# Networking Technology Systems (NTS)

# Courses

## NTS 104 CCNA1: Introduction to Networks

Credits: 3 Term: (F)

Prerequisite or Corequisite: CSCI 105 or consent of instructor Introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

#### NTS 105 CCNA2: Routing and Switching

Credits: 3 Term: (F)

Prerequisite OR Corequisite: NTS 104

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

## NTS 206 CCNA 3: Enterprise Networking Security and Automation

Credits: 3 Term: (S)

Prerequisite: NTS 105

This course describes architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. It covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used to secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks.

#### NTS 210 CCNP Enterprise: Core Networking 1

Credits: 4 Term: (F)

Prerequisite: NTS 206

This course covers switching, routing, wireless, and related security topics, along with the technologies that support software-defined programmable networks.

# NTS 211 CCNP Enterprise: Core Networking 2

Credits: 4 Term: (F)

Prerequisite OR Corequisite: NTS 210

This is the second CCNP course which prepares students for the concentration exam Implementing Cisco Enterprise Advanced Routing and Services (300-410 ENARSI) to complete CCNP Enterprise certification.

## NTS 212 CCNP: Enterprise Advanced Services and Routing 1

Credits: 4 Term: (S)

Prerequisite: NTS 211

This is the first of two courses covering advanced administration of Cisco's Enterprise Networking Services. Students will learn troubleshooting of advanced routing technologies and services including Layer 3, VPN services, infrastructure security, infrastructure services, and infrastructure automation. Tis course prepares students for the Cisco Enterprise Advanced Routing and Services v1.0 (ENARSI 300-410) exam.

#### NTS 213 CCNP: Enterprise Advanced Services and Routing 2

Credits: 4 Term: (S)

Prerequisite OR Corequisite: NTS 212

This is the second of two CCNP Enterprise courses which prepare students for the "Implementing Cisco Enterprise Advanced Routing and Services (300-410 ENARSI)" CCNP Enterprise certification exam.