Cybersecurity

About the Major

This degree will enable you to address the security challenges and risks that all industries encounter daily. Cybersecurity is a multidisciplinary area: it is a combination of information technology, computing, and engineering. This program will provide a solid, comprehensive background in the related topics of cybersecurity engineering and their applications. With more companies in all industries increasingly relying on technology for their operations, cybersecurity is a rapidly growing field.

Marketable Skills and Abilities this Major Develops

- Critical thinking and analysis
- Problem solving and evaluation
- Strong attention to detail
- Ability to work across multiple platforms
- Logical reasoning and troubleshooting
- Certified ethical hacking
- Project organization, coordination, and management

Relevant Fields

- Risk Management
- Software Development
- Government
- Computer Forensics
- Network Security
- Security Consultation
- Malware Analysis
- Program Management

Occupational Titles/Careers with Bachelor's Degree

- Security Analyst
- Cybercrime Investigator
- Security Software Developer
- Cryptographer
- Penetration Tester
- Source Code Auditor
- Security Architect
- Forensic Expert

Sample Coursework

- Computing
- Web Programming
- Database Systems
- Cryptography
- Network Security
- Secure Hardware
- Secure Software
- Intelligence and National Security

Career Opportunities and Job Outlook

According to The U.S. Bureau of Labor Statistics' Information Security Analyst's Outlook, cybersecurity jobs are among the fastest-growing career areas nationally with an increase of 32% new jobs in this career by 2028. Cybersecurity impacts all industries who rely on technology for their operations.

Salary Estimates

According to The U.S. Bureau of Labor Statistics, the median annual wage for information security analysts was $103,590 in May 2020. Cybersecurity salaries typically range from $85,000 to $130,000 per year, depending on the level of your experience, specific job title, expertise, employer, and location.
(This section is intended for informational purposes, not prediction of actual salary.)

Advanced Degrees

- Security Architecture
- Digital Forensics
- Vulnerability Research
- Computer Science
- Computer Engineering
- Information Technology

Professional Associations

- Information Security System Operations Association International
- Association of Information Technology Professionals (AITP)
- Association for Information Science and Technology (ASIS&T)
- International Association of Computer Science and Information Technology (IACSIT)
- Association for Women in Computing (AWC)
- International Information Systems Security Certification Consortium