COURSES

COMPUTER INFORMATION TECHNOLOGY COURSES

CIT 011   Introduction to Computer Hardware and Software (A+) (3.0 Lecture/1.0 Lab)   4.0 UNITS
This course covers the fundamentals of computer hardware and software and advanced concepts such as security, networking, mobile devices such as tablets and smartphones, client-side virtualization, and the responsibilities of an IT professional. It helps students prepare for entry-level career opportunities in ICT and the CompTIA A+ certification. It also provides a learning pathway to Cisco CCNA. Hands-on lab activities are an essential element of the course. The Virtual Laptop and Virtual Desktop are stand-alone tools designed to supplement classroom learning and provide an interactive "hands-on" experience in learning environments with limited physical equipment. The use of Packet Tracer supports alignment with the new CompTIA A+ certification objectives. C-ID # ITIS 110.

CIT 012   Introduction to Networking (3.0 Lecture/1.0 Lab)   4.0 UNITS
This course introduces the fundamental building blocks that form the modern network, such as protocols, media, topologies and hardware. It then provides in-depth coverage of the most important concepts in contemporary networking, such as TCP/IP, Ethernet, wireless transmission, virtual networks, security and troubleshooting. This course helps students prepare for entry-level career opportunities in ICT and the CompTIA Network+ certification. It also provides a learning pathway to Cisco CCNA. C-ID # ITIS 150.

CIT 013   AWS 1 Cloud Practitioner- Foundational (2.5 Lecture/0.5 Lab)   3.0 UNITS
Prerequisite: CIT 021 This introductory course provides an overall understanding of cloud computing concepts , AWS core services, security, architecture, storage, networking, pricing, and support.

CIT 014   AWS 2 Solutions Architect- Associate (3.0 Lecture/1.0 Lab)   4.0 UNITS
Prerequisite: CIT 013 This course will help students develop technical expertise in cloud computing and prepare them for the AWS Certified Solutions Architect – Associate certification exam. The curriculum is delivered through instructor-led classes, knowledge assessments, hands-on labs, and project work. The course covers AWS Cloud, management console, S3 storage, Networking and VPC, cloud migration, continuity, Scalability, database.

CIT 016   CyberSecurity and Ethical Hacking (3.0 Lecture/1.0 Lab)   4.0 UNITS
This course is an introduction to IT security and ethical hacking using the latest operating systems, security techniques, and wireless standards. It also covers the fundamentals of system security, network infrastructure, access control, assessments and audits, cryptography, and organizational security. Students gain hands-on experience with various ethical hacking methods and techniques. C-ID # ITIS 160.

CIT 017   Cyber Security Essentials (3.0 Lecture/1.0 Lab)   4.0 UNITS
Prerequisite: CIT 021 The Cybersecurity Essentials course develops foundational understanding of cybersecurity and how it relates to information and network security. This course explores the importance of cybersecurity, data confidentiality, and best practices for using the internet and social media safely. This course introduces students to characteristics of cybercrime, security principles, technologies, and procedures to defend networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, students build technical and professional skills to pursue careers in cybersecurity.

CIT 018   CCNA Cyber Security Operations (3.0 Lecture/1.0 Lab)   4.0 UNITS
Prerequisite: CIT 017 The CCNA Cybersecurity Operations course provides an introduction to the knowledge and skills needed for a Security Analyst working with a Security Operations Center team. It teaches core security skills needed for monitoring, detecting, investigating, analyzing and responding to security events, thus protecting systems and organizations from cybersecurity risks, threats and vulnerabilities.

CIT 021   Cisco Network Fundamentals (CISCO-1) (3.0 Lecture/1.0 Lab)   4.0 UNITS
Introduction to Cisco Networks (ITN) is the first course in the CCNA curriculum. It covers the architecture, structure, functions and components of the Internet and other computer networks. Students achieve 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). C-ID # ITIS 150.

CIT 022   Switching, Routing, and Wireless Essentials (3.0 Lecture/1.0 Lab)   4.0 UNITS
Prerequisite: CIT 021 Switching, Routing, and Wireless Essentials (SRWE) course is the second course in the CCNA curriculum. It covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn 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.

CIT 023   Enterprise Networking, Security, and Automation (3.0 Lecture/1.0 Lab)   4.0 UNITS
Prerequisite: CIT 022 Enterprise Networking, Security, and Automation (ENSA) is the third course in the CCNA curriculum. It describes the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. The course emphasizes network security concepts and introduces network virtualization and automation. Students learn how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation.

CIT 024   Implementing and Administering Cisco Networking Technologies (3.0 Lecture/1.0 Lab)   4.0 UNITS
Prerequisite: CIT 023 The course is advanced course that provides students with the required knowledge to develop a comprehensive foundation for designing, securing, operating, and troubleshooting modern computer networks, on the scale from small business networks to enterprise networks, with an emphasis on hands-on learning and essential career skills like problem solving and collaboration.

CIT 078   Microsoft Server Essentials 1 (3.0 Lecture/1.0 Lab)   4.0 UNITS
Advisory: CIT 011 This course focuses primarily on the installation, storage, "compute features and functionality" and the "networking features and functionality" available in Windows Server 2016. It covers general installation tasks and considerations and the installation and configuration of Nano Server, in addition to the creation and management of images for deployment. It also covers DFS and BranchCache solutions, high performance network features and functionality, and implementation of software-defined networking (SDN) solutions, such as Hyper-V Network Virtualization (HNV) and Network Controller. C-ID # ITIS 155.