

# COMPUTER SCIENCE – INFORMATION TECHNOLOGY SPECIALIST

## Diploma, 36 Credit Hours, 9-Month Program

The Computer Science - Information Technology Specialist program strikes a balance between theory and application. Students will learn about real-life networking and security environments, making them immediately productive upon graduation and prepared to take on a variety of information technology (IT) roles. The first year builds a solid foundation of basic hands-on computer skills and networking concepts. The second year challenges students to learn to adapt and react to the changing world of computers. Deeper networking concepts are introduced, including security, complex networks, and programming skills. The emphasis of coursework will be based on preparing students for Microsoft certification testing. Students also will be prepared to continue learning and advancing within the field, allowing them to work within an organization to apply networking to business strategy, tactics, and goals.

A typical job description for an information technology specialist would generally include working in an office environment. The job is often performed alone, and the IT Specialist must possess strong troubleshooting and technical skills, including strong math skills. Conversely, the IT Specialist must also work with users who are not comfortable with the system or who are experiencing difficulties, thus the requirement for strong communications skills. Configuring a network can require long hours of work in a short period of time. Maintaining the network can alternate between routine tasks to install, maintain, and update programs, as well as the hectic work of troubleshooting and fixing network problems. If a network crashes, the Information Technology Specialist must work quickly and purposefully to solve problems and restore the network operation. In addition, the task of updating and maintaining network services can require late hours and work on an irregular schedule. The IT worker must also be prepared to maintain related technology within an organization, including audio-visual equipment, televisions, phones, and cabling infrastructure. Physical duties may include climbing and working using ladders, installing cabling, moving computers and related equipment, and installing equipment.

Course	No.	Course Title	Credits
<b>General Education Requirements</b>			
CIS	105	MICROCOMPUTER SOFTWARE APPLICATIONS I	3
ENGL	101	COMPOSITION*	3
MATH	102	COLLEGE ALGEBRA**	3
PSYC	101	GENERAL PSYCHOLOGY <i>or</i>	3
PSYC	103	HUMAN RELATIONS IN THE WORKPLACE	3
<b>Total</b>			<b>12</b>
<b>Technical Requirements</b>			
CIS	122	INFORMATION TECHNOLOGY HARDWARE/SOFTWARE	6
CIS	129	WINDOWS OPERATING SYSTEMS	3
CIS	131	NETWORKING TECHNOLOGIES I	3
CIS	132	NETWORKING TECHNOLOGIES II	3
CIS	201	LINUX TECHNOLOGIES	3
CIS	213	NETWORKING USING WINDOWS SERVER	3
CIS	225	DATABASES	3
<b>Total</b>			<b>24</b>

\*Prerequisite: Acceptable ACCUPLACER score or Basic Writing.

\*\*Prerequisite: Acceptable ACCUPLACER score or Intermediate Algebra.

### Semester Breakdown Diploma

First Semester			Second Semester		
		CR			CR
CIS 122	Information Technology Hardware/Software	6	CIS 132	Networking Technologies II	3
CIS 129	Windows Operating Systems	3	CIS 201	Linux Technologies	3
CIS 131	Networking Technologies I	3	CIS 213	Networking Using Windows Server	3
CIS 105	Microcomputer Software Applications I	3	CIS 225	Databases	3
MATH 102	College Algebra	3	ENGL 101	Composition	3
			PSYC 101	General Psychology <i>or</i>	3
			PSYC 103	Human Relations in the Workplace	3
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>18</b>