Network Systems

Course Overview: Encompass entry level, technical, and professional careers related to the design, development, and support of hardware, software, multimedia, and systems integration services.

Career Goal (O*NET Code): **Computer Systems Engineer**/Architect (15-1099), Computer Support Specialist (15-1041), Computer Operator (43-9011), Network Systems and Data Communications Analyst (15-1081), Computer Security Specialist (15-1071).

Student Name:_____

Grade: _____

School: _____

SUGGESTED COURSEWORK

EXTENDED LEARNING EXPERIENCES

Level	Grade	Category	Courses
Middle School	8th	**HS Courses:**	
High School	9th	**Core Courses:**	English I World Geography Professional Communications Algebra I Physical Education Biology Languages other than English I
		Career-Related Electives:	Principles of Information Technology
	10th	**Core Courses:**	English II World History Geometry Languages other than English II Chemistry
		Career-Related Electives:	
	11th	**Core Courses:**	English III United States History Algebra II Physics
		Career-Related Electives:	Information Technology and Security Academy
	12th	**Core Courses:**	English IV Government/Economics Precalculus Fine Arts 4th year Science
		Career-Related Electives:	Information Technology and Security Academy

Curricular Experiences:
Business Professionals of America
Future Business Leaders of America
SkillsUSA
Technology Student Association

Career Learning Experiences:
Career Preparation
Internship
Job Shadowing

Extracurricular Experiences:
Academic Decathlon
Computer Tutor
Language Immersion Programs
School Newspaper
Student Government
UIL Academic Competitions
Yearbook

Service Learning Experiences:
Boy Scouts of America
Campus Service Organizations
Community Service Volunteer
Girl Scouts of the USA
Peer Mentoring / Peer Tutoring

COLLEGE CREDIT OPPORTUNITIES -- High School

Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses (Tech Prep), if possible. List those courses that count for college credit on your campus.

Level	Category	Courses	Career Options	Professional Associations
Postsecondary	**On-the-Job Training**	e-Trade Technician Computer Maintenance Technician NOTE: These experiences may be started and/or completed as part of the high school experience.		*Professional Associations:* American Society for Engineering Education Association for Women in Computing Computer Security Institute
	Certificates	A+ Internet and Computer Core OSHA CareerSafe Cisco Network Associate Network+ Panduit NOTE: Students may earn all or part of these certificates as part of the high school experience.	*Career Options:* Applications Specialist Administrative Assistant Programmer Database Associate	Computing Technology Industry Association IEEE Computer Society Institute of Configuration Management National Society of Professional Engineers
	Associate Degrees	Applied Mathematics Computer Programming Laser and Optical Technology Computer and Information Sciences Electrical and Electronic Equipment Installers and Repairers Network & Information Technology	*Career Options:* Network Technician Industrial Electronics Repairer Documentation Writer Data Systems Technician Code Programmer	Texas Board of Professional Engineers
	Bachelor Degrees	Computer Science Computer Systems Engineering Technology Computer Science - Systems Microelectronics Telecommunications Computer Engineering Biomedical Engineering	*Career Options:* Autonomy Developer Diagnostic Engineer Firmware Engineer Manufacturing Engineer Network Engineer	
	Graduate Degrees	Computer Engineering Manufacturing Systems Systems Engineering Engineering-Robotics & Control Network Communications Technology Project Management	*Career Options:* Robotics Engineer Embedded Electronics Engineer Manufacturing Engineering Communication Network Designer	

Students may select other elective courses for personal enrichment purposes.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2009. All plans meet high school graduation requirements as well as college entrance requirements.