Cyber Security & Information Assurance

Program Overview:

Information Technology is one of the fastest-growing career fields today. The Cybersecurity Information Assurance curriculum prepares students to support the information security needs of businesses. This curriculum can assist students in preparing for the following certifications: CompTIA (A+, Network+, Linux+, Security+, Project+), CISSP and Cisco Certified Network Associate.

Learning Outcomes:

Upon completion of an Associate of Applied Science degree in Cybersecurity Information Assurance, a graduate will be able to:

- Demonstrate knowledge of computer and network systems terms and concepts.
- Setup, install, configure, and troubleshoot hardware/software for desktop computer systems.
- Install, configure, manage, and maintain network-based voice, audio, and video technologies.
- Install, configure, manage, and maintain network infrastructure equipment and software.
- Demonstrate knowledge of computer and network security terms and concepts.
- Implement, configure, and troubleshoot network security software and hardware.
- Design secure computer and network infrastructures.

Freshman Year

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>ITS 164 - Networking Fundamentals (This course is an introduction to technologies, terminology, and skills used in the world of data networking. Emphasis is on practical applications of networking and computer technology to real-world problems. Prepares students for entry-level jobs as a networking technician and prepares them for learning more advanced topics in networking.)</td>
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<tr>
<td>ITS 271 Securing Desktop/Mobile Devices - (MUS course still need to get MSU approval after program is approved. This course is an introduction to technologies, terminology, and skills used in the world of desktop and mobile devices.)</td>
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<tr>
<td>ITS 218 - Network Security (This course is an introduction to technologies, terminology, and skills used in the world of data network security. With a focus on security baselines, network infrastructure security, web security, cryptography, operations security, and security management. CompTIA Security+ certification objectives.)</td>
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<tr>
<td>ITS 272 - Cyber Defense (Information security and risk management, access controls, application security, disaster recovery planning, cryptography, capstone project and legal aspects of information security.)</td>
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<td>ITS 274 Ethical Hacking and Network Defense - (This course includes an in-depth understanding of how to effectively protect computer networks. Students will learn the tools and penetration testing methodologies used by ethical hackers. In addition, the course provides a thorough discussion of what and who an ethical hacker is and how important they are in protecting corporate and government data from cyber attacks. Students will learn updated computer security resources that describe new vulnerabilities and innovative methods to protect networks. Also covered is a thorough update of federal and state computer crime laws, as well as changes in penalties for illegal computer hacking.)</td>
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Year Total: 10 6

Total Program Credits: 16
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.