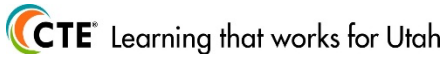


# Utah Career and Technical Education Career Pathway

## 2019-2020 School Year



**CTSO Information**  
 Career and Technical Student Organizations (CTSO) align with the national Career Clusters® and the Utah CTE Career Pathways.

Students who participate in the Cybersecurity Career Pathway choose among the following CTOS, depending upon what is available at their school:

FBLA | SkillsUSA | TSA

**Workforce Trends**  
 According to the U.S. Bureau of Labor Statistics, employment of information security analysts is projected to grow 28 percent through the year 2026. Demand is expected to be very high, as these analysts will be needed to create innovative solutions to prevent hackers from stealing critical information or causing problem for computer networks.

### Career Cluster: Information Technology

### Career Pathway: Cybersecurity

CORE CODE	FOUNDATION COURSES (required)	CREDITS	
<i>Choose three of the following courses:</i>			1.50 credits
35.02.00.00.042	Cloud Computing	.50	
35.01.00.00.036	Cybersecurity Ethical Hacking	.50	
35.01.00.00.038	Cybersecurity Forensics	.50	
35.02.00.00.060	Web Development 1	.50	
ELECTIVE COURSES			1.50 credits
35.02.00.00.021	Database Development	1.00	
35.02.00.00.008	Exploring Computer Science 2	.50	
35.02.00.00.005	Introduction to Information Technology	.50	
35.01.00.00.025	Linux Fundamentals	.50	
41.00.00.00.050	CTE Internship	.50	
41.00.00.00.030	Workplace Skills	.50	
<b>3.00 credits for completion</b>			

Foundation courses taken beyond the required credits can be used as elective credit.  
 Visit [UtahCTE.org](http://UtahCTE.org) to learn how to earn industry certification in this Career Pathway.

**Career and Technical Education provides all students access to high-quality, rigorous career-focused programs that result in attainment of credentials with labor market value.**

**Cybersecurity is:**

- > High skill
- > High wage
- > High demand

**Sample Occupations Requiring:**

[High School Diploma](#)  
 > N/A

[Certificate](#)  
 > N/A

[Assoc. or Technical Degree](#)  
 > Computer Network Support Specialist

[Baccalaureate Degree](#)  
 > Career and Technical Education Teacher  
 > Computer and Information Systems Managers  
 > Computer Programmers  
 > Information Security Analyst

[Graduate or Prof. Degree](#)  
 > Computer and Information Research Scientists

**Student Testimonial**  
 "Getting a degree will help me to pursue my goal of working as a computer programmer at a large company. CTE classes prepared me by showing me what I would actually be doing in the different job fields and how I would apply the information that I learned in class."  
 Aaron Montoya

### HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING

There are a number of options for education and training beyond high school, depending on your career goals.

12th Grade	1-Year Certificate	2-Year Associate or Technical Degree	4-Year Bachelor's Degree	More Graduate or Prof. Degree
Certificates are awarded upon the successful completion of a brief course of study, usually one year or less. Upon completion of a course of study, a certificate does not require any further action to retain. In high school a variety of certificates can be earned.		An academic degree is an award for the completion of a program or course of study over multiple years at postsecondary education institutions. In 2016-2017, 74 percent of secondary students who concentrated in a CTE Career Pathway placed in postsecondary education, advanced training, military service or employment (October 1-December 31).		

**Utah Business and Industry Facts**

In 2018, the Information Technology and Innovation Foundation (ITIF) ranked Utah's state government website (Utah.gov) #1 for security, and 17th overall. "Government websites should be fast, secure, mobile-friendly, and accessible to everyone, said Daniel Castro, ITIF vice president.

**CTE Skill Certificates**  
 Competency-based student assessments, measured by core standards and competencies, needed to be successful in the workforce.

In 2017-2018, 111,238 CTE skill certificates were awarded to high school students. Students' knowledge and performance is demonstrated as part of the Skill Certificate process.

**UtahFutures: College and Career Planning**  
 Visit [UtahFutures.org](http://UtahFutures.org) for salary projections, labor market demand, and training options.

In 2016-2017, the graduation rate for students who concentrated in a CTE Career Pathway was 95 percent, compared to Utah's statewide graduation rate of 86 percent.