

ACHIEVE TEXAS

ALIEF ISD COUNSELORS: PROMOTING COLLEGE AND CAREER READINESS



Information technology careers are available in every sector of the economy. Careers in IT involve the design, development, support and management of hardware, software, multimedia and systems integration services.

Sample Occupations:

- ◆ Web designer or webmaster
- ◆ Network administrator or technician
- ◆ Telecommunications technician
- ◆ Data communications analyst
- ◆ Security or database administrator
- ◆ Application integrator
- ◆ Computer or game programmer
- ◆ Software applications architect
- ◆ 3D animator
- ◆ Virtual reality specialist
- ◆ Graphic artist
- ◆ Help desk specialist
- ◆ Technical writer

10 Fast-Growing Careers

Occupation	% Growth (2006-2012)	New Jobs (2002-2012)
Network Systems and Data Communications Analyst	53.0%	1,930
Computer Software Engineer, Applications	45.0%	3,000
Computer Systems Analyst	29.0%	2,800
Database Administration	29.0%	470
Computer Software Engineer Systems	28.0%	1,500
Network and Computer Systems Administration	27.0%	1,540
Multi-Media Artists and Animators	26.0%	430
Technical Writers	20.0%	240
Industrial Engineers	20.0%	890
Computer and Information Systems Managers	16.0%	860

This is a projection of 10 fast-growing careers in Information Technology in Texas from the year 2006 to 2016 and the number of new jobs created in each occupation. Note that where as the percentage of growth in jobs may be high, the actual number of jobs created may be low. Source: Texas Workforce Commission.

4 Career Pathways within the cluster:

1. Information support and services
2. Interactive media
3. Network systems
4. Programming and software development





Top Paying Careers

Occupation	Average Wage	Entry-Level Wage	Experienced Wage
Computer & Information Systems Manager	\$57.36	\$37.77	\$67.16
Computer and Information Scientist, Research	\$45.93	\$25.20	\$56.30
Computer Hardware Engineer	\$46.91	\$31.79	\$54.47
Computer Software Engineer, Systems Software	\$43.50	\$29.97	\$50.27
Sales Representative, Wholesale And Manufacturing, Technical and Scientific Products	\$18.64	\$35.46	\$43.87
Computer Software Engineer, Applications	\$42.98	\$30.41	\$49.26
Electronics Engineers	\$41.98	\$28.21	\$48.85
Computer Systems Analyst	\$36.41	\$22.05	\$43.60
Network Systems and Data Communications Analyst	\$34.26	\$20.61	\$41.08

This is a chart of hourly wages for 10 of the top-paying careers in the Information Technology cluster in Texas. Note how entry-level wages are often much lower than pay for the average worker and experienced workers in each profession. Source: Texas Workforce Commission.

Information Technology— Q & A

1. Name some video games developed in Texas.
2. What company developed the world’s first commercial silicon transistors, integrated circuit, and electronic handheld calculator?

INFORMATION TECHNOLOGY

Information Technology Courses in Alief

- ◆ Principles of Information Technology
- ◆ Computer Maintenance
- ◆ Telecommunications and Networking
- ◆ Computer Programming
- ◆ Advanced Computer Programming
- ◆ Digital & Interactive Multimedia
- ◆ Web Technologies



Required Knowledge and Skills

Students interested in a career in Information Technology (IT) should concentrate on getting the basics.

It's smart to start by mastering math, science, English, and social studies. Why? Computers are just superfast number crunchers, so it helps to understand the mathematics and science underlying their operation.

Developing computer-related documents such as web pages and technical manuals requires excellent reading and writing skills.

Students who understand the history and social impact of technology are better positioned to use high-tech tools to solve problems.

Getting good grades in rigorous academics gives students the knowledge they need for success in IT.

Students may be able to earn certifications as Microsoft Office, Excel, or Word specialists while in high school.

Source: Achieve Texas In Action Magazine (www.achievetexas.org)

For more information on courses in the Information Technology cluster in Alief, go to the Achieve Texas Student Career Planner under the Student tab on the Alief homepage (www.aliefisd.net) .

Alief Information Technology

