IT - NETWORKING AND SYSTEM ADMINISTRATION (150)

150-107 - IT Fundamentals 1
Investigates and applies concepts, terminology, software, hardware and theory expected of information technology learners. Focuses on gaining entry level concepts and terminology for the information technology field. (Prerequisite: Completion of or concurrent enrollment in 890-101 College 101) Credit for Prior Learning Available
3 Credit hours
54 Lecture hours

150-108 - IT Fundamentals 2
Investigates and applies advanced concepts, terminology, software, hardware and theory expected of information technology learners. Focuses on gaining advanced concepts and terminology for the information technology field. (Prerequisite: Completion of or concurrent enrollment in 150-107 IT Fundamentals 1) Credit for Prior Learning Available
3 Credit hours
54 Lecture hours

150-110 - Cloud Computing
Administration and configuration of open cloud platforms. Students learn to deploy and manage applications across a global network of managed datacenters. Focus will be on Software as a Service (SaaS). (Prerequisite: 150-191 Principles of Information Security or 150-192 Network Security Fundamentals)
3 Credit hours
36 Lecture hours
36 Lab hours

150-115 - Emerging Innovations in Technology
Provides opportunities to explore emerging technologies. Emphasizes identifying, researching, and presenting current technological topics and explores important issues currently affecting the field of organizational computer systems and related emerging information technologies. (Prerequisite: 150-191 Principles of Information Security or 150-192 Network Security Fundamentals or 154-117 Computer Hardware Support)
3 Credit hours
36 Lecture hours
36 Lab hours

150-120 - Microsoft Servers
Covers the user interface, installation, administration and troubleshooting of Microsoft server operating systems from the viewpoint of the support person. Students compare and contrast among Microsoft server network operating systems. (Prerequisite: 150-108 IT Fundamentals 2)
3 Credit hours
36 Lecture hours
36 Lab hours

150-122 - Virtualization
This hands-on training course explores the installation, configuration, and management of the components of VMware® and Microsoft. Students will learn to deploy virtual machines, perform live migrations, and implement full virtualization hypervisors. (Prerequisite: Completion of or concurrent enrollment in 150-120 Microsoft Servers)
3 Credit hours
36 Lecture hours
36 Lab hours

150-126 - Internet of Things
Explores the importance of the Internet of Things (IoT) in society, the current components of IoT devices, Industrial IoT, and trends for the future. Students will gain proficiency in key components of networking to ensure connectivity of IoT devices to the Internet. (Prerequisite: Completion of or concurrent enrollment in 150-110 Cloud Computing)
3 Credit hours
36 Lecture hours
36 Lab hours

150-130 - IT Administration
Presents overview of management, network analysis, help desk, and upgrade aspects of IT administration. Students research security standards for Internet presence, mainframe, networks, firewall configuration and design, and they conduct security reviews for compliance. Using a fictitious company, students budget, staff and establish policies from an administration viewpoint. This class is the exit assessment for IT-Network Support Specialist. (Prerequisite: Completion of or concurrent enrollment in 150-115 Emerging Innovations in Technology)
3 Credit hours
54 Lecture hours

150-141 - Computer Network Installation
Students design a structured cabling system for a computer network, install peer-to-peer computer networks, implement client-server computer networks, and provide wireless connectivity for a computer network. (Prerequisite: 150-120 Microsoft Servers)
3 Credit hours
36 Lecture hours
36 Lab hours

150-143 - Linux Network Administration
Examines specifically how to perform network administration tasks for a Linux network operating system. Students have extensive hands-on practice carrying out administration tasks on a Linux server network. Students will also spend time securing Linux systems, installing software, and working in the BASH shell. (Prerequisite:150-108 IT Fundamentals 2)
3 Credit hours
36 Lecture hours
36 Lab hours

150-191 - Principles of Information Security
Develops security policies and strategies after exploring the concept of trustworthy computing and the important role that security plays with respect to people, processes and technologies in an organization. Course is structured around three phases of network security: planning, building and managing network security policies.
3 Credit hours
36 Lecture hours
36 Lab hours

150-192 - Network Security Fundamentals
Provides a detailed overview of the fundamentals of network security. Covers security topology, intrusion detection, firewalls, routers and their configuration, access lists, authentication and encryption, in addition to reviewing the different methods of attacks such as viruses, Trojan horses and worms. Also covers wireless technology security. The structure of the course assumes students have a solid understanding of LAN/WAN fundamentals. (Prerequisite: 150-191 Principles of Information Security)
3 Credit hours
36 Lecture hours
36 Lab hours

150-193 - Network Attacks and Firewalls
Students are introduced to the methods used to attack networks and likewise the protection mechanisms used by organizations to thwart those attacks. The course utilizes the Check Point Secure Academy courseware to give students the ability to experience installation, configuration and management of Check Point Security solutions, as well as exploring case studying the history and approaches used to compromise networks. (Prerequisite: 150-192 Network Security Fundamentals)
3 Credit hours
36 Lecture hours
36 Lab hours

150-194 - Network Defense and Countermeasures
As a continuation of Network Attacks and Firewalls (150-193), students are introduced to the methods used to attack networks and likewise the protection mechanisms used by organizations to thwart those attacks. The course utilizes the Check Point Secure Academy courseware to give students the ability to experience installation, configuration and management of Check Point Security solutions, as wells as exploring case studying the history and approaches used to compromise networks. (Prerequisite: 150-193 Network Attacks and Firewalls)
3 Credit hours
36 Lecture hours
36 Lab hours