# Information Technology Cluster

## **Business & Industry Endorsement**

## Do you....

- have a knack for understanding the inner workings of computer networking systems?
- ✓ have an interest in being a Computer Technician before graduation?
- Iove the idea of actually building and maintaining computers?
- ✓ help family and friends connect electronic equipment?
- ✓ desire to be a Computer Programmer?
- ✓ have the ability to visualize a flat drawing as a 3D object or landscape?

## Then log onto a career in Information Technology!

Almost every career area relies on computers...the medical field, engineering, transportation, the military, media, video game industry, remote control devices, criminal justice, business, 3D geographic mapping, just to name a few!!! Get started NOW on an IT career pathway and earn national certifications in this area while in high school!!







## Questions to Ask When Exploring Careers:

- 1. What careers relate to things I like to do?
- 2. Show me the \$\$! What are the potential salaries of my careers of interest?
- 3. Are my careers of interest projected to grow? (Job Outlook)



Sample <i>Fastest Growing</i> Information Technology Careers— Salary Ranges in Texas	Bottom 10% & Under	50%	Top 10% & Up
Computer and Information Systems Manager	\$88,950	\$140,960	\$187,200
Computer Systems Analysts	\$53,490	\$86,950	\$144,700
Information Security Analysts	\$51,530	\$89,790	\$134,130
Computer User Support Specialist	\$27,520	\$47,670	\$79,710
Database Administrators	\$43,340	\$75 <i>,</i> 890	\$123,160
Computer Network Support Specialists	\$38,540	\$66,090	\$104,720
Software Developers, Applications	\$57,830	\$99,340	\$146,450
IT Project Manager	\$51,870	\$120,000	\$132,540
Computer Network Architects	\$66,130	\$108,620	\$158,720

### Careers to Consider with a 4-Year College Degree and Higher:

Network Systems Analyst Computer Software Engineer, Computer Programmer, GIS Programmer/Analyst, Telecommunications Engineer

#### With a 2-Year College Degree:

Computer Operator , Computer Support Specialist, Electrical and Electronic Engineering Technician

### With a Certification and HS Diploma:

Computer Maintenance Technician Computer Network Maintenance Technician Radio, Cellular, and Tower Equipment Installers and Repairers Computer Controlled Machine Tool Operator

# **Career Pathways in Information Technology**

	Pathways and Required Courses				
Computer Networking	Networking 1 with Lab	Networking 2 (Practicum in IT)	Practicum in Info. Tech. 2 OR Internship in IT related area OR Computer Technician		CCENT (CISCO Certification Entry Network Technician)
Computer Service Technician Computer Maintenance must be the first course in the sequence.	Computer Maintenance 1 With Lab	Computer Technician Practicum	Practicum in Information Technology 2 or Internship in IT related area.		CompTIA A+ Certification (test 801 and/or 802)
Geological Data Technician Guthrie Center	Business Information Management	Geographic Information Systems (GIS) and Raster Based GIS Systems (taken the same year)	Computer Programming 1 and Computer Programming 2 (taken the same year)	Practicum in Information Technology OR Internship in Data Technician related area	Certification: Microsoft Office Specialist Word

Refer to the Spring Branch ISD High School Program of Studies for more detailed information regarding course descriptions and prerequisites.

#### Samples of the professional experiences that students will enjoy in our IT courses:

- building and setting up computers
- configuring routers setting up small networks
- using commercial design work with servers and infrastructure
- computer programming ArcGIS geographical mapping system

digital interactive media

Testing for professional certifications are available through many of these courses. Check the pathways table.

#### SBISD Information Technology courses include: Computer Maintenance, Computer Programming 1 & 2, Networking 1 & 2, Computer Technician, GIS and Raster Based GIS, Digital Interactive Media, Web Technologies, Practicum in Info. Tech. 2, and GC Internships.

For more information, contact your school counselor or: Beverly Litton Guthrie Center & Career and Technical Education Counselor Spring Branch Independent School District The Guthrie Center 10660 Hammerly Blvd., Houston, Texas 77043

Office: 713-251-1303 Fax: 713-251-1315

**Sources**: Achieve Texas, O\*Net Online, Labor Market and Career Information, CareerOneStop.org, U.S. Bureau of Labor & Statistics

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