Bachelor of Science in Cyber Security

Program Overview

Chair, Department of Continuing Studies: Mark L. Parker
Program Manager: Henry Collier

The Bachelor of Science in Cyber Security program (BSCS) is a degree-completion program designed for military, government, and private sector professionals who seek to complete their bachelor's degree in the information technology field and who want to further their careers by developing specialized skills in the high-need area of network security. The program offers a solid foundation of cyber security courses as well as two concentration areas of study:

- Computer Forensics and Vulnerability Management
- Information Warfare and Security Management

The cyber security curriculum balances general education and core cyber security courses (many of which can be fulfilled through transfer credits) with elective and project-based courses that allow students to delve into sub-areas such as national security policy, offensive and defensive information warfare, penetration testing, and malware forensics. All courses are designed to hone foundational skills in critical thinking, research and analysis, ethical decision-making, and oral and written communications.

Students entering the cyber security program must transfer a minimum of 60 credits to be admitted to the program and may transfer as much as 84 credits to satisfy the degree requirement. Basic networking, programming and operating systems knowledge acquired through prior coursework, certifications, or military training is required for entry into the degree program.

Curriculum Requirements

Pre-Program Education and Training

Students accepted into the Cyber Security degree program must have earned a minimum of 60 semester credits from college courses, military training, or other educational experiences such as CLEP tests. A maximum of 84 semester credits may be transferred into the program. Basic networking, programming and operating systems knowledge acquired through prior coursework, certifications, or military training is required for entry into the degree program.

Students are required to meet general education requirements in literature, history, arts and humanities, science, social science, and math and may do so by transfer credit or enrollment in courses such as ENGL 250, HIST 310, PHLS 205, SCIE 202, SCIE 301, SOCI 335, and MATH 232.

Core Courses

Students in the BSCS are required to complete the following:

- CJ 341 Cyber Law and Cyber Crime (3)
- IA 340 Introduction to Information Assurance (3)
- IA 342 Management of Information Assurance II (3)
- EN 204 Professional and Technical Writing (3)
- MG 309 Management of Organizations (3)

Concentrations

Students in the BSCS program are required to complete one of the following 18-credit concentrations:

Forensics and Vulnerability Management

- CJ 442 Introduction to Computer Forensics (3)
- DF 311 Network Forensics (3)
- DF 312 Malware Forensics (3)
- DF 411 Digital Investigation (3)
- CYBR 320 Vulnerability Testing I (3)
- CYBR 420 Vulnerability Testing II (3)

Information Warfare

- CYBR 370 Introduction to Information Warfare (3)
- CYBR 380 Offensive Information Warfare (3)
- CYBR 382 Defensive Information Warfare (3)
- CS 407 Politics of Cyberspace (3)
- POLS 302 National Security Policy (3)
- CYBR 410 Systems Assurance (3)

Capstone

The capstone course, *CYBR 400 (6), is the culminating academic activity for BSCS students. In it, students propose, develop, and deliver a final substantive research project that combines the general knowledge acquired in the core courses with the specific knowledge of the concentration. The final project requires students to draw upon at least two different academic disciplines for research methodology, seminal literature and sources, and intellectual frameworks in order to bring an interdisciplinary perspective to the subject. The capstone course may not be fulfilled through transfer credit.

Faculty Member	Institution at which highest degree was earned
Henry Collier, MS (Program Manager)	Champlain College
Matthew Bambrick, MS	Norwich University
Matthew Chase, MBA	Nova Southeastern University
Adam Duby, MS	Nova Southeastern University