

CIT 260. CAPSTONE PROJECT.

Credit Hours: 3

Scheduled hours per week

Lecture: #

Lab: #

Other: #

Catalog Course Description: Students will conduct a semester long major networking project. The project will include proper network design, documentation, and an oral presentation. Students will sit for the CompTIA Network+ industry certification. Capstone course.

Pre-requisites: Grade of “C” or better in CIT 206, CIT 240, and CIT 211 or taken concurrently.

Co-requisites: Grade of “C” or better in CIT 206, CIT 240, and CIT 211 or taken concurrently.

Course Learning Outcomes:

To demonstrate a comprehensive knowledge and understanding of the topics taught in the CIT degree program, and that ability to apply those concepts to real world situations.

Topics to be studied:

- Selecting a project
- Needs assessment and goals
- Design Methodology
- Network Topologies
- Systems design
- Technology plans

Relationship of Course to Program or Discipline Learning Outcomes:

X	Identify and describe layers of the OSI and TCP/IP models, and use them effectively in troubleshooting
X	Describe and apply LAN and WAN technologies in wired and wireless environments
X	Demonstrate ability to apply workstation and server installation, configuration, management and troubleshooting techniques
X	Demonstrate ability to install, configure, manage, and maintain routing and switching technologies
X	Describe and discuss different operating systems and their relationship with hardware, their functions, advantages and disadvantages, and their respective tools and software packages
X	Explain Information Systems and choose appropriate systems based on requirements
X	Describe basic information security and computer ethics

Relationship of Course to General Education Learning Outcomes:

Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	X
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	X

<p>Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.</p>	<p>X</p>
<p>Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.</p>	<p>X</p>
<p>Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.</p>	<p>X</p>
<p>The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.</p>	
<p>5/3/2016</p>	

Special requirements of the course:

- Students will complete a comprehensive project at the end of the class.
- Student must sit for industry certification.

Additional information:

- The project will be presented in both a written paper and in class presentation.
- The industry certification exam will be the Network+ certification.

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