SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

CYBERSECURITY

A.A.S. DEGREE/CERTIFICATES

ACC
ALVIN COMMUNITY COLLEGE

Help Protect Against Cyber Crime

Today's digital threats continue to evolve and become increasingly more complex. The cybersecurity profession is entwined with computer information technology and the businesses and industries that rely on computer technology for their daily operations. In our increasingly connected world, demand for cybersecurity professionals continues to grow as companies improve protection of data and digital assets.

Organizations need people with the knowledge and skills required to effectively respond to cyber threats by leveraging intelligence and threat detection techniques, identifying and addressing vulnerabilities, and analyzing and interpreting data. Skilled cybersecurity professionals are needed to secure, defend, manage, and respond to threats in the energy, oil and gas industries, financial, government, healthcare, retail and manufacturing industries.

Career Opportunities

Demand for information security professionals is expected to continue to grow. Cyberattacks have escalated in frequency, and cybersecurity professionals are needed to develop innovative solutions to prevent bad actors from stealing critical information or compromising computer networks. Banks and financial institutions, hospitals and healthcare facilities, educational institutions, and other organizations, will all need to improve their information security capabilities in the face of growing cybersecurity threats.

According to the Bureau of Labor Statistics, the employment of information security professionals is projected to grow 28 percent from 2016 to 2026, much faster than the average of occupations.

What Will I Study?

The cybersecurity curriculum prepares graduates for employment with organizations that assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures. Upon completion of the program, students will be able to:

- Analyze and determine the cybersecurity needs of an organization.
- Identify and utilize cyber forensics tools.
- Measure the performance of cybersecurity systems and troubleshoot within an enterprise-level information system.
- Create and communicate organizational cybersecurity strategies and policies.

For More Information:

Website: www.alvincollege.edu/cybersecurity
Phone: 281.756.3817
Email: cybersecurityprogram@alvincollege.edu

Your College Right Now

Revised 8/22

CYBERSECURITY

Associate of Applied Science – 60 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
+ENGL 1301 - Composition 1	3
ITMT 1358 - Windows Client Operating System	3
ITNW 1325 - Fundamentals of Networking	3
ITSY 1300 - Fundamentals of Information Security	3
SECOND SEMESTER	
ITNW 1313 - Computer Virtualization	3
ITSC 1316 - Linux Installation & Configuration	3
ITSE 1302 - Computer Programming	3
+MATH 1314 - College Algebra **or**	
+MATH 1342 - Elementary Statistical Methods	3
THIRD SEMESTER	
ITNW 1358 - Network+	3
+SPCH 1318 - Interpersonal Communication	3
SECOND YEAR FIRST SEMESTER	
ITSY 1342 - Information Technology Security	3
ITSY 2300 - Operating System Security	3
ITSY 2301 - Firewalls & Network Security	3
ITSY 2345 - Network Defense & Countermeasures	3
+PSYC 2301 - General Psychology **or**	
+SOCI 1301 - Introduction to Sociology	3
SECOND SEMESTER	
ITSY 2341 - Security Management Practices	3
ITSY 2342 - Incident Response & Handling	3
ITSY 2359 - Security Assessment & Auditing	3
*ITSY 2386 - Internship-Computer & Information Sys Security **or**	
*ITSC 2335 - Application Software Problem Solving	3
+PHIL 2306 - Introduction to Ethics	3
CYBERSECURITY (A.A.S.) DEGREE	**60**

CYBERSECURITY

Certificate 2 – 45 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
ITMT 1358 - Windows Client Operating System	3
ITNW 1325 - Fundamentals of Networking	3
ITSY 1300 - Fundamentals of Information Security	3
SECOND SEMESTER	
ITNW 1313 - Computer Virtualization	3
ITSC 1316 - Linux Installation & Confirguration	3
ITSE 1302 - Computer Programming	3
THIRD SEMESTER	
ITNW 1358 - Networking+	3
SECOND YEAR FIRST SEMESTER	
ITSY 1342 - Information Technology Support	3
ITSY 2300 - Operating System Security	3
ITSY 2301 - Firewalls & Network Security	3
ITSY 2345 - Network Defense & Countermeasures	3
SECOND SEMESTER	
ITSY 2341 - Security Management Practices	3
ITSY 2342 - Incident Response & Handling	3
ITSY 2359 - Security Assessment & Audit	3
*ITSY 2386 - Internship-Computer & Information Sys Security **or**	
*ITSC 2335 - Application Software Problem Solving	3
CYBERSECURITY CERTIFICATE 2	**45**

CYBERTECH

Certificate 1 – 21 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
ITMT 1358 - Windows Client Operating System	3
ITNW 1325 - Fundamentals of Networking	3
ITSY 1300 - Fundamentals of Information Security	3
SECOND SEMESTER	
ITNW 1313 - Computer Virtualization	3
ITSC 1316 - Linux Installation & Confirguration	3
ITSE 1302 - Computer Programming	3
THIRD SEMESTER	
ITNW 1358 - Networking+	3
CYBERTECH CERTIFICATE 1	**21**

+Denotes core requirement. Speak with Department Chair or Academic Advisor for proper course selection.
* Capstone Course

*PROGRAM COSTS

Approximate costs for the A.S. Degree program including tuition and fees are $4,200 for indistrict students, $6,960 for students out-of-district, and $9,840 for non-residents. Additional fees for books and supplies may vary.

*Alvin Community College may change tuition rates and other fees without notice or when directed by the Board of Regents.

Alvin Community College is an equal opportunity institution.
If you have a disability and need assistance or require special accommodations contact Student Accessibility Services at 281-756-3533 or sas@alvincollege.edu.