

High School to College and Career Pathway: Secondary

Career and Technical Education: Preparing Students for College and Career!



Area of Study: Information Technology Education

Pathway: Network Systems

Get the Facts

The term “computer bug” was coined in the 1940s when an insect got into a relay in a primitive electromechanical computer causing computer malfunctions.

Workforce Trends

Growth will be driven by rapid increases in the computer and data processing services industry.

CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses

(Students may select individual courses for exploration, or a complete Pathway for an in-depth focus.)

CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL

Course #	Foundation Courses: (required)	Credit
Choose 1.5 credits from the following courses:		
11.0101	Information Technology, Introduction	.50
11.0420	Cisco Certified Network Administrator (CCNA)	1.00
11.0430	Microsoft Certified Professional (MCP)	1.00
11.0440	Network Fundamentals	.50
Elective Courses:		
11.9920	A+ (Computer Maintenance)	1.00
11.9940	Linux Fundamentals	1.00
11.0450	Security Fundamentals	.50
32.0199	Student Internship (Critical Workplace Skills)	.50

1.50 credits

1.50 credits

3.00 credits for completion

Visit UtahCTE.org to learn how to earn industry certification in this Pathway.



Network Systems is:

- > High skill
- > High wage
- > High demand
- > Nontraditional for females

Sample Career Occupations

- > Information Technology Education Teacher
- > LAN Administrator
- > Network Analyst
- > Network Engineer
- > Telecommunication Manager

Foundation courses taken beyond the required credits can be used as elective credit.

Middle School		State Requirements			High School Suggested Education Plan				College and Career
7th Grade	8th Grade	Middle School	High School		9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	Beyond High School
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts	4.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	Language Arts 12 1.00	There are a number of options for education and training beyond high school, depending on your career goals. <ul style="list-style-type: none"> > Certificate > Associate degree > Bachelor's degree > Professional degree > On-the-job training > Apprenticeship > Military training For more information on salary projections, labor market demand, and training options, visit www.utahfutures.org .
Math * 1.00	Math * 1.00	2.00	Math	3.00	Math * 1.00	Math * 1.00	Math * 1.00	Computer Programming 1.00	
Science .50	Science 1.00	1.50	Science	3.00	Earth Systems 1.00	Biological Science 1.00	Additional credit 1.00		
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	3.00	Geography for Life .50	World Civilizations .50	U.S. History II 1.00	U.S. Government and Citizenship .50	
P.E. 1.00	Health .50	1.50	P.E./Health	2.00	Participation Skills and Techniques .50	Fitness for Life .50 / Health Education .50 Lifetime Activities or Sport .50			
The Arts .50	The Arts .50	1.00	Fine Arts	1.50	Fine Arts Courses 1.50				
Keyboarding .50			Computer Tech.	.50	Computer Technology .50				
CTE Intro 1.00		1.00	CTE	1.00	Refer to Career and Technical Education box above.				

* Talk to your school counselor about math requirements in the new common core curriculum. Core curriculum and elective requirements may vary district to district.

Concurrent enrollment course offerings vary by school and district. Many Utah postsecondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional postsecondary Pathways for details.