

CIS 100 COMPUTER LITERACY (3 or 5)

Introduction to the practical application of computers and communication technology. Includes the major components of computer systems, user interfaces, applications, networking, and societal issues surrounding computing, including ethics, privacy, security, and sustainability. (UEs)

CIS 105 COMPUTER OPERATING SYSTEMS I (5)

Introduces the fundamentals of computer operating systems including history, evolution and design, as well as support, maintenance and troubleshooting. Lab work included. Prerequisite: CIS 100 or CS 101 or permission of program coordinator. (UE)

CIS 106 OPEN SOURCE OPERATING SYSTEMS (5)

fundamental management of open source systems from the command line, user administration, file permissions, software configuration and management of clients. Prerequisite: CIS 105 with a "C" or better or permission of program coordinator. (UE)

CIS 110 INTRODUCTION TO COMPUTER SECURITY (3)

Basics of Computer Security, including identifying threats, planning for business continuity, and preparing for various security attacks. Prerequisite: CIS 105 with a "C" or better or permission of program coordinator. (UE)

CIS 205 COMPUTER OPERATING SYSTEMS II (5)

Advanced study of computer operating systems and platforms. Prerequisite: CIS 105 with a "C" or better or permission of program coordinator. (UE)

CIS 206 COMPUTER SUPPORT I (5)

In-depth study of computer components and their interrelationships. Lab period with hands-on experience in installation, upgrading, removal, configuration, and troubleshooting of software and hardware. Prerequisite: CIS 105 with a "C" or better or permission

of program coordinator. (UE)

CIS 207 COMPUTER SUPPORT II (5)

In-depth study of computer components and their interrelationships.

Lab period with hands-on experience

in installation, upgrading, removal, configuration, and troubleshooting of hardware and software on various platforms. Prerequisite: CIS 206 with a "C" or better or permission of program coordinator. (UE)

CIS 214 NETWORK SECURITY I (5)

Network security fundamentals including defining a security policy, attack methods, intrusion detection, firewalls, identifying risks, and securing networks. Prerequisite: CIS 106, CIS 110 and CIS 226 with a "C" or better or permission of program coordinator. (UE)

CIS 215 NETWORK SECURITY II (5)

This course is a continuation of Network Security I, with added emphasis on defense in depth. Prerequisite: CIS 214 with a "C" or better. (UE)

CIS 217 ADVANCED NETWORKING TOPICS (5)

Current topics in networking. Prerequisite: CIS 208 with a "C" or better. (UE)

CIS 225 COMPUTER FORENSICS (5)

Computer forensics and investigations. Topics include forensic tools, computer forensic analysis, investigations and preparing written reports. Prerequisite: CIS 105 and 206 with a "C" or better or permission of program coordinator. (UE)

CIS 226 CISCO NETWORKING I (5)

First in the four quarter networking sequence. Fundamentals of networking including introduction to the OSI and TCP/IP network models, including IP addressing and sub-netting. Topics include network design, topologies, protocols, wiring and network devices. Prerequisite CIS 105 with a "C" or better or permission of program coordinator. (UE)

CIS 227 CISCO NETWORKING II (5)

Continuation of four quarter networking sequence. Topics include routing protocols and concepts including static and dynamic routing. Students will gain hands on experience in the lab configuring and troubleshooting multiple routing protocols, including OSPF. Prerequisite: CIS 226. (UE)

CIS 228 CISCO NETWORKING III (5)

Topics include LAN Switching and wireless communication, configuring, verifying, and troubleshooting VLANs, inter-VLAN routing, VTP, and trunking on Cisco switches. Students will learn to configure wireless networks and common implementation issues. Students will gain hands on experience in the lab. Prerequisite: CIS 227. (UE)

CIS 229 CISCO NETWORKING IV (5)

Topics include voice and video over IP and WAN technologies including PPP, Frame Relay, and broadband links. WAN security concepts are discussed in detail, including types of threats, how to analyze network vulnerabilities, and general methods for mitigating common security threats. Prerequisite: CIS 228. (UE)

CIS 230 COMPUTER NETWORKING IV (5)

Topics covered include advanced routing and remote access. Part of the Cisco certified network professional program. Prerequisite: CIS 213 with a "C" or better.