

Degree Description

This program provides the knowledge and training needed for employment in business as an information systems specialist.

Marketable Skills

1. Understand and apply computing terminology and concepts used in the workplace- Critical Thinking/Communication.
2. Apply fundamentals of computer programming in structured design concepts- Critical Thinking/Communication.
3. Configure, use, and troubleshoot computer operating systems and/or application software Critical Thinking.
4. Use the Internet to locate, transfer, research and publish information at a level appropriate for the academic and work environment. Critical Thinking/Communication.
5. Install and evaluate desktop and network security protocols and principles- Critical Thinking.

Semester I	Hours
BCIS 1305 Business Computer Applications	3 hours
COSC 1336 Programming Fundamentals I	3 hours
IMED 1316 Web Design I	3 hours
ITCC 1314 CCNA 1: Introduction to Networks ³ <i>or</i> ITNW 1354 Implementing and Support Servers ²	3 hours
ITSC 1305 Introduction to PC Operating Systems	3 hours
	15 hours

Semester II	Hours
ARTC 1302 Digital Imaging I	3 hours
ITSC 1325 Personal Computer Hardware ¹	3 hours
ITSE 1311 Beginning Web Programming <i>or</i> ITSE 1302 Computer Programming <i>or</i> COSC 1337 Programming Fundamentals II	3 hours
ITSW 1304 Introduction to Spreadsheets	3 hours
ITSW 1307 Introduction to Database	3 hours
	15 hours

Total hours: 30 hours

¹ This course prepares students for the DoD Approved 8570 Baseline Comptia A+ Hardware Certification.

² This course is designed to prepare students for the exams to receive the Comptia Server+ Certification.

³ MCC is a local CISCO Academy. This is one of three courses leading up to the CISCO Certified Network Administrator Certification.

Course Descriptions

BCIS 1305 Business Computer Applications

Introduces and develops foundational skills in applying essential and emerging business productivity information technology tools. The focus of this course is on business productivity software applications, including word processing, spreadsheets, databases, presentation graphics, data analytics, and business-oriented utilization of the internet. (BCIS 1305 is included in the Business Field of Study.) Semester Hours 3 (2 lec/2 lab)

COSC 1336 Programming Fundamentals I

Introduces the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing and debugging. This course assumes computer literacy. Semester Hours 3 (3 lec)

IMED 1316 Web Design I

Introduces Internet Web page design and related graphic design issues, including mark-up languages, websites, Internet access software, and interactive topics. Students should be proficient with Windows functions, mousing and keyboarding skills. Semester Hours 3 (2 lec/2 lab)

ITCC 1314 CCNA 1: Introduction to Networks

Covers networking architecture, structure, and functions; introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations to provide a foundation for the curriculum. Semester Hours 3 (2 lec/3 lab)

ITNW 1354 Implementing and Support Servers

Develops skills necessary to implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment using Microsoft Windows-based servers. Students will learn to configure peripherals and devices; set up servers for various client computers; configure directory replication; and manage licensing, user groups accounts, user profiles, system policies, and profiles. Students will also learn to administer remote servers and disk resources, create and share resources, implement permissions and security, implement fault-tolerance data storage measures and configure servers for interoperability with various network operating systems servers. Course will teach how to install and configure Remote Access Service (RAS), identify and monitor performance bottlenecks, and resolve configuration problems. Prerequisite: ITSC 1305. Semester Hours 3 (2 lec/2 lab)

ITSC 1305 Introduction to PC Operating Systems

Introduction to personal computer operating systems, including installation, configuration, file management, memory and storage management, control of peripheral devices and use of utilities. Semester Hours 3 (2 lec/2 lab)

ARTC 1302 Digital Imaging I

Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Semester Hours 3 (2 lec/2 lab)

ITSC 1325 Personal Computer Hardware

Studies current personal computer hardware including assembly, upgrading, setup, configuration, and troubleshooting. Semester Hours 3 (2 lec/2 lab)

ITSE 1311 Beginning Web Programming

Skill development in Web page programming, including mark-up and scripting languages. Semester Hours 3 (2 lec/2 lab)

ITSE 1302 Computer Programming

Introduces computer programming, including design, development, testing, implementation, and documentation. Semester Hours 3 (2 lec/2 lab)

COSC 1337 Programming Fundamentals II

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. Prerequisite: COSC 1336. Semester Hours 3 (3 lec)

ITSW 1304 Introduction to Spreadsheets

Introduces the concepts, procedures and importance of electronic spreadsheets. Semester Hours 3 (2 lec/2 lab)

ITSW 1307 Introduction to Database

Introduces relational and non-relational database theory and the practical applications of a contemporary databases. Topics may adapt to changes in industry practices. Semester Hours 3 (2 lec/2 lab)
