

CYBERSECURITY MAJOR

Department: Management Information Systems (<https://catalog.bradley.edu/undergraduate/business/management-information-systems/>)

Cybersecurity is a diverse field that focuses on maximizing the confidentiality, integrity, and availability of data and systems, while simultaneously minimizing risks to individuals and organizations. Cybersecurity has become a critical occupation due to rapid technology development and the exponential growth in data generated by an increasingly connected society. The cybersecurity major provides a foundation in business and teaches students how to identify and mitigate threats to ensure that organizations are protected from cyber-attacks. Students are also exposed to various ethical issues related to emerging technology, such as privacy and anonymity.

The cybersecurity major prepares students for a variety of cybersecurity positions across all industries. Typical graduates' first jobs are positioned as cybersecurity specialist, information security analyst, information technology auditor, systems administrator, and junior penetration tester. Graduates of the program can expect interesting and challenging job opportunities in a dynamic field.

The cybersecurity major differs from the MIS concentration in cybersecurity in that it has a deeper focus on developing technical knowledge, skills, and abilities in specialties like digital forensics and cryptography. The major also allows students to explore career opportunities by highlighting the wide range of roles within the cybersecurity field, such as networking, penetration testing, and security awareness training.

Requirements

To major in Cybersecurity, a student must earn a minimum of 30 semester hours credit in courses with the following requirements:

Code	Title	Hours
Required Courses:		
CS 141	Introduction to Python Programming	3.0
CIS 230	Introduction to Computer Forensics	3.0
CIS 330	Advanced Computer Forensics	3.0
CIS 415	Applied Cryptography	3.0
MIS 272	Business Analytics Tools and Techniques	3.0
MIS 373	Applied Networking	3.0
MIS 374	Database Management and Administration	3.0
MIS 375	Business Systems Analysis and Design	3.0
MIS 379	Information Systems Security	3.0
MIS 483	Advanced Ethical Hacking	3.0
Total Hours		30

Students must also complete the Foster College's business core (<https://catalog.bradley.edu/undergraduate/business/>).