

# Cybersecurity

## Curriculum Plan 2022-2023



Area of Concentration: N4

CTSO: BPA

### Program Courses

EMIS Course Code	Course Name	Grade	Is this course a CTAG?
145005	Information Technology	10	No
146005	Cybersecurity	11	No
145035	Networking	11	No
145055	Routing and Switching	12	No
145050	Network Security	12	No

### Industry Credentials/Certifications

Industry Credentials Offered	ODE Points Available	Completed during Grade
CompTIA IT Fundamentals	6	

### College Credit Opportunities

Course Name	College	Credit Hours	Completed during Grade
CTIT006 Network Security	CTAG	3	12

### Work-Based Learning Opportunities

On the job placement opportunities	
CTSO competitions	

### Tasks

<ul style="list-style-type: none"> <li>• Develop computer or information security policies or procedures.</li> <li>• Update knowledge about emerging industry or technology trends.</li> <li>• Implement security measures for computer or information systems.</li> <li>• Test computer system operations to ensure proper functioning.</li> <li>• Collaborate with others to resolve information technology issues.</li> <li>• Document operational procedures.</li> <li>• Troubleshoot issues with computer applications or systems.</li> <li>• Coordinate project activities with other personnel or departments.</li> <li>• Monitor the security of digital information.</li> <li>• Train others in computer interface or software use.</li> </ul>
---

# CYBERSECURITY

## Program of Study

Aligned with Sinclair – Internet of things (IoT) Cyber Technician CETT.S.AAS

<b>Secondary</b>	9	English 9	Algebra I or Geometry	Physical Science	World History	PE/PE	Health/ Career Exploration	Elective
	10	English 10	Geometry or Algebra II	Biology	U.S. History	Elective	Information Technology 145005	
	11	English 11	Algebra II or Pre-Calculus	Chemistry or Environmental Science	American Government	Elective	Cybersecurity 146005	Networking 145035
	12	English 12	Adv Math	Elective	Elective	Elective	Routing and Switching 145055	Network Security 145050

<b>Post-Secondary</b>	Fall Year 1	CIS 1107 Intro to Operating Systems	CIS 1130 Network Fundamentals OR CIS 1141 Intro to Networks	CIS 1140 Information Systems Analysis & Design	ENG 1101 English COMP I	OT36: Social & Behavioral Science Elective
	Spring Year 1	CIS 2165 Database Management	CIS 2265 Data Visualization	EET 1120 Introduction to DC & AC Circuits	EET 1198 Digital Technology	
	Summer Year 1	EET 2261 Microprocessors		EET 2281 Programmable Logic Controllers		COM 2211 Effective Public Speaking
	Fall Year 2	CIS 2266 Python for Data Analytics	CIS 2640 Network Security	EET 2282 Advanced Programmable Logic Controllers	MAT 1580 OR Pre-Calculus AND MAT 1470 College Algebra AND MAT 157- Analytic Geom and Trig	
	Spring Year 2	EGR 1128 Robotics in CIM Systems		EGR 2252 Teach Pendant Robot Programming		EGR 2261 Engr Prob Solv using "C" & "C++"

<b>Key</b>	Required Course	Recommended Elective Courses	High School Career-Technical Courses <b>Bold =College Credit Opportunity</b>
------------	-----------------	------------------------------	---