

# Computer & Networking Technology (CNT)

---

## Courses

### CNT A160 PC Operating Systems 3 Credits

Develops basic understanding of command line, desktop, and server operating systems. Includes computer programming, architecture, and hardware necessary to understand the operating system interactions.

### CNT A162 PC Architecture and Building 3 Credits

Develops skills required to evaluate, install and troubleshoot software and hardware computer equipment. Introduces architecture and hardware associated with microcomputer operation, including, but not limited to, motherboards, CPUs, chipsets, memory, buses, expansion slots and resource allocations.

### CNT A165 Customer Service Fundamentals 1 Credit

Introduces basic customer service principles, including relationships, perceptions, telephone techniques, quality, ethics, record keeping, interpersonal relationships, and teamwork.

### CNT A168 Computer User Support and Help Desk 3 Credits

Provides an overview of user support systems and help desk functions in an enterprise IT environment. Examines user support from the perspective of end users and develops skills for ethical customer service, critical thinking, troubleshooting and decision-making. Includes identifying typical problems and needs assessment for installation, training and documentation.

### CNT A170 CCNA 1 4 Credits

Covers the architecture, structure, functions and components of the Internet and other computer networks. Covers a basic understanding of how networks operate and how to build simple local area networks (LAN), perform basic configurations for routers and switches, and implement Internet Protocol (IP). The first of three Cisco Networking Academy courses covering the material for the Cisco Certified Networking Associate (CCNA) certification.

### CNT A180 PC Peripherals, Storage and A+ Certification 4 Credits

Covers PC operating systems, peripheral devices, auxiliary storage devices and the interfaces used to connect them to the personal computer. Also covers the fundamental topics necessary to prepare for the CompTIA A+ Certification exams.

### CNT A183 Local Area Networks 3 Credits

Presents the fundamentals of Local Area Networking, including topologies, protocols, computer and delivery hardware, Ethernet, network operating systems, LAN assessment, and other related software. Covers the fundamental networking topics necessary to prepare for the CompTIA Net+ Exam.

**Prerequisites:** CNT A162 with a minimum grade of D.

### CNT A210 PC Technician Fundamentals 3 Credits

Introduction to the principles of personal computer hardware/software maintenance and troubleshooting. The course is designed to give the student equivalent experience of a PC technician that has been working for six months.

**Prerequisites:** BADA A105 with a minimum grade of D.

### CNT A240 Industry PC Configuration Essentials 2 Credits

Introduces personal computer configuration essentials. Includes installation, configuration and support of personal computers in a mixed enterprise environment.

**Prerequisites:** CNT A170 with a minimum grade of C or CNT A183 with a minimum grade of C.

### CNT A241 Administering and Supporting Industry Network Infrastructure 3 Credits

Provides an introduction to network infrastructure in a mixed enterprise environment.

**Prerequisites:** CNT A240 with a minimum grade of C.

### CNT A242 Industry Network Directory Configuration 3 Credits

Provides an introduction for installing, configuring and deploying application services in an enterprise- networked environment.

**Prerequisites:** CNT A241 with a minimum grade of C.

### CNT A243 Industry Application Infrastructure 3 Credits

Provides an introduction for application support and deployment in an enterprise-networked environment.

**Prerequisites:** CNT A241 with a minimum grade of C or CNT A242 with a minimum grade of C.

### CNT A261 CCNA 2 4 Credits

Covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Demonstrates how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both IPv4 and IPv6 networks. The second of three Cisco Networking Academy courses covering the material for the Cisco Certified Networking Associate (CCNA) certification.

**Registration Restrictions:** Students may enroll concurrently with CNT A170 when offered in half-semester format, but must meet prerequisite grade in CNT A170 when CNT A261 begins.

**Prerequisites:** CNT A170 with a minimum grade of C or concurrent enrollment.

### CNT A262 Computer Technical Support 2 Credits

Develops skills necessary for evaluating and implementing various technical support functions, including hardware and software needs assessments, training development, preventive maintenance, and effective communication and documentation.

**Prerequisites:** CNT A165 with a minimum grade of D.

### CNT A264 Introduction to Information Security 3 Credits

Provides students with an understanding of the core concepts that relate to the practice of network security. This course will help prepare students for the CompTIA Security+ exam.

**Prerequisites:** CNT A261 with a minimum grade of D.

**CNT A270 CCNA 3 4 Credits**

Describes the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. Emphasizes network security concepts and introduces network virtualization and automation. Demonstrates how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation. The final of three Cisco Networking Academy courses covering the material for the Cisco Certified Networking Associate (CCNA) certification.

**Registration Restrictions:** Students may enroll concurrently with CNT A261 when offered in half-semester format, but must meet prerequisite grade in CNT A261 when CNT A270 begins.

**Prerequisites:** CNT A261 with a minimum grade of C or concurrent enrollment.

**CNT A271 CCNA 4 4 Credits**

This is the fourth of four Cisco Networking Academy courses covering the material for the Cisco Certified Networking Associate (CCNA) Routing and Switching certification. Discusses, configures and troubleshoots the WAN technologies and network services required by converged applications in a complex network.

**Registration Restrictions:** Students may enroll concurrently with CNT A270 when offered in half-semester format, but must meet prerequisite grade in CNT A270 when CNT A271 begins.

**Prerequisites:** CNT A270 with a minimum grade of C or concurrent enrollment.

**CNT A275 Information Technology Project Management 2 Credits**

Introduces Information Technology (IT) project management fundamentals. Develops skills required to work with stakeholders and IT processes. Includes skills in leadership and team participation. Covers IT project planning, design, team skills, proposals, implementation, reporting and completion.

**Registration Restrictions:** Satisfactory completion of 12 CNT credit hours with a minimum grade of C.

**Prerequisites:** WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A2W with a minimum grade of C.

**CNT A276 Individual Technical Project 1-3 Credits**

Covers development, implementation, and completion of a project based on a relevant technological issue. Student works closely with faculty to produce an end product and report.

**Special Note:** Faculty permission and working knowledge of CNT topics required.

**Prerequisites:** CNT A261 with a minimum grade of D.

**CNT A280 Server Operating Systems 3 Credits**

Develops server operating system basics. Includes installation, troubleshooting, creation and administration of user accounts and resources, and remote and internet accounts.

**Special Note:** A CompTIA Network + Certificate may be substituted for the CNT A183 prerequisite, with department approval.

**Prerequisites:** CNT A183 with a minimum grade of D and CNT A261 with a minimum grade of D.

**CNT A282 Industry Workplace Experience 1-3 Credits**

Provides supervised workplace experience in industry settings. Integrates advanced-level knowledge and practice to demonstrate skill competencies.

**Special Note:** Requires instructor permission and successful completion of 12 credits in the CSNT program.

**Registration Restrictions:** Faculty permission.

**CNT A290 Selected Topics in Information Technology 1-4 Credits**

Covers various intermediate to advanced topics in information technology.

**Special Note:** Prerequisites vary by topic. May be repeated with a change in subtitle.

**CNT A390 Selected Topics in Computer and Networking Technology 1-4 Credits**

Offers selected topics in computers and networking pertaining to state-of-the-art technology and trends. Course content is determined by current trends, new technologies, and student and employer needs.

**Special Note:** Prerequisites vary by topic. May be repeated with a change in subtitle.