

PROGRAM OF STUDY: Cybersecurity



This Program of Study may serve as a graduation guide for the next four plus years, along with other career planning and educational materials. Courses listed in this model may include recommended coursework and should be individualized to students' educational and career goals. Each graduation plan needs to meet minimum high school graduation requirements. Dual Enrollment courses can be high school academic and/or career technical education courses.

SECONDARY:					POSTSECONDARY:					
COURSE/ GRADE	NINTH	TENTH	ELEVENTH	TWELFTH	TCC	DIPLOMA OR AAS	BACHELOR OF SCIENCE			
ENGLISH	9 th grade Lit/ Composition	10 th grade Lit/ Composition	American Lit/ Composition	World Lit/ Composition / British Lit	Entrance/Exit Point	Entrance/Exit Point	Entrance/Exit Point			
MATHEMATICS	Coordinate Algebra / Algebra I	Analytic Geometry / Geometry	Advanced Algebra / Algebra II	Pre-calculus						
SCIENCE	Physical Science	Biology	Chemistry	Physics						
SOCIAL STUDIES	World History	Psychology	US History	Government (½ unit) Economics (½ unit)						
PATHWAY COMPLETER	Introduction to Digital Technology	Introduction to Cybersecurity	Advanced Cybersecurity	Another course in focus area, Work-Based Learning, or Youth Apprenticeship						
Industry Recognized Credential (Pathway Completer)		Visit the End of Pathway Assessment Page (see note below)						Find the campus for the TCC options		https://apps.ds.usg.edu/ords/f?p=118:1:0:
Required/ Selective Electives	Health & Personal Fitness (can be taken in grades 9-12)	Financial Literacy	Introduction to Business and Technology	Entrepreneurship				Find the campus for the Diploma, Degree options		
	Modern Language/Latin 2 units required for admissions to Georgia University System Colleges/Universities For a listing of Modern Language/Latin courses offered at your high school, please contact your advisor, counselor, or curriculum handbook.		Other Electives For a listing of other elective courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.							

NOTE: Students have many options to **ENTER** and **EXIT** from their academic studies into the workforce. When a student graduates from high school, they are eligible to choose one of many **ENTRANCE POINT** options: **1.** Enroll in either a 2 or 4 year post-secondary program; **2.** Enroll in an apprenticeship program or the military; or **3.** Enter the workforce using technical skills learned in high school. When a student finishes a 2- or 4-year degree program, they may choose to **EXIT** and **1.** Enroll in an apprenticeship program or the military; **2.** Enroll in a professional university degree program; or **3.** Enter the workforce using technical skills learned.

Cybersecurity Career Pathway Completers - Industry Credentialing for High School Students
Upon completion of sequenced courses in the Cybersecurity Pathway, students are eligible to complete the Industry-Recognized student credential for fulfillment of the End of Pathway Assessment. Secondary students completing the Cybersecurity pathway will be able to sit for the National Industry Credentialed assessment offered on-line from Security+. Once mastery is reached, students will receive recognition for completion and use this credential in conjunction with their job or continuing training. For specific assessment information, refer to: <http://bit.ly/GAInfoTech>.

Sample In Demand Careers in Georgia

Occupation Specialties	Level of Education Needed	Georgia Average Salary	Annual Average Openings in Georgia	2014 – 2024 Employment Outlook
Information Security Analyst	Bachelor's Degree	\$90,122	328	In Demand, High Skill, High Wage
Network & Computer System Administrators	Bachelor's Degree	\$82,897	772	In Demand, High Skill
Security Management Specialists	Bachelor's Degree	\$71,098	4,342	In Demand, High Skill,
Information Technology Project Managers	Bachelor's Degree	\$85,978	1,931	In Demand, High Skill

[Data link here.](#)

Go to [GAfutures at www.gafutures.org](http://www.gafutures.org) for more information about your education and career planning, including valuable financial information (grants and scholarships including HOPE Program, grants and loans, FAFSA, and CSS forms).

Career Enhancement Opportunities	Career-Related Education Activities <ul style="list-style-type: none"> Career Awareness Career Exploration Instructional Related Connecting <ul style="list-style-type: none"> Work-Based Learning Employability Skill Dev. Cooperative Education Internship Youth Apprenticeship Clinicals 	Postsecondary Options: <ul style="list-style-type: none"> 4-Year Universities/Colleges 2-Year Colleges Technical Colleges State Registered Apprenticeships Special Purpose Schools On-the-Job Training Military 	Earning Postsecondary Credits While in High School <ul style="list-style-type: none"> Dual Enrollment Program Earn postsecondary credit while in high school You can complete <ul style="list-style-type: none"> Industry Credential Technical Certificate of Credit (TCC) Associates of Applied Science Degree Bachelor's Degree Who can help? <ul style="list-style-type: none"> Parents School Counselor Advisor
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Postsecondary Transition <ul style="list-style-type: none"> University System of Georgia Institutions: Admissions Testing <ul style="list-style-type: none"> ACT or SAT For More Information: <ul style="list-style-type: none"> Contact the institution of your choice OR Technical College System of Georgia <ul style="list-style-type: none"> Placement Exam United States Military <ul style="list-style-type: none"> ASVAB Assessment Use BRIDGE Law platform to inform decisions on postsecondary opportunities Dual Enrollment <ul style="list-style-type: none"> Earning high school course credits while taking college courses
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Related Pathway Occupations	Other Related Occupations
<ul style="list-style-type: none"> Information Security Officer Data Security Administrator Computer Security Specialist 	<ul style="list-style-type: none"> Computer Network Analysts Computer Network Architects Computer Systems Engineers <p style="text-align: right;">*ONET Online</p>

Cybersecurity Pathway Description

Cybersecurity, also referred to as information technology security, focuses on protecting computers, networks, programs, and data from unintended or unauthorized access, change or destruction. Network outages, data compromised by hackers, computer viruses and other incidents affect our lives in ways that range from inconvenient to life threatening.

Training programs in cybersecurity prepare students to assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures.

As the number of mobile users, digital applications and data networks increase, so do the opportunities for exploitation. Governments, military, corporations, financial institutions, hospitals, and other businesses collect, process, and store a great deal of confidential information on computers and transmit that data across networks to other computers.

With the growing volume and sophistication of cyber-attacks, ongoing attention is required to protect sensitive business and personal information, as well as safeguard national security.