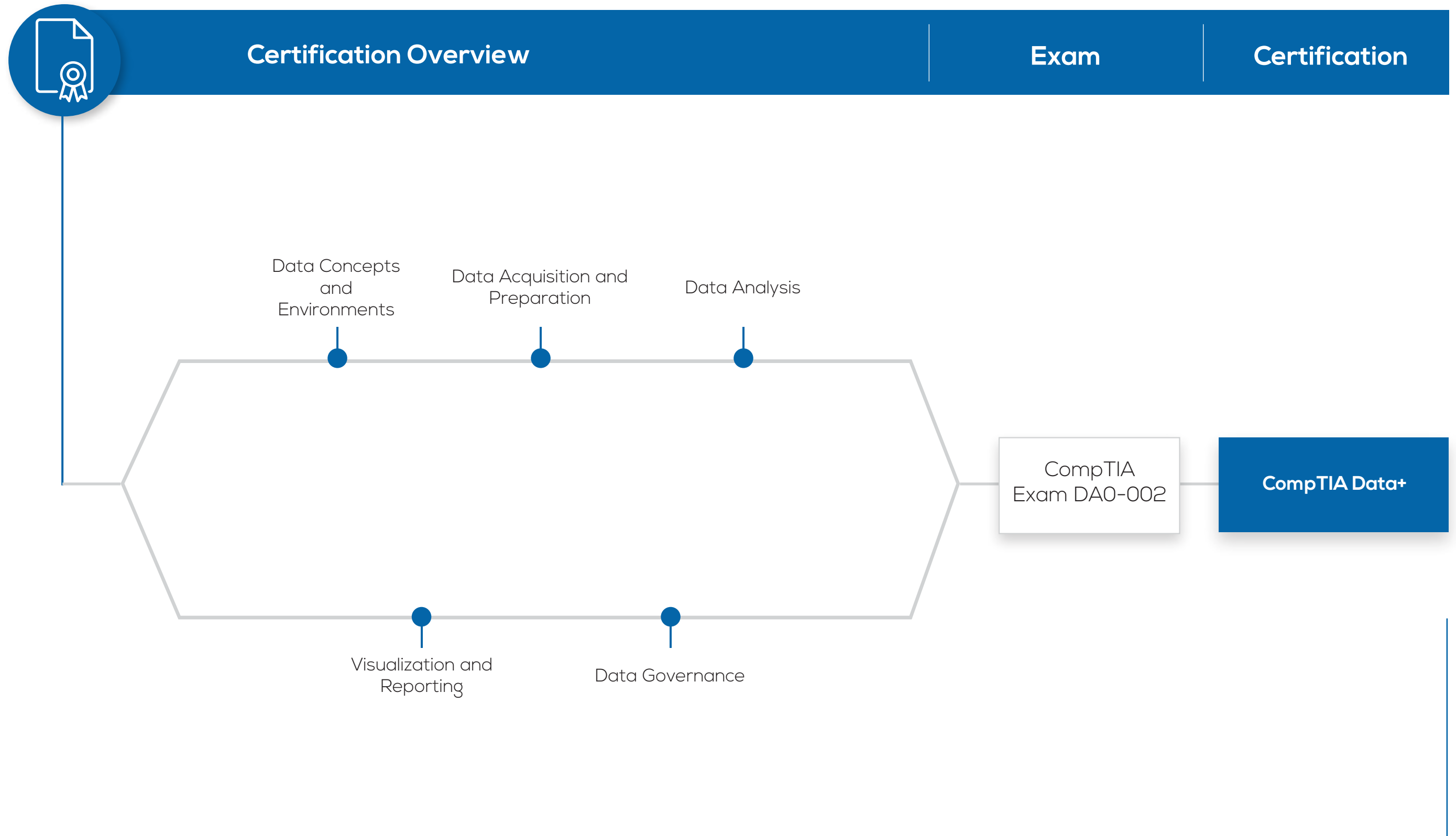


Stackable Certifications

CompTia offers stackable certifications are grouped combinations of individual certifications that collectively signify a specialized title and demonstrate expertise in a specific area of focus.

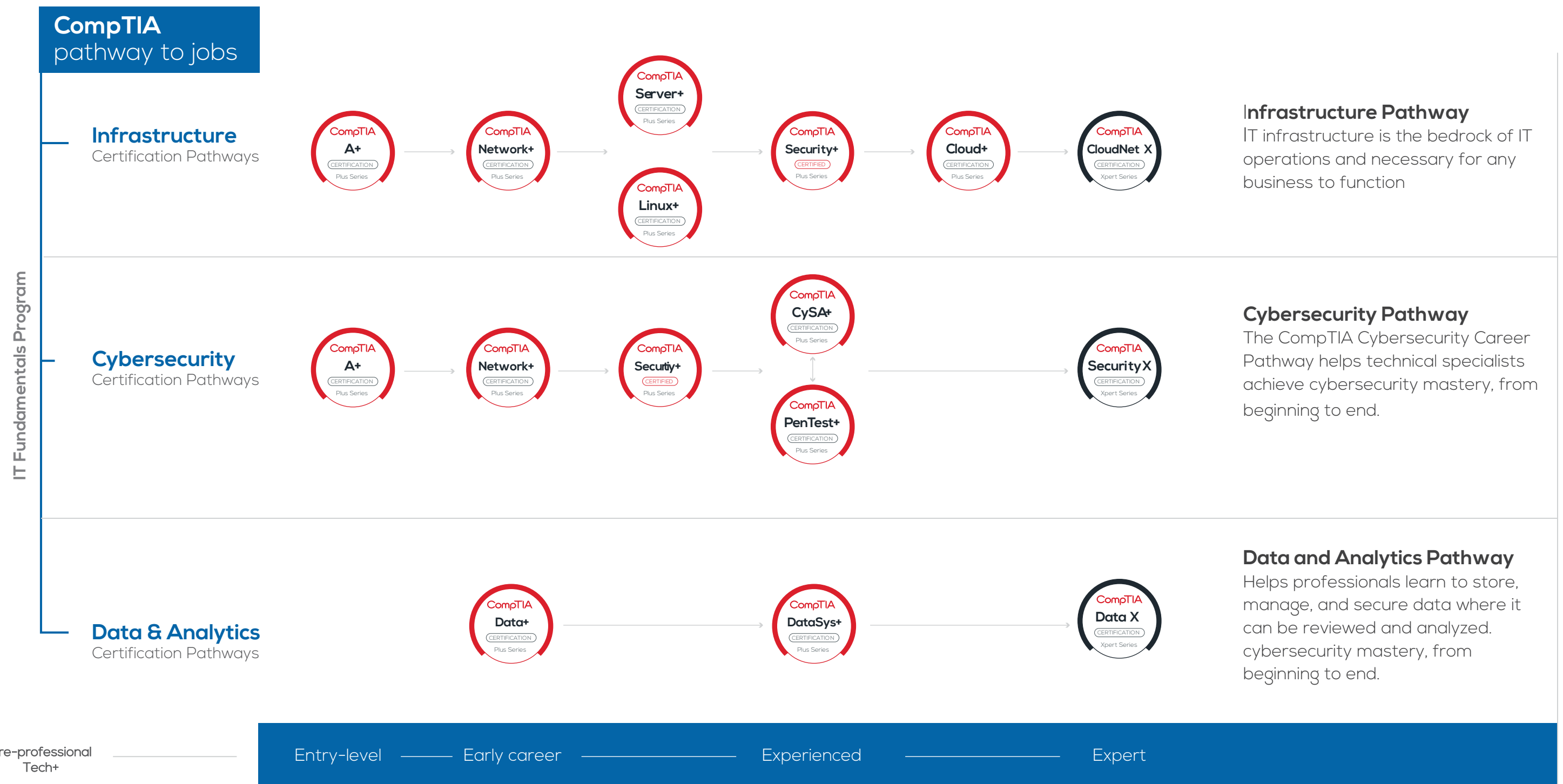
For details on the various roles, please refer to page 5 – see under Certification for the full list.





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.



CERTIFICATION	COMPETENCIES	JOB ROLES	TEST INFO
Core Certifications 	- Learn computing basics, notational systems, data value, and troubleshooting steps. - Set up devices, configure wireless networks, and explore virtualization and cloud tech. - Understand operating systems, software, browsers, and AI tools like chatbots. - Apply foundational programming concepts, logic, and organizational techniques. - Explore databases, backup methods, and data's role in decision-making. - Practice device security, password management, and data encryption.	- Sales Associate - Account Manager - Marketing Specialist - Customer Support	Questions: Max 75 Length: 60 minutes
	- Install, configure, and maintain hardware components and device effectively. - Diagnose and resolve issues with PCs, mobile devices, and software applications. - Understand networking basics and configure wired/wireless SOHO networks. - Apply basic cybersecurity methods to mitigate threats and secure systems. - Install and support multiple operating systems, including Windows, Linux, and macOS. - Explain virtualization and cloud computing concepts and their applications. - Follow best practices for safety, environmental impacts, and effective communication. - Provide customer support using appropriate troubleshooting and communication skills. - Gain a respected certification that validates your foundation in tech and prepares you for success in your career.	- IT Support Specialist - Helpdesk Technician - Field Technician - Tier I Support Specialist - Desktop Support Specialist - Associate Network Engineer - Systems Support Technician - Junior Systems Administrator	Two Exams Questions: Max 90 each Length: 90 minutes each
	- Deploy wired and wireless devices, covering IP addressing, ports, protocols, and network architecture for network deployment. - Understand documentation, life-cycle, change, and configuration management processes and procedures. - Grasp virtualization, cloud service models, elasticity, and scalability to apply cloud concepts. - Monitor networks for high availability and resolve connectivity issues to maintain network performance. - Establish secure networks and mitigate vulnerabilities to strengthen security. - Diagnose and resolve network issues using appropriate tools for effective troubleshooting.	- Junior Network Administrator - Datacenter Support Technician - Network Engineer - System Administrator - NOC Technician - Telecommunications Technician - Cable Technician	Questions: Max 90 Length: 90 minutes



- Identify various types of threats, attacks, and vulnerabilities, including malware, social engineering, and application attacks. Utilize security technologies and tools, such as firewalls, intrusion detection systems, and endpoint security, to protect systems.
- Design secure network architectures, implement secure systems, and apply secure protocols for architecture and design.
- Manage identity and access concepts, including authentication, authorization, and accounting, to ensure secure access control.
- Assess and manage risk through risk analysis, mitigation strategies, and business continuity planning.
- Apply cryptography concepts, including encryption algorithms, public key infrastructure (PKI), and digital signatures, to secure data.

- Security Specialist
- Security Administrator
- Systems Administrator
- Help Desk Analyst
- Security Analyst
- Security Engineer

Questions: Max 90
Length: 90 minutes

Professional Certifications



- Implement compliance and operational security measures, including security policies, procedures, and best practices.
- Understand the properties of a project, including phases, schedules, roles and responsibilities, cost controls, and the fundamental aspects of agile methodology.
- Analyze the impact of various constraint variables and influences throughout a project while applying risk strategies and activities.
- Implement appropriate communication methods and change control processes within the context of a project.
- Utilize various project management tools and create project and partnercentric documentation to support project success.

- IT Support Manager
- Project Coordinator
- Business Analyst
- IT Project Manager
- IT Manager

Questions: Max 90 each
Length: 90 minutes each

Infrastructure Career Pathway Certifications



- Configure and manage Linux systems, storage, networks, and services in cloud and hybrid environments.
- Apply best practices including permissions, authentication, firewalls, and system hardening.
- Automate administration tasks and streamline operations with shell scripting, Python, and configuration management tools.
- Deploy, maintain, and monitor containers and virtual machines using leading technologies.
- Troubleshoot system, network, security, and application issues to ensure uptime and reliability for business operations.

- Linux Administrator
- Junior Cloud Engineer
- Junior DevOps Support Engineer
- Technical Support Specialist
- Systems Administrator
- Network Administrator
- Web Administrator/Developer
- Cybersecurity Engineer

Questions: Max 90 each
Length: 90 minutes each

CERTIFICATION	COMPETENCIES	JOB ROLES	TEST INFO
	- Install physical hardware, configure storage solutions, and perform hardware maintenance for server hardware installation and management. - Manage server operating systems, configure network services, implement high availability, and utilize virtualization technologies for effective server administration. - Apply server hardening techniques, implement data security measures, and develop disaster recovery and backup strategies to enhance security and disaster recovery. - Diagnose and resolve issues related to hardware, software, connectivity, storage, and security through effective troubleshooting.	- Systems Administrator - Data Center Technician - Server Administrator - Network Administrator - Field Service Technician or Engineer - IT Technician - Data Center	Questions: Max 90 Length: 90 minutes
	- Analyze cloud models and design solutions to meet business requirements for effective cloud architecture. - Execute workload migrations, implement infrastructure as code (IaC), and provision cloud resources to support deployment. - Manage and optimize cloud environments by scaling, performing backups, and ensuring recovery operations. - Implement security measures, address vulnerabilities, and ensure compliance with standards like PCI DSS and ISO 27001. - Apply DevOps fundamentals, including source control, CI/CD pipelines, automation, system integration, and DevOps tools. - Diagnose and resolve deployment, network, and security issues to troubleshoot cloud environments effectively.	- Sr. Systems Administrator - Systems Engineer - Cloud Engineer - Sr. Network Administrator - Sr. Network Engineer - Cloud Specialist - Cloud Project Manager	Questions: Max 90 each Length: 90 minutes each
	- Analyze business requirements to design and configure secure network architecture for on-premises and cloud environments - Analyze requirements to design for network security, availability, Zero Trust, and identify and access management technologies - Apply and configure concepts and tools related to network monitoring and performance, automation, and scripting - Troubleshoot network issues related to connectivity, performance, access, and security - Perform network operation and maintenance	- • Network Operations Specialist - • Enterprise Architect - • Security Architect - • Infrastructure Architect - • Cloud Architect - • Systems Architect - • Linux Engineer	Questions: Max 90 each Length: 165 minutes each

CERTIFICATION	COMPETENCIES	JOB ROLES	TEST INFO
Cybersecurity Career Pathway 	- Plan and scope penetration tests while ensuring compliance with legal and ethical requirements, and develop detailed reports with remediation recommendations to support engagement management. - Perform active and passive reconnaissance, gather information, and enumerate systems to uncover vulnerabilities effectively. - Conduct vulnerability scans, analyze results, and validate findings to identify and address security weaknesses. - Execute network, host-based, web application, and cloud-based attacks using appropriate tools and techniques to test system defenses. - Maintain persistence, perform lateral movement, and document findings to support remediation efforts during post-exploitation activities	- Penetration Tester - Security Consultant - Cloud Penetration Tester - Web App Penetration Tester - Cloud Security Specialist - Network & Security Specialist - Information Security Engineer - Security Analyst	Questions: Max 85 Length: 165 minutes
	- Enhance security operations processes, differentiate threat intelligence and threat hunting, and identify malicious activity using appropriate tools. - Conduct vulnerability assessments, prioritize vulnerabilities, and recommend effective mitigation strategies for vulnerability management. - Apply attack methodology frameworks, perform incident response, and understand the incident management lifecycle to handle security incidents effectively. - Utilize communication best practices to report on vulnerability management and incident response, providing stakeholders with actionable plans and meaningful metrics.	- Security Analyst - Threat Intelligence Analyst - Security Engineer - Application Security Analyst - Compliance Analyst - Threat Hunter	Questions: Max 85 each Length: 165 minutes each
	- Design, implement, and integrate secure solutions across complex environments to support a resilient enterprise in security architecture and engineering. - Use automation, monitoring, detection, and incident response to proactively support ongoing security operations. - Apply security practices to cloud, on-premises, and hybrid environments to ensure enterprise-wide protection. - Utilize cryptographic technologies and techniques while evaluating the impact of emerging trends, such as artificial intelligence, on information security. - Implement governance, compliance, risk management, and threat modeling strategies across the enterprise. - Validate advanced, hands-on skills in security architecture and senior security engineering within live environments.	- Cybersecurity Architect - Information Security Architect - Cybersecurity Manager - Security Operations Center (SOC) Manager - Cybersecurity Engineer - Network Security Architect - Linux Engineer	Questions: Max 90 each Length: 165 minutes each

CERTIFICATION	COMPETENCIES	JOB ROLES	TEST INFO
Data Pathway 	- Build a foundation in modern data concepts so you can confidently navigate analytics tools and data sources in any organization. - Transform, clean, and organize raw data to make it reliable and useful for analysis. - Apply statistical methods to extract trends, uncover insights, and support business decisions. - Use data visualizations and dashboards to translate complex results into presentations anyone can understand. - Maintain data quality, ensure compliance, and protect sensitive information in alignment with industry standards. - Solve data problems, validate reports, and resolve analytics issues as they arise on the job.	- Data Analyst - Data Specialist - Business Analyst - Business Intelligence (BI) Analyst - Reporting Analyst - Sales and Marketing Data Analyst	Questions: Max 90 Length: 90 minutes
	- Understand database structure types and develop, modify, and run SQL code to gather, store, and manage data assets across various operating systems. - Plan and design databases, implement and test systems, and optimize data deployment processes for effective database deployment. - Monitor and report on database performance, perform maintenance tasks and create critical documentation to support database management and maintenance. - Secure databases, protect against attacks, manage authorization, and ensure governance and regulatory compliance to enhance data and database security. - Prepare for and recover from incidents by implementing disaster recovery, backup, and restoration best practices for database management systems.	- Database Administrator - Database Developer - SQL Database Administrator - Database Analyst - Data Center - Technician - Data Warehouse - Specialist	Questions: Max 90 each Length: 90 minutes each
	- Apply mathematical and statistical methods appropriately, including data processing, cleaning, statistical modeling, linear algebra, and calculus concepts. - Utilize appropriate analysis and modeling methods to make justified model recommendations for modeling, analysis, and outcomes. - Implement machine learning models and understand deep learning concepts to advance data science capabilities. - Implement data science operations and processes effectively to support organizational goals. - Demonstrate an understanding of industry trends and specialized applications of data science in various fields.	- Data Scientist - Quantitative Analyst - Machine Learning Engineer/Specialist - Predictive Analyst - Artificial Intelligence (AI) Engineer	Questions: Max 90 each Length: 165 minutes each