CYBERSECURITY AND COMPUTER NETWORKS

Program Description

This degree program combines cybersecurity with system and network administration. Classes focus on best practices in security, networking, operating systems, and their administration.

Our students experience real-life scenarios through hands-on labs and simulations that are constructed based on feedback from the cybersecurity community and continually adapted to today's changing world. Not only do we teach security concepts and technologies, we also teach the information technology component that goes with it. Upon graduation, you will be ready to use your knowledge and skills in the workforce.

The curriculum contains core classes in computer hardware, Windows and Linux operating systems, networking, security, and programming. Students may have the opportunity to earn college credit for cooperative education or internship opportunities with local businesses.

All classes in the program can be taken online or on campus. We continue to evolve our advanced instructional methodologies to complement cutting-edge and remote learning technologies, providing our students with synchronous, virtual classroom environments. Our flexible, online and/or on-campus courses make it easier to achieve your educational goals.

Students can complete the program in two years, three years, or longer, depending upon prior preparation in Math, English, and Computers.

Program Certificate Options

Security and Hacking
Computer Networking
Offensive and Defensive Security
Modern Computing Technologies
Secure Programming

Preparation

Students enrolling in the Cybersecurity and Computer Networks program should be logical and detail-oriented, as well as interested in computers and how they communicate. They should be able to type at least 40 words per minute and know how to perform basic file management skills such as saving, deleting, copying, and backing up files. Students should also be comfortable using a Windows-based computer, be able to easily navigate the Internet, and be experienced using email. For students that struggle to meet these requirements, BOTE 102 and CSCI 101 are highly recommended.

Program Requirements

Students are required to have their own modern Windows-based computers while completing classes in the program. On-campus students will need a laptop for class use, while online students may use a laptop or desktop system. Minimum computer specifications can be found at https://bismarckstate.edu/cybersecurity/become-a-student/computer-requirements/.

Students who complete the Cybersecurity and Computer Networks curriculum requirements earn an Associate in Applied Science degree.

BSC Cybersecurity and Computer Networks students can enhance their degree by obtaining industry-standard certification including A+, Linux+, Network+, Server+, Security+, CySA+, CCNA Routing & Switching, CCNA Cyber Ops, and CEH. Coursework will help students understand the concepts tested by these certifications.

Career Opportunities

Upon completion of the program, students are prepared to work in Information Technology and Cybersecurity departments for countless organizations. It is an opportune time to be involved in the industry, as research shows nationwide, millions of IT and Cyber positions go unfilled due to lack of qualified applicants.

Career opportunities: Computer Technician, Computer Operator, Computer Support Specialist, Help Desk Support, Information Security Analyst, Network Security Analyst, Systems Administrator, Security Administrator, Network Administrator, and Data Security Administrator.

Contact

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Degree Plans

- Cybersecurity and Computer Networks Associate in Applied Science