

OSA CIS / Information Security

McLENNAN COMMUNITY COLLEGE

2022-2023

Degree Description

Introduces the operating systems, network security and networking.

Marketable Skills

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

ITSC 1305 Introduction to PC Operating Systems	3 hours
ITSY 1342 Information Tech Security	3 hours
ITCC 1314 CCNA 1: Introduction to Networks or ITNW 1354 Implementing and Support Servers	3 hours
	9 hours

Total hours: 9 hours

Course Descriptions

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)

ITSY 1342 Information Tech Security

Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices. Students will learn to ensure the physical security of file servers and other network components using best practices; develop backup procedures to provide for data security; use network operating system features to implement network security; describe the nature of computer viruses, their methods of spreading, and means of protecting networks from viruses; use relevant tools to provide for network security; and use encryption techniques to protect network data. 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 Windowsbased 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)