



- Level 1**  
Computer Science I  
Principles of Information Technology

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- Level 2**  
Internetworking Technologies I  
Computer Maintenance/Lab  
AP Computer Science Principles

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- Level 3**  
Internetworking Technologies II  
Networking/Lab  
Advanced Cloud Computing

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- Level 4**  
Practicum in Information Technology  
Practicum in Entrepreneurship  
Independent Study in Technology Applications  
Independent Study in Evolving/Emerging Technologies  
Project Based Research  
Career Preparation I

HIGH SCHOOL/INDUSTRY CERTIFICATION	CERTIFICATE/LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
Oracle Certified Associate Java SE 8	AEM 6 Business Practitioner	Computer and Information Sciences, General	Computer and Information Sciences, General	Computer and Information Sciences, General
Oracle Certified Database Associate	Intelligence Planner Certification Program	Computer Systems Networking And Tele-communications	Computer Systems Networking And Tele-communications	Information Technology
Cisco Certified Entry Networking Technician (CCENT)	Cisco Certified Entry Networking Technician	Information Technology	Computer and Information Systems Security/Information Assurance	Computer and Information Systems Security/Information Assurance
Associate of (ISC)2	Microsoft Networking Fundamentals	Network and System Administration/Administrator	Computer Engineering, General	Computer Engineering, General

Occupations	Median Wage	Annual Openings	% Growth
Computer Network Architects	\$111,633	1,082	23%
Computer Systems Analysts	\$87,568	5,937	29%
Computer Network Support Specialists	\$68,037	1,824	19%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES	
<b>Exploration Activities:</b>	<b>Work Based Learning Activities:</b>
Join TSA Job shadow a computer network architect or support specialist	Earn an industry-based certification.

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit [TXCTE.org](http://TXCTE.org).

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.



The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

Successful completion of the Networking Systems program of study will fulfill requirements of the Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020



# COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	Grade
Computer Science I	03580200 (1 credit)	Algebra I	9-10
Principles of Information Technology	13027200 (1 credit)	None	9-10
Internetworking Technologies	N1302803 (1 credit)	None	10-12
Computer Maintenance/Lab	13027300 (1 credit) 13027310 (2 credits)	PREQ: Principles of Information Technology	10-12
AP Computer Science Principles	A3580300 (1 credit)	Algebra I	9-12
Advanced Cloud Computing	N1302813 (1 credit)	None	10-12
Internetworking Technologies II	N1302804 (1 credit)	PREQ: Internetworking Technologies I	10-12
Networking/Lab	13027400 (1 credit) 13027410 (2 credits)	None	10-12
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits) 13028010 (2 credits) 13028015 (3 credits)	PREQ: Minimum of two high school information technology (IT) courses	12
Practicum in Entrepreneurship	N1303425 (2 credits)	None	11-12
Independent Study in Technology Applications	03580900 (1 credit)	None	9-12
Independent Study in Evolving/Emerging Technologies	03581500 (1 credit)	None	9-12
Project Based Research	12701500 (1 credit)	None	11-12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12

FOR ADDITIONAL INFORMATION ON THE INFORMATION TECHNOLOGY CAREER CLUSTER,  
PLEASE CONTACT: [CTE@tea.texas.gov](mailto:CTE@tea.texas.gov)  
<https://tea.texas.gov/cte>