

# 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>
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# CYBERSECURITY

## Program of Study

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

Secondary	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

Post-Secondary	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	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>
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Dayton Public Schools does not discriminate on the basis of race, color, national origin, sex, disability, or age for participation in any program or activity. Lack of English language proficiency will not be a barrier to admission and participation in career-technical education programs.