CYBERSECURITY SCIENCE & OPERATIONS MAJOR (B.S.)

Purpose

The Bachelor of Science in Cybersecurity Science and Operations major prepares students for success in one of the fastest growing and increasingly complex technical professions. Students will learn to research and analyze time-sensitive problems to design, implement, and test operational solutions for the effective security of people, infrastructure, systems, and information. Students will develop a deep background in advanced topics such as programming, cryptography, networking, reverse malware engineering, digital forensics, incident response, and ethical hacking as the core body of technical knowledge and skills required in the discipline of cybersecurity operations. Faculty will help students prepare for a lifetime of service with the highest ethical standards as applied to cybersecurity best practices with a Christian worldview.

Program Learning Outcomes

The student will be able to:

- Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the cybersecurity discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the cybersecurity discipline.
- Apply security principles and practices to maintain operations in the presence of risks and threats.
- Conduct best practices in Cybersecurity while maintaining a Christian Worldview.

Program of Study
Delivery Format: Residential Only

- Cybersecurity Science & Operations (B.S.) - Residential

Career Opportunities

Graduates of the BS Cybersecurity Science and Operations program will be well-prepared for a variety of career paths in the cybersecurity field.

- Cybersecurity Analyst
- Network Security Engineer
- Incident Response Specialist
- Security Consultant
- Malware Analyst
- Ethical Hacker
- Information Security Manager
- Security Software Developer

Note: *Many cybersecurity roles require or prefer candidates with specific industry certifications. Students should consider pursuing certifications relevant to their desired career path, such as CISSP, CISO, CEH, GCIH, GREM, OSCP and others.*