

**AAS Computer Information Technology**  
Concentrations: Networking  
(Formerly AAS Computer Networking Technology - CNT)

CITC 1302

Introduction to Networking (*formerly CNT 1005 – Intro to Computer Networks*)

Credit hours: 3                      Contact Hours: 3 Lecture

Course Description:

A broad-based course that provides an overview of computer networking. Topics will include network models, protocols and services, media and topologies, devices and tools, network management, and network security. This course may align with the outcomes of industry certification.

Prerequisite Course: None

Semester Availability: Fall, Spring

CITC 1323

CCNA I (*formerly CNT 1060 – Cisco Routers I*)

Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

Course Description:

Introduction to Networks is the first of two courses leading to the Cisco Certified Entry Networking Technician (CCENT) designation and is the first of four courses leading to the Cisco Certified Network Associate (CCNA R&S) designation. This course introduces Networking Academy students to the networking field. Topics include Network terminology, Network protocols, Local-area networks (LANs), Wide-area networks (WANs), Open System Interconnection (OSI) model, Cabling, Routers, Internet Protocol (IP) addressing, and Network standards.

Prerequisite Course: None

Semester Availability: Fall, Spring

CITC 1324

CCNA II (*formerly CNT 1160 Cisco Routers II*)

Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

Course Description:

Routing and Switching Essentials is the second of two courses leading to the Cisco Certified Entry Networking Technician (CCENT) designation and is the second of four courses leading to the Cisco Certified Network Associate (CCNA R&S) designation. This course focuses on the following: basic routing and switching concepts, Virtual LANs (VLANs), Inter-VLAN routing, static routing and dynamic routing protocols, Single-Area OSPF, Access Control Lists (ACLs), Dynamic Host Configuration Protocol (DHCP) and Network Address Translation (NAT).

Prerequisite Course: CITC 1323

Semester Availability: Fall, Spring

CITC 1325

Applied Networking Fundamentals (*formerly CNT 2110 Applied Networking Fundamentals*)

Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

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**Course Description:**

First of two courses developed to prepare students to solve real world networking problems. Topics include the review of DOS concepts and commands as well as a variety of other operating systems, installing, configuring, maintaining, and troubleshooting Ethernet networks using virtualization and building servers and workstations using various operating systems.

Prerequisite Course: CITC 1324, CITC 2320  
Semester Availability: Fall, Spring

**CITC 1330**

Microsoft Desktop OPER Sys (*formerly CNT 1170 Microsoft Professional OS*)  
Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

**Course Description:**

Microsoft Desktop Operating Systems is designed to provide students with the knowledge and skills necessary to install, manage and troubleshoot computers running current Microsoft desktop operating systems. Upon successfully completing this course, the student will be academically prepared for a current core Microsoft desktop operating system exam.

Prerequisite Course: None  
Semester Availability: Fall, Spring

**CITC 2320**

Windows Server Administration (*formerly CNT 2350 Install/Config Windows Server*)  
Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

**Course Description:**

Using the Microsoft Windows Server network operating systems, students will learn to install, configure, administer, maintain, and troubleshoot networked computer system servers.

Prerequisite Course: CITC 1330  
Semester Availability: Fall, Spring

**CITC 2321**

CCNA III (*formerly CNT 2410 – Cisco Routers III*)  
Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

**Course Description:**

Scaling Networks is the third of four courses leading to the Cisco Certified Network Associate (CCNA) designation. This course focuses on Hierarchical Network Design, LAN Redundancy, Spanning Tree Protocol (STP), FHRP & HSRP redundancy protocols, Link redundancy with EtherChannel, Wireless LANs, Advanced Single-Area OSPF, Multi-Area OSPF, Cisco's dynamic routing protocol EIGRP, IOS Images and Licensing. Students will be required to apply information from both CCNA I and II to network situations.

Prerequisite Course: CITC 1324

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Semester Availability: Fall, Spring

CITC 2322

CCNA IV (*formerly CNT 2420 – Cisco Routers IV*)

Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

Course Description:

Connecting Networks is the last of four courses leading to the Cisco Certified Network Associate (CCNA) designation. This course focuses on Hierarchical Network Design, WAN Technologies/Terminology/Devices, Point-to-Point Protocol (PPP), Frame Relay, Network Address Translation (NAT), Broadband solutions, Securing Site-to-Site connections with VPN/GRE/IPSec, and Network Management including NTP, SYSLOG, SNMP, and NetFlow. Students will be required to apply information from CCNA I, II, and III to network situations.

Prerequisite Course: CITC 2321

Semester Availability: Fall, Spring

CITC 2323

Microsoft Network infrastructure (*formerly CNT 2370 – Administering Windows Server*)

Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

Course Description:

This course is designed to teach the basic skills required to install, support, and troubleshoot the various Microsoft Windows Server networking components and services, including DNS, DHCP, Remote Access, WINS, and NAT.

Prerequisite Course: CITC 2320

Semester Availability: Fall, Spring

CITC 2326

Network Security (*formerly CNT2450 – Network Security*)

Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

Course Description:

This course is designed to give students a fundamental understanding of computer and network security. It will introduce students to a wide variety of concepts related to computer security. This course will cover the objectives for the CompTIA Security+ Certification.

Prerequisite Course: CITC 1330

Semester Availability: Fall, Spring

CITC 2339

Configuring Advanced Services (*formerly CNT 2380 – Configuring Advanced Services*)

Credit hours: 3                      Contact Hours: 2 Lecture, 2 Lab

Course Description:

Designed to help enterprise administrators develop skills, this course focuses on advanced configuration of services necessary to deploy, manage and maintain a Windows Server

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infrastructure. Upon successfully completing this course, the student will be academically prepared for a current Microsoft core server operating system exam.

Prerequisite Course: CITC 2323  
Semester Availability: Fall, Spring

CITC 2390  
CIT Capstone (Networking) (*formerly CNT 2470 – CNT Capstone*)  
Credit hours: 3                      Contact Hours: 3 Lecture

**Course Description:**

This course is taken during the final semester and provides a comprehensive review of concepts taught in the CIT Networking Concentration program. A case study or project will be used in the application and reinforcement of principles. An exit exam will be administered as a means of assessing program outcomes.

Prerequisite Course: CITC 1320, CITC 1324, CITC 1325, CITC 1332, CITC 2323, CITC 2326  
Semester Availability: Fall, Spring