Cybersecurity

Principles of Information Technology

Foundations of Cybersecurity

Networking/Lab

Practicum in Information Technology
OR
Project-Based Research

Oracle Certified Associate Java SE 8	GIAC Reverse Engineering Malware	System Networking, and LAN/WAN Management	Computer Systems Networking and Telecommunications	Computer Systems Analysis/Analyst
Oracle Certified Database Associate	Certified Advanced Windows Forensic Examiner	Information Technology	Computer Systems Networking and Telecommunications	Information Technology
Cisco Certified Entry Networking Technician (CCENT)	SAP Certified Technology Professional System Security Architect	Computer and Information Sciences, General		
Associate of (ISC)2	Cisco Certified Network Professional Security Certification	Computer Science		

Information Security Analysts	$91,915	814	29%
Network and Computer System Administrators	$82,597	2,814	19%
Computer Systems Analyst	$87,568	5,937	29%

Additional industry based certification information is available from the TEA CTE Website

For more information on postsecondary options for this program of study, visit TXCTE.org.

Exploration Activities:

Join TSA
Job shadow a computer system analyst or information security analyst.

Work Based Learning Activities:

Obtain an industry based certification.

Successful completion of the Cybersecurity program of study will fulfill requirements of a Business and Industry or STEM Endorsement.

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Information Technology	13027200 (1 credit)	None	9-10
Fundamentals of Computer Science	03580140 (.5 to 1 credit)	None	9-12
Foundations of Cybersecurity	03580850 (1 credit)	None	9-12
Internetworking Technologies I	N1302803 (1 credit)	None	10-12
Computer Programming I	13027600 (1 credit)	None	10-12
Computer Science I	03580200 (.5 to 1 credits)	PREQ: Algebra I	9-12
AP Computer Science Principles	A3580300 (1 credit)	None	9-12
Computer Maintenance	13027300 (1 credit) 13027310 (2 credits)	None	10-12
Internetworking Technologies II	N1302804 (1 credit)	PREQ: Internetworking Technologies I	11-12
Engineering Applications of Computer Science Principles	N1303772 (1 credit)	None	10-12
Networking/Lab	13027400 (1 credit) 13027410 (2 credits)	None	10-12
Digital Forensics	03580360 (.5 to 1 credit)	None	9-12
AP Computer Science A	A3580110 (1 credit) A3580120 (1 credit)	None	9-12
Cybersecurity Capstone	03580855 (1credit)	None	11-12
Practicum in Information Technology	13028000 (2 credit) 13028005 (3 credit) 13028010 (2 credit) 13028015 (3 credit)	PREQ: Two high school Information Technology courses	12
Practicum in STEM	13037400 (2 credits) 13037405 (3 credits) 13037410 (2 credits) 13037415 (3 credits)	PREQ: Algebra I and Geometry	12
Project-Based Research	12701500 (1 credit)	None	11-12

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS CAREER CLUSTER, PLEASE CONTACT:

https://tea.texas.gov/cte