

CTS Computer Networking and Technology (CNET) Courses Descriptions

CNET 145 COMPUTER SYSTEM MAINTENANCE - An introduction to the installation, configuration, and maintenance of microcomputer systems. Examination of the functions of the components within a computer system with emphasis on the evolution of microprocessors and microprocessor bus structures. Development of skills in the use of test equipment and maintenance aids. This course and CNET 156 aligns with the requirements of the Computing Technology Industry Association (CompTIA) A+ certification exam. Lab required. (2-1-3)

CNET 110 INTRODUCTION TO CYBERSECURITY - Explores the broad topic of cybersecurity in a way that matters to individuals. Learn how to protect your personal data and privacy online and in social media, and why more and more IT jobs require cybersecurity awareness and understanding. Upon completion of the course, students will learn what cybersecurity is and what it means for you personally and professionally, learn how to be safe online by understanding the most common threats, attacks and vulnerabilities and find out how businesses protect their operations from cyber-attacks and why jobs are growing. (3-0-3)

CNET 156 SUPPORTING CLIENT OPERATING SYSTEMS - This course provides an introduction to the fundamentals of personal computer and mobile device operating systems. Topics include software configuration, file and data management, synchronization, and troubleshooting. Cloud concepts and the integration of cloud services in the work environment are introduced. This course and CNET 145 aligns with the requirements of the Computing Technology Industry Association (CompTIA) A+ certification exam. Lab required. (2-1-3)

CNET 180 INTRODUCTION TO NETWORKING – This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the 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. Lab required. (2-2-4)

CNET 185 ROUTING AND SWITCHING ESSENTIALS – This course 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 virtual LANs and interVLAN routing in both IPv4 and IPv6 networks. Lab required. (2-2-4)

CNET 191 CNET PRACTICUM/COOPERATIVE EDUCATION I– A work-based instruction that provides basic or intermediate career exploration, which helps students gain practical experience in the discipline, enhance skills, and integrate knowledge under the supervision of the college and the employer. A practicum may be a paid or unpaid learning experience, and includes a lecture component. Requires departmental approval. (0-8-3)

CNET 220 CERTIFICATION REVIEW – Review of subjects commonly found on entry level industry network certification exams such as the Cisco and CompTIA ratings. (3-0-3)

CNET 130 CYBERSECURITY ESSENTIALS - The course focuses on security principles and technologies. Students learn to understand common security concepts, and deploy basic security

techniques utilizing a variety of popular security appliances within a “real-life” network infrastructure. Upon completion of the course, students will have the knowledge and skills to describe common network security concepts, secure routing and switching infrastructure, deploy basic authentication, authorization and accounting services and deploy basic. (2-1-3)