



Pre-Baccalaureate Certificate

Information Security & Risk Management Certificate

• CIP code 111003 • 27 credits, 3 terms

Program Description — The Information Security & Risk Management Certificate consists of 9 online or on-site courses focused on providing every student with a solid foundational knowledge of how to identify, quantify, respond and maintain IT risk, business continuity, regulatory and compliance protocols for an organization.

Learning Outcomes — Upon completion of the Information Security & Risk Management certificate, students will be able to:

- Identify and evaluate cyber security risks and threats
- Discern the risk appetite of an organization or business
- Design and develop IT risk and cyber security programs using industry frameworks and methodologies
- Understand the legal, policy and regulatory implications for cybersecurity
- Formulate an effective communication strategy by acquiring, evaluating, organizing, managing, and interpreting information

Careers — Graduates of the Information Security & Risk Management Certificate program will be prepared for employment in a variety of industries including Healthcare, Manufacturing, Financial Services, Government Agencies, Education, and Retail. An Information Security and Risk Management Certificate from Cambridge College qualifies you for in-demand positions, such as:

- Cybersecurity Analyst
- IT Audit and Risk Manager
- Security Consultant
- Security Operations Center (SOC) Analyst
- Security & Risk Compliance Analyst
- Cybersecurity Specialist

Courses can be taken online or on-site.

Courses 27 credits

Term 1 Spring

Introduction to Cybersecurity

- CMP 250 Fundamentals of Cybersecurity
- CMP 255 Information Security Foundations
- CMP 280 Introduction to Computer and Network Security Essentials

Term 2 Fall

Governance, Risk & Compliance

- CMP 302 Cybersecurity Governance Frameworks
- CMP 323 Digital Law - Privacy Policies, Regulations, Ethics
- CMP 331 Cybersecurity Audit & Risk Management

Term 3 Spring

Communications & Data Handling

- CMP 350 Cybersecurity Communications
- CMP 455 Protecting and Handling Data
- CMP 460 Risk Response & Monitoring

Pre-Baccalaureate Certificate

Network Security Certificate

• CIP code 111003 • 27 credits, 3 terms

Program Description — The Network Security Certificate provides students with a solid foundational knowledge of network operating systems, network security, digital forensics, and incident response methods.

Learning Outcomes — Upon completion of the Network Security certificate, students will be able to:

- Analyze network and data traffic
- Build simple Local Area Networks (LAN)
- Establish disaster recovery strategies
- Implement and troubleshoot Access control list for Pv4 and IPv6 networks
- Explore network security tools
- Monitor networks for security breaches
- Install, configure and test security hardware and software tools with supporting documentation such as port scanners

Careers — Graduates of the Network Security Certificate program will be prepared for employment in a variety of industries including business, education, healthcare, government, insurance, manufacturing, and retail. Employment opportunities include but are not limited to Computer Network Defense Analyst, Computer Network Defense Infrastructure Support, Computer Network Support Specialist, Network Administrator, Penetration Tester, Red Team Technician, and Systems Administrator.

Courses can be taken online or on-site.

Courses 27 credits

Term 1 Spring

Introduction to Networking Basics

- CMP 250 Fundamentals of Cybersecurity
- CMP 280 Introduction to Computer and Network Security Essentials
- CMP 205 Basic Network Troubleshooting

Term 2 Fall

Network Management

- CMP 260 EndPoint & Infrastructure Security
- CMP 400 Cloud Network Security
- CMP 401 Wireless Technology & Security

Term 3 Spring

Protecting & Network Monitoring

- CMP 415 Network & Digital Forensics Investigation
- CMP 435 Network Protection & Threat Monitoring
- CMP 450 Machine Learning for Network Intrusion Detection

All courses 3 credits except as noted.