A.S. Cybersecurity (60 Credits)

Guided Pathway: Associate of Science, Cybersecurity (CYSC)

For more information, visit www.fgc.edu and your academic advisor.

Meta-major: STEM

The Associate in Science in Cybersecurity prepares students in detection, containment, and remediation of IT threats. Students will learn to monitor networks and applications to identify cyber-attacks or intrusions, help coordinate and report on cyber incident responses, perform analysis and trends of security log data, provide Incident Response (IR) support, and conduct threat and vulnerability analyses. Students who successfully complete this Associate in Science degree are exposed to the competencies included in the following industry certifications: CompTIA's A+, Network+, Security+, Linux+, PenTest+, CySA+, and Cisco CyberOps Associate. This program prepares students for a variety of careers in the computer science field to include: Compliance Officer, Cyber Crime Analyst/Investigator, Cybersecurity Manager or Administrator, Cybersecurity Engineer, Cybersecurity Architect, Incident Responder, Penetration Tester, Security Auditor and more.

This is the sequence of courses for students interested in a Cybersecurity Degree. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an *AS* degree[ii]. Courses that complete the degree are listed below. As always, visit your academic advisor each semester to help you keep on track for graduation.

All AS degrees must satisfy the statewide Civic Literacy requirement for graduation. Please see the catalog.

SEMESTER BY SEMESTER MAP FOR FULL-TIME STUDENTS

SEMESTER 1	ACTION ITEMS
ENC 1101 – Freshman Composition	• Complete the Florida Gateway College Application • Complete the CYSC program application • Signup for and pass the Florida Civic Literacy Exam. • Begin applying for Financial Aid and Scholarships. *(You can start the FAFSA in October for the next academic year – i.e. October 2024, you can complete the FAFSA for class registration for Fall 2025)* • Check with your advisor for important deadlines and dates. • REQUIRED: Contact the Test Center and schedule to take the PERT Exam, which must be taken prior to registration for classes. • Meet with your advisor to discuss your plan of study.
COP 2000 – Introduction to Programming	
CTS 1170 – Foundations of Information Security	
CTS 1131 – Computer Essentials & Support	
Choose one: **AMH 2010 –** United States History to 1877 *OR* **AMH 2020 –** United States History from 1877 *OR* **POS 1041** – American Government[iv] *(Social Science & civic literacy)*	

TOTAL SEMESTER CREDIT HOURS: 15

SEMESTER 2	ACTION ITEMS
CNT 2414 – Computer & Network Security	• Meet with your advisor to confirm or update your academic/career pathway and program of study.
CGS 2541 – Database Management	
COP 2830 – Basic Web Page Programming	
CTS 1134 – Introduction to Networking	
MAC 1105 – College Algebra	

TOTAL SEMESTER CREDIT HOURS: 15

SEMESTER 3	ACTION ITEMS
CIS 1254 – Professional Development for IT	• Check with your advisor for important deadlines and dates.
CIS 2352 – Ethical Hacking	
CGS 2811 –Incident Response & Disaster Recovery	
Approved Program Elective	
General Education Humanities Core Course	

TOTAL SEMESTER CREDIT HOURS: 15

SEMESTER 4	ACTION ITEMS
CIS 2350 – Cybersecurity Analysis	
CIS 2774 – Cyber Warfare	• After reviewing your final program of study, apply for Graduation.
CIS 2940 – Cybersecurity Internship	o Meet with your advisor to apply for graduation for your degree.
Approved Program Elective	o Sign up for commencement.
General Education Natural Science Core Course *(3-5 cr)*	• Congratulations, graduate!

TOTAL SEMESTER CREDIT HOURS: 15-17

CYSC DEGREE PATHWAY TOTAL: 60-62 CREDIT HOURS