CYBERSECURITY & NETWORKING

Career Cluster: Information Technology

Endorsement: Business & Industry

Level One

Principles of Information Technology

Level Two

Computer Maintenance/Lab (KCC)

Level Three*

Digital Forensics, or
Networking (KCC)

Level Four*

Practicum of Information Technology (KCC)

Indicates advanced course(s)

A CTE Completer is a student who completes three or more CTE courses for four or more credits including one Level 3 or 4 (advanced level) CTE course within a program of study will fulfill the requirements of a Business and Industry Endorsement.

The Cybersecurity program includes the occupations and educational opportunities related to planning, implementing, upgrading, or monitoring security measure for the protection of computer networks and information. The Networking program explores the occupations and educational opportunities associated with designing and implementing computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. The Information Technology program explores the occupations and educational opportunities associated with administering, testing, and implementing computer databases and applying knowledge of database management systems.

The Networking Systems program of study explores the occupations and educational opportunities associated with designing and implementing computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. This program of study may also include exploration into analyzing science, engineering, and other data processing problems to implement and improve computer systems.

CAREER OUTLOOK**

Occupation	Texas Outlook			National Outlook		
	Median Wage	Annual Openings	Growth	Median Wage	Annual Openings	Growth
Computer Systems Analysts	$92,980	5,080	16%	$90,920	46,200	7%
Computer Network Support Specialist	$65,410	1,360	17%	$63,460	14,800	6%
Information Security Analysts	$104,710	1,040	38%	$99,730	13,900	31%
Network & Computer System Administrators	$83,790	3,080	14%	$83,510	23,800	4%

** *Career Outlook information derived from O*NET Online at https://www.onetonline.org/*

INDUSTRY CERTIFICATIONS & EDUCATION

Industry Certification Offered at the KISD Career Center	Certification/ License	Associate's Degree	Bachelor's Degree	Master's/ Doctoral/ Professional Degree
COMPTIA Networking+ COMPTIA Security+ COMPTIA Fundamentals+	Cisco Certified Entry Networking Technician	Network and System Administration/ Administrator	Computer and Information Sciences, General	Computer and Information Sciences, General
Microsoft Technology Associate (MTA)	Cisco Certified Entry Networking Technician	Network and System Administration/ Administrator	Computer and Information Sciences, General	Computer and Information Sciences, General

Note: All students enrolled in this at the KISD Career Center have an opportunity to challenge all ten Microsoft Technology Associate examinations; all students in the program are expected to challenge the Microsoft Technology Associate - Operating Systems & Networking and Network Fundamentals & Operating Systems.

HIGH SCHOOL COURSE INFORMATION

Course Name	Service ID	Prerequisite(s)	Grade(s)
Principles of Information Technology	13027200 (1 Credit)	None	9-10
Computer Maintenance	13027310 (2 Credits)	None	10-12
Digital Forensics	03580360 (1 Credit)	None	9-12
Networking	13027400 (1 credit)	None	10-12
Practicum of Information Technology	13028000 (2 Credits)	Successful completion of a minimum of at least 2 IT courses	12

CAREER EXPLORATION & WORK - BASED LEARNING OPPORTUNITIES

Possible Career Exploration Activities	Possible Work-Based Learning Opportunities
• Job Shadowing with an IT department in a local business • Participate in a Career & Technical Student Organization (CTSO), such as Technology Student Organization (TSA) & CyberPatriot competitions.	• Intern with a local business's IT department *Note: If you have an internship during high school, talk with your counselor about taking Career Prep.*

FIND COLLEGES & UNIVERSITIES OFFERING CERTIFICATES & DEGREE PLANS IN THIS FIELD

Log into Naviance and use the College Supermatch Tool to find colleges offering degree plans in this field.

NAVIANCE ACCESS

All Killeen ISD students (7th-12th graders) should login to their Naviance account through Clever:

1. Go to your Clever portal:
https://clever.com/in/killeenisd

2. Username: school username
Password: school password

3. Click on: Naviance

NAVIANCE

ARMED FORCES CAREER INFORMATION

Cyber Network Defender – U.S. Army	**Local Armed Forces Recruiter Contact Information:**
Cyber Operations Specialist – U.S. Army	Air Force – (254) 247-8992
Cyber Surety – U.S Air Force	Army – (254) 690-8554
Cyber Systems Operator – U.S. Air Force	Army National Guard – (903) 262-6355
Computer Systems Programmer – U.S. Air Force	Marines – (254) 690-2626
This is not a comprehensive list.	Navy – (254) 690-2096

*See your school counselor to connect with a military recruiter for career counseling and to take the ASVAB in high school.