CompTIA Network Systems Professional (CNSP)
(NFQ Level 6: Diploma in Advanced Network Systems)
(CompTIA A+, Network+, Linux+)

Course Overview

As all commercial sectors, state agencies and academic enterprises are moving towards the digitization of their systems, there is an increasing need for professionals who can networks and provide appropriate information technology (IT) support for their customers. The CompTIA A+ is designed to ensure a basic understanding of hardware, networking, and computer systems, as well as the relevant operational skills. It also provides a platform for developing the next level of skills, such as Network+. Troubleshooting and the maintainenance of computer systems, and networks which are key factors for IT operations. The CompTIA Network+ delivers a fundamental understanding of networking from Local Area Network (LAN) management, and Internet Protocol (IP) tasks for performing hardware-software maintenance of Networks following the best security practices. The CompTIA Linux+ certification ensures capacity development for successful installation, configuration, and maintenance of Linux systems, monitoring systems performance in compliance with security standards as well as resolving problems associated with the operating system's servers, hardware, applications, and software.

Upon completion of A+, Network+ and Linux+ courses, which provide the knowledge required for managing the flow and the optimization of day-to-day workplace activities based on different requirements, students will receive stackable certification form CompTIA, to become a network systems professional. This includes a certificate of completion at NFQ Level 6 equivalent to the IT professional credential from PCD. The learning materials provided will allow students to study for and pass all of CompTIA A+, Network+ and Linux+ exams, leading to their designation as a Linux and Network Infrastructure Professional.

Course format

The two components making up this course are:
- CompTIA A+ 220-1001 (Core 1) and 220-1002 (Core 2)
- CompTIA Network+ (N10-007)
- CompTIA Linux+ (XK0-004)

This course is designed not only for beginners who are seeking foundational knowledge for reaching professional level (NFQ Level 6 equivalent) but also for intermediate learners intending to progress to the next level of qualification from PCD and advanced certification courses from CompTIA, such as CompTIA Cloud Admin Professional (CCAP) and CompTIA Linux Network Professional (CLNP).

The course will be delivered as either Face-to-Face (in-classroom) or through a Virtual Classroom (instructor-led, real time) format and/or a Blended Learning environment. In addition to classes and hands-on training, course material/handouts will be accessible to students for further study either as hard copy (charge may apply) and/or online (Virtuline Hub). In addition, several sample tests, practical exercises/lab work, guided and self-paced study sessions, online problem-solving exercises etc. will be arranged by the instructor to assist in exam preparation and final certification as an Linux and Network Infrastructure Professional.

Entry level

The course is designed for students, professionals, and avid learners having 0 to 2 years of experience in the field of IT. Students completed NFQ Level 5 at PCD can carry over their credentials to take remaining courses to get Level 6 equivalent qualification.

Modules

CompTIA A+

Module 1: CompTIA A+ Hardware
Module 2: CompTIA A+ Networking
Module 3: CompTIA A+ Mobile Devices
Module 4: CompTIA A+ Hardware and Network Troubleshooting
Module 5: CompTIA A+ Windows Operating Systems
Module 6: CompTIA A+ Other Operating Systems and Technologies
Module 7: CompTIA A+ Security
Module 8: CompTIA A+ Software Troubleshooting
Module 9: CompTIA A+ Operational Procedures

CompTIA Network +

Module 1 / CompTIA Network+ Local Area Networks
Module 2 / CompTIA Network+ IP Addressing
Module 3 / CompTIA Network+ Internetworking
Module 4 / CompTIA Network+ Applications and Security
Module 5 / CompTIA Network+ Operations and Infrastructure

CompTIA Linux +

Module 1: CompTIA Linux+ Instructions
Module 2: CompTIA Linux+ Managing Software
Module 3: CompTIA Linux+ Configuring Hardware
Module 4: CompTIA Linux+ Managing Files
Module 5: CompTIA Linux+ Booting Files
Module 6: CompTIA Linux+ X
Module 7: CompTIA Linux+ Admin
Module 8: CompTIA Linux+ Basic Networking
Module 9: CompTIA Linux+ Scripts
Module 10: CompTIA Linux+ Security

Learning outcomes

This Level 6 diploma will enable students to gain in-depth understanding of the major networking technologies and systems associated with modern networks, and how to configure, manage, and troubleshoot these networks with the help of Linux. This includes how to**:**

- Demonstrate baseline security skills for IT support professionals.
- Configure device operating systems, including Windows, Mac, Linux, Chrome OS, Android and iOS and administer client-based as well as cloud-based (SaaS) software.
- Troubleshoot and problem solve core service and support challenges while applying best practices for documentation, change management, and scripting.
- Support basic IT infrastructure and networking.
- Configure and support PC, mobile and IoT device hardware.
- Implement basic data backup and recovery methods and apply data storage and management best practices.
- Identify basic network theory concepts and major network communications methods.
- Describe bounded network media.
- Identify unbounded network media and the major types of network implementations.
- Identify TCP/IP addressing, and data delivery methods and the major services deployed on TCP/IP networks, and implementation of routing technologies.
- Identify the infrastructure of a WAN implementation.
- Identify the components used in cloud computing and virtualization.
- Describe basic concepts related to network security, prevention of security breaches, and responding to security incidents.
- Identify the components of a remote network implementation, the tools, methods, and techniques used in managing a network.
- Describe troubleshooting of issues on a network.
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- Identify the tools, methods, and techniques used in managing a network.
- Describe troubleshooting of issues on a network.

Job Opportunities

- Field Service Technician.
- Help Desk Technician.
- IT Specialist.

- Technical Support Specialist.
- IT Support Manager.
- Junior Network Administrator.
- Junior Systems Engineer.
- Network Support Specialist.
- Systems Analyst.
- Tier I and/or Tier II Support Specialist.
- Linux Database Administrator.
- Junior Linux Administrator.
- Web Administrator.
- Network Infrastructure Engineer

Credentials

Upon completion of A+, Network+ and Linux+ exams, CompTIA will issue digital certification badge(s) from Credly and grant the respective stackable certification(s) automatically via certmetrics. Students will have global recognition as a Linux and Network Infrastructure Professional and will obtain a course completion certificate from PCD with an Irish NFQ 6 equivalent credential. Besides they will also obtain the following stackable certifications from CompTIA:

- CompTIA IT Operations Specialist
- CompTIA Systems Support Specialist
- CompTIA Linux Network Professional

The CompTIA credentials will not only make students workplace ready but also facilitate further progress by allowing students to take other advanced courses such as CompTIA Security+, Cloud+ and Server+, enabling to become a relevant professional and expert. Besides, students will have an opportunity to carry over credentials to complete NFQ Level 7 (Advanced Diploma/Graduation degree) at PCD.

Course duration

Standard: 12 months (Flexible: weekdays/weekends; mornings/afternoons/evenings)
Intensive: 1-2 weeks in each 3-month period to complete by 12 months.

- A senister-wise class routine will be available a month before starting the classes.
- A minimum number of students' enrolment is required to start the course.