



Bachelor of Science

Cybersecurity

• CIP code 430403 • 120 credits

Program Description

The Bachelor of Science in Cybersecurity equips students with the practical and conceptual means to understand and navigate today's vast digital security landscape. This expansive program focuses on the National Initiative for Cybersecurity Education (NICE) identified skill sets for the Cybersecurity workforce. The curriculum aligns a wide variety of courses with the technical, legal, social, and investigatory aspects of digital security. Students will emerge with the competencies necessary to compete in a growing global market that demands highly skilled Cybersecurity professionals. Two distinct concentrations enables students to select a range of career paths that fits their interests and goals.

Program Outcomes:

Graduates of the Cybersecurity program will have demonstrated proficiency in the following areas:

- Techniques used to protect the integrity of an organization's security architecture and safeguard its data against attack, damage or unauthorized access
- Design and develop IT risk and cyber security programs using industry frameworks and methodologies
- Knowledge of cybersecurity regulatory environment and ethics
- Monitor and assess cloud assets and resources for misconfigurations and non-standard deployments
- Meeting the challenges of evolving cyber network threats

The Cambridge College Cybersecurity program is designed to provide the requisite skills and knowledge-base for successful graduates to sit for the following certifications: CompTIA (Cybersecurity Analyst) CSA, CompTIA (Information Security Specialist) Security+.

Careers and Further Study

A Bachelor's Degree in Cybersecurity from Cambridge College qualifies you for in-demand positions such as:

- Information Security Manager
- Cybersecurity Analyst
- Cybersecurity Consultant
- Network Administrator
- Security and Risk Compliance Analyst
- IT Auditor
- Penetration and Vulnerability Tester

Degree completion: General education requirements may be satisfied by an associate's degree or 60 credits of prior courses that meet all general criteria for transfer; up to 90 credits may be accepted.

General Education 42 credits

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| LRN 175 | Principles & Processes of Adult Learning | 3 |
| WRT 101 | College Writing I | 3 |
| CTH 225 | Foundations of Critical Thinking | 3 |
| MAT 101 | College Math I | 3 |
| CMP 130 | Introduction to Computer Applications | 3 |
| CMP 230 | Digital Literacy | 3 |
| WRT 102 | College Writing II | 3 |
| MAT 102 | College Math II | 3 |

WRT 101-102 and MAT 101-102 may be waived if equivalent courses have been accepted in transfer. Credits will be replaced with open electives. WRT 201 required if both WRT 101-102 are waived; not required for students completing WRT 101-102 at Cambridge. WRT 090 and MAT 100 required if assessment indicates need.

Arts & Humanities 6

Natural & Physical Sciences 6

Social Sciences 6

Open Electives 36 credits

Choose electives and/or concentrations to support your academic interests and professional goals.

Cybersecurity Major 42 credits

Core courses 27 credits

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| CMP 250 | Fundamentals of Cybersecurity |
| CMP 255 | Information Security Foundations |
| CMP 260 | EndPoint & Infrastructure Security |
| CMP 270 | Operating Systems, Applications & Services |
| CMP 280 | Introduction to Computer & Network Security Essentials |
| CMP 300 | Digital Forensics |
| CMP 341 | Incident Response |
| CMP 350 | Cybersecurity Communications |
| CMP 390 | Emerging Technologies |

Concentrations 15 credits

Choose one concentration:

Network Security

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| CMP 400 | Cloud Networking Security |
| CMP 401 | Wireless Technology & Security |
| CMP 415 | Network & Digital Forensics Investigation |
| CMP 435 | Network Protection & Threat Monitoring |
| CMP 450 | Machine Learning for Network Intrusion Detection |

Information Security & Risk Management

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| CMP 302 | Cybersecurity Governance Frameworks |
| CMP 323 | Digital Law – Policies, Regulations, Ethics |
| CMP 331 | Cybersecurity Audit & Risk Management |
| CMP 455 | Protecting and Handling Data |
| CMP 460 | Risk Response & Monitoring |

All courses 3 credits except as noted