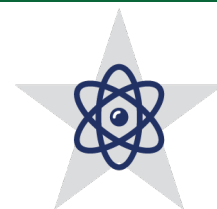


# Science, Technology, Engineering, and Mathematics Career Cluster

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.



## Cybersecurity (VMHS) Statewide Program of Study



The Cybersecurity program of study includes the occupations and educational opportunities related to planning, implementing, upgrading, or monitoring security measure for the protection of computer networks and information. This program of study may also include exploration into responding to computer security breaches and virus and administering network security measures.

### Secondary Courses for High School Credit

Level 1	T365	Foundation of Cybersecurity (1/Term)
Level 2	T346	Computer Maintenance - Lab (2/YL)
Level 3	T340	Networking – Lab (2/YL)
Level 4	T914	Practicum of Science, Technology, Engineering and Math (2/YL)

### Industry-Based Certifications

- CodeHS Cybersecurity Level 1 Certification
- CompTIA Fundamentals+
- CompTIA A+ Certification
- CompTIA Network+
- CompTIA Security+
- Cybersecurity Fundamentals
- CyberSecurity Fundamentals: An ISACA Certificate



### Postsecondary Opportunities

#### Associates Degrees

- System Networking, and LAN/WAN Management
- Information Technology
- Computer and Information Sciences, General
- Computer Science

#### Bachelor's Degrees

- Computer Systems Networking and Telecommunications
- Computer Systems Networking and Telecommunications
- Computer and Information Sciences, General
- Computer Science

#### Master's, Doctoral, and Professional Degrees

- Computer Systems Analysis/Analyst
- Information Technology
- Computer Information Sciences, General
- Computer Science



### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join TSA or SkillsUSA
- Job shadow a computer system analyst or information security analyst

#### Work-Based Learning Activities

- Obtain a cybersecurity IBC

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Information Security Analysts	\$91,915	814	29%
Network and Computer System Administrators	\$82,597	2,814	19%
Computer System Analysts	\$87,568	5,937	29%

Successful completion of the Agribusiness program of study will fulfill requirements of the Business and Industry or STEM Endorsement if this math and science requirements are met. Revised – October 2022