

Information Technology (IT)

IT 100 IT Fundamentals

5 credits , ELEC

Quarter(s): S, F, W, Sp

Develops the knowledge to identify and explain basic computer components, set up a basic workstation, conduct basic software installation, establish basic network connectivity, identify compatibility issues and identify/prevent basic security risks. This course will also focus on the areas of safety and preventative maintenance of computers and is intended for students who are considering a career in IT and later considering the pursuit of a Comptia A+ or similar certification. Lab hours are required for this course.

Prerequisite: BUS 100

IT 102 Introduction to Web Design

5 credits , REEL

Quarter(s): W

Offers concepts, fundamentals, and techniques of web page design. Topics include web page usability, design principles and development, site planning, and implementation. HTML scripting language and Cascading Style Sheets are used to create structural and presentational web pages. Students will use concepts presented in the course for development of personal and commercial web pages. Lab hours are required for this course.

Prerequisite: IT 100 or co-enrollment, or instructor permission

IT 111 Intro to Windows

4 credits , REEL

Quarter(s): S, F

Offers an introduction to the study of the Microsoft Windows operating system. Presents fundamental concepts of a Microsoft Windows client operating system such as file management and customizing a graphical user interface (GUI). Lab hours are required for this course.

Prerequisite: None

IT 140 Configuring Windows Operating System

4 credits , REEL

Quarter(s): F

Presents installing, deploying, configuring, monitoring, and maintaining systems that run Microsoft Windows OS. Installation, system images, application, networking, resource allocation, mobile computing, monitoring, maintenance, backup, and recovery topics are included. Continues to prepare students for Microsoft's Certification: Configuring Windows Operating System. Lab hours are required for this course.

Prerequisite: IT 100 IT Fundamentals (5 credits)

IT 141 PC Technician I

4 credits , REEL

Quarter(s): F, W

Provides an overview of the roles of the PC technician including: protection and safety of users, acting in a professional manner, communication, and documentations are examined. Technical topics include installation, maintenance, and troubleshooting of system components, peripheral devices, storage, printers, mobile devices, and networking. Prepares students for TestOut's PC Pro and CompTIA's A+ certification exams. Lab hours are required for this course.

Prerequisite: IT 100 (was CS 100) with a C or better, or instructor permission.

IT 142 PC Technician II

4 credits , REEL

Quarter(s): Sp

Continues an overview of the roles of the PC technician including: protection and safety of users, acting in a professional manner, communication, and documentations are examined. Technical topics include installation, maintenance, and troubleshooting of system components, peripheral devices, storage, printers, and networking. Continues preparation

of students for TestOut's PC Pro and CompTIA's A+ certification exams. Lab hours are required for this course.

Prerequisites: IT 141 (was CS 141) with a grade of C or better, or instructor permission.

IT 211 Introduction to Networking
5 credits , REEL
Quarter(s): F

Introduces the fundamental building blocks that form a 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 is focused on preparing students for the COMPTIA Network + Certification. Lab hours are required for this course.

Prerequisite: IT 140 with a grade of C or better or instructor permission.

IT 212 Installing and Configuring Windows Server
5 credits , REEL
Quarter(s): W

Provides in-depth knowledge of Windows Server, including installation, local and remote management, file and storage services, Active Directory, group policies, TCP/IP, networking services, and Hyper-V virtualization has been acquired. This course prepares students for Microsoft server certification exam objectives and focuses on the skills needed to install and configure Windows Server. Lab hours are required for this course.

Prerequisite: IT 211 (was CS 211) with a grade of C or better or instructor permission.

IT 220 Intro to Cloud Computing
3 credits , REEL
Quarter(s): Sp

Provides an overview of cloud computing from a non-technical perspective. Includes the value of cloud computing, cloud types, adoption of the cloud, impact and changes on IT services, and risks of implementation.

Prepares students for the CompTIA Cloud Essentials certification Cloud+. Includes both theoretical study of cloud computing and hands on labs. Lab hours are required for this course.

Prerequisites: IT 140 (was IT 143) or IT 211 (was CS 211) with a grade of C or better, or instructor permission.

IT 230 Database Development
5 credits , REEL
Quarter(s): F

Offers further study and use of computerized database management systems. Provides intermediate theory and practice in a disciplined approach to problem solving using a database management system in a business environment.

Prerequisite: BTEC 135, Advanced Data Analysis with a grade of C or better, or instructor permission.

IT 235 Introduction to Big Data
5 credits , REEL

Provides an introduction to concepts used in data mining and data-analytics, including exploration and application of data modeling tools. Lab hours are required for this course.

Prerequisites: IT 230 (was CS 230) with a grade of C or better, or instructor permission.

IT 236 Network and Systems Automation
5 credits
Quarter(s): Sp

Provides hands-on experience in automating information technology systems, network tasks, and processes to improve efficiency and reliability. Covers essential concepts and tools for automating network configurations, deploying and managing servers and performing routine maintenance tasks. Gain proficiency in scripting, utilizing industry-standard automation tools, and configuring remote management and monitoring systems with a focus on tools such as Python, PowerShell, and Ansible. Lab hours are required for this course.

Prerequisites: IT 212, IT 249, IT 211

IT 249 Linux Operating Systems
5 credits , REEL
Quarter(s): W

Prepares students for application of Linux+ certification knowledge and skills. Course is focused on meeting CompTia Linux+ certification objectives in both knowledge and hands on lab practice. It is recommended that most students will need some experience with Linux in the work place prior to attempting the Linux+ exam. Lab hours are required for this course.

Prerequisites: IT 140 (was IT 143) and IT 211 (was CS 211) each with a grade of C or better, or instructor permission.

IT 260 Info Tech Security
5 credits , REEL
Quarter(s): Sp

Prepares students for application of Security+ certification knowledge and skills. Course is focused on meeting CompTia Security+ certification objectives in both knowledge and hands on lab practice. It is recommended that most students will need some experience with Linux in the work place prior to attempting the Security+ exam. Lab hours are required for this course.

Prerequisites: IT 211 (was CS 211) with a grade of C or better, or instructor permission.

IT 288 Cooperative Work Experience
1 – 15 credits

Provides work-based learning experience in a specific program of study. Individualized student outcomes are developed, focusing on behaviors that contribute to workplace success.

Prerequisites: Instructor or Cooperative Education Coordinator permission
 Concurrent requirements: COLL 289 or BUS 294 must be taken prior to or concurrent with this course.

IT 299 Independent Study
1 – 10 credits

Offers individualized learning opportunities for knowledge or skill development. Content and expectations are established between

the student and instructor, and documented in an Independent Study contract.

Prerequisite: By Instructor Permission only.