

# INFORMATION TECHNOLOGY - NETWORKING SOFTWARE (ITNT)

## ITNT-2300 Networking Fundamentals 3 Credits

Survey course into the fundamental topics and concepts of networks and network technologies. Topics include introductory content on networking standards, models and protocols, networking hardware, transmission methods and media, LANs, WANs, Wireless, VOIP, security, and network management issues. Serves as a preparation basis for the CompTIA Network+ exam.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): EET-1241 Digital Fundamentals, or concurrent enrollment; or IT-1025 Information Technology Concepts for Programmers, or concurrent enrollment; or departmental approval.*

*OAN Approved: Transfer Assurance Guide OIT002. CTAN Approved: Career Technical Assurance Guide CTIT002.*

## ITNT-2310 TCP/IP 3 Credits

Provides knowledge and skills required to setup, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP). Emphasis on Microsoft Windows operating system.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): ITNT-2300 Network Fundamentals or concurrent enrollment, or departmental approval: equivalent knowledge or skills.*

## ITNT-2320 Network Administration I 3 Credits

Introduction to knowledge and skills necessary to perform installation, configuration, and day-to-day administration tasks in a Microsoft Windows-based network. Includes how to install the server operating system, manage local and remote access, manage file and printer services, implement group policies, and manage server storage.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): ITNT-2300 Network Fundamentals or concurrent enrollment, or departmental approval: equivalent knowledge or skills.*

*OAN Approved: Transfer Assurance Guide OIT004. CTAN Approved: Career Technical Assurance Guide CTIT013.*

## ITNT-2370 Network Security Fundamentals 3 Credits

A survey examination of network security fundamentals involved in creating and managing secure computer network environments. Both hardware and software topics are considered, including authentication methods, remote access, network security architectures and devices, cryptography, forensics, and disaster recovery plans. Serves as preparation basis for CompTIA Security+ exam.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): ITNT-2300 Networking Fundamentals. CTAN Approved: Career Technical Assurance Guide CTIT015 and Industry-Recognized Transfer Assurance Guide ITITS015.*

## ITNT-2380 Linux Administration 3 Credits

Linux is used as a platform for many server applications including the dominant Web server. Cost and licensing advantages have made it a network operating system that is in widespread use. The essentials of installing, configuring, maintaining, administering, and troubleshooting the Linux Operating System will be covered.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): ITNT-2300 Network Fundamentals or concurrent enrollment; or departmental approval: equivalent skills.*

## ITNT-2420 Network Administration II 3 Credits

Focus on designing, implementing, and supporting Windows Server network operating system in multiple-domain enterprise environment. Implementing directory services, analysis and optimization, and troubleshooting discussed.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): ITNT-2320 Network Administration I, or departmental approval: equivalent knowledge or skills.*

## ITNT-2814 Special topics: AWS Cloud Foundations 3 Credits

This course will provide students with a foundational knowledge in AWS Cloud Foundations. It's intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support. This course also covers all objectives necessary to pass the AWS Cloud Practitioner certification.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): IT-1025 Information Technology Concepts for Programmers, or concurrent enrollment, or departmental approval: equivalent knowledge or skills.*

## ITNT-2815 Cloud Computing Fundamentals 3 Credits

A vendor neutral course that introduces the student to cloud computing terms, definitions, techniques, benefits and risks, service providers, and system integration. This course serves as a preparatory tool for the CompTIA Cloud Essentials + certification exam.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): IT-1025 Information Technology Concepts for Programmers, or concurrent enrollment, or departmental approval.*

## ITNT-2816 Special Topics: Cloud and Azure Fundamentals 3 Credits

From Principles of Cloud Fundamentals, you learned the role of Cloud Fundamentals in the digital organization of the modern era. How can you apply this knowledge and build a Cloud and Azure Fundamentals? In this course, you will contextualize and apply the principles through the services offered by Amazon Web Services (AWS) and Azure and learn how to architect a firm using AWS and Azure.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): ITNT-2814 AWS Cloud Foundations, or concurrent enrollment, or departmental approval: equivalent knowledge or skills.*

**ITNT-2819 Special Topics: Azure Certifications AZ-900/AI900**

**3 Credits**

This course is designed to help students prepare for the Azure Certifications AZ-900/AI900. Even if you don't plan to take the exam, hands-on labs will help you gain a solid understanding of Azure's AZ/AI services. Including, general cloud concepts, and Microsoft Azure, starting with Azure architecture and services. Finally, cover Azure management and governance.

*Lecture: 2 hours. Laboratory: 2 hours*

*Prerequisite(s): ITNT-2300 Network Fundamentals, ITNT-2320 Network Administration I, and ITNT-2816 Cloud and Azure Fundamentals, or departmental approval: equivalent knowledge or skills.*

**ITNT-2820 Advanced Independent Study/Research in Networking Software**

**1-3 Credits**

Directed individual advanced study. Study/research title and specific content arranged between instructor and student (see Credit Schedule of classes for current offerings). May be repeated for a maximum of six credits of different topics.

*Lecture: 1-3 hours*

*Prerequisite(s): Departmental approval, and instructor approval, and ENG-0995 Applied College Literacies, or appropriate score on English Placement Test. or appropriate score on English Placement Test. Note: ENG-0990 Language Fundamentals II taken prior to Fall 2021 will also meet prerequisite requirements.*

**ITNT-2990 Networking Capstone**

**3 Credits**

Capstone course for Networking Hardware and Software degree programs. Focus is on career preparation, importance of soft skills, ethical considerations, and industry-recognized information technology certifications.

*Lecture: 3 hours*

*Prerequisite(s): To be taken within the last 15 credits of the IT (Networking Software) or the EET (Networking Hardware) degree programs, or departmental approval.*