



Division of Science, Technology, Engineering and Mathematics

Associate in Science in Cybersecurity

The Associate of Science degree program in Cybersecurity educates students with higher level of security and networking knowledge to prepare them for cybersecurity careers within the Information Technology (IT) field. This allows students to continue their education in cybersecurity field at a 4-year institution. Students are trained with current technology and tools to gain important networking and security skills required for a position in the cybersecurity field.

Successful graduate of this Associate in Science degree will be able to:

1. Identify security threats and vulnerabilities and mitigate the risks by choosing the best protection (Access Control) and prevention (perimeter defense) methods;
2. Understand the cryptographic systems and recognize and apply capabilities of each cryptographic system according to the specifications/requirements;
3. Use scripting language to implement solutions for network and system administration problems;
4. Design, maintain, and manage a small network of computers, secure access to it and use network diagnostics tools effectively to evaluate and analyze network issues;
5. Setup, configure, test, maintain networking devices while securing them with effective and up-to-date techniques as well as monitoring;
6. Describe different components of modern Operating Systems and perform general operations (installation, setup, and configuration as well as accounts and application management);
7. Define, describe, and discuss ethical concepts and recognize privacy boundaries as well as cyber regulations, compliance, and laws while demonstrating professional ethics and code of professional conduct;
8. Exhibit critical thinking, creative thinking, and problem-solving skill to wide array of issues and problems in scientific as well as non-scientific disciplines;
9. Work effectively as a member of a team, and demonstrate leadership by making meaningful contributions to the team; accept and provide feedback when necessary;
10. Communicate effectively with a diverse group of collaborators within the computer science and other disciplines using appropriate written and oral presentation conventions.