Computer Support Specialist

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): (15-1041) - Computer support specialists provide help and advice to people and organizations using computer software or equipment. Some, called technical support specialists, support information technology (IT) employees within their organization. Others, called help-desk technicians, assist non-IT users who are having computer problems.

Student Name:_____
Grade: _____
School: _____

SUGGESTED COURSEWORK

EXTENDED LEARNING EXPERIENCES

			SUGGESTED COURSEWORK	
Middle School	8th	**HS Courses:**	(Local districts may list high school credit courses here)	
High School	9th	**Courses*:**	English I World Geography Fine Arts Algebra I or Geometry Foreign Language I Biology Physical Education or Athletics	
		Career-Related Electives:	Principles of Information Technology	
	10th	**Courses:**	English II World History Elective Geometry or Algebra II Foreign Language II Chemistry Elective	
		Career-Related Electives:	Digital & Interactive Multimedia	
	11th	**Core Courses:**	English III United States History Elective Algebra II or Pre-Calculus Foreign Language III ** Physics Professional Communications or Speech	
		Career-Related Electives:	Web Technologies	
	12th	**Core Courses:**	English IV Government/Economics Pre-Calculus or Calculus Elective 4th Science Elective	
		Career-Related Electives:	Research in IT Solutions	

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

Career Learning Experiences:
Apprenticeship
Career Preparation
Internship
Job Shadowing

Extracurricular Experiences:
Academic Decathlon
Computer Tutor
Language Immersion Programs
School Newspaper
Student Council
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.

How to Become a Computer Support Specialist
Because of the wide range of skills for different computer support jobs, there are many paths into the occupation. A bachelor's degree is required for some computer support specialist positions, but an associate's degree or postsecondary classes may be enough for others. After being hired, many workers enter a training program that lasts for several months.

Postsecondary

Texas Southmost College	South Texas College	Texas State Technical College
Computer Information Technology (CERT)	Computer and Information Technologies Specialist (CERT)	Computer Systems Management Technology (CERT)
Microsoft Certified Application Specialist (CERT)	Computer and Internet Specialist Certificate (CERT)	Computer Systems Management Technology (AAS)
Computer Information Systems (AAS)	Computer Support Specialist (CERT)	
Technology (AS)	Information Security Specialist (CERT)	

The University of Texas at Brownsville	The University of Texas - Pan American

Carrer Options
(Sample of reported job titles)

• Information Technology Specialist (IT Specialist)
• Support Specialist
• Computer Technician
• Computer Support Specialist
• Help Desk Analyst

• Technical Support Specialist
• Network Support Specialist
• Electronic Data Processing Auditor (EDP Auditor)
• Network Technician
• Computer Specialist

Professional Associations:
• Technical Services Industry Association
• Help Desk Institute (HDI)
• Association for Computing Machinery
• Institute of Electrical and Electronics Engineers Computer
• Computing Research Association
• National Workforce Center for Emerging Technologies
• National Center for Women and Information Technology

* Students must meet local & state high school graduation requirements. ** Required course for the Distinguished Graduation Plan (in addition to other measures). *** Based on campus availability. 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.

Computer Support Specialist	

TEA Industry Cluster	Computer/IT
SOC Code	15-1041
Identified by	JFF Software; TWC LCMI; Tech Prep Occupations
Projected Growth (2018)	12 %
BISD Magnet School Available	Yes

Source: Demand Occupations by Cluster, updated *June 27, 2012*

Description

What Computer Support Specialists Do

Computer support specialists provide help and advice to people and organizations using computer software or equipment. Some, called technical support specialists, support information technology (IT) employees within their organization. Others, called help-desk technicians, assist non-IT users who are having computer problems.

Duties

Technical support specialists typically do the following:
- Test and evaluate existing network systems
- Perform regular maintenance to ensure that networks operate correctly
- Troubleshoot local area networks (LANs), wide area networks (WANs), and Internet systems

Technical support specialists, also called computer network support specialists, usually work in their organization's IT department. They help IT staff analyze, troubleshoot, and evaluate computer network problems. They play an important role in the daily upkeep of their organization's networks by finding solutions to problems as they occur. Solving an IT problem in a timely manner is important because organizations depend on their computer systems. Technical support specialists may provide assistance to the organization's computer users through phone, email, or in-person visits. They often work under network and computer systems administrators, who handle more complex tasks. For more information, see the profile on network and computer systems administrators.

Help-desk technicians typically do the following:
- Pay attention to customers when they describe their computer problems
- Ask customers questions to properly diagnose the problem
- Walk customers through the problem-solving steps
- Set up or repair computer equipment and related devices
- Train users to use new computer hardware or software, including printing, installation, word processing, and email
- Give information to others in the organization about what gives customers the most trouble and other concerns customers have

Help-desk technicians, also called computer user support specialists, usually provide technical help to non-IT computer users. They respond to phone and email requests for help. Sometimes they make site visits so that they can solve a problem in person.

Help-desk technicians may solve a range of problems that vary with the industry and the particular firm. Some technicians work for large software companies and for support service firms and must give instructions to business customers on how to use complex programs. Others work in call centers answering simpler questions from consumers. Some technicians work for organizations and help non-IT workers with their computer problems.

Training Opportunities Linked to Those Jobs
(Degree Types and Colleges/Universities)

How to Become a Computer Support Specialist

Because of the wide range of skills for different computer support jobs, there are many paths into the occupation. A bachelor's degree is required for some computer support specialist positions, but an associate's degree or postsecondary classes may be enough for others. After being hired, many workers enter a training program that lasts for several months.

Education and Training
Training requirements for computer support specialists vary, but many employers prefer to hire applicants who have a bachelor's degree. More technical positions are likely to require a degree in a field such as computer science, engineering, or information science, but for others the applicant's field of study is less important. Some lower level help-desk jobs or call-center jobs require some computer knowledge, but not necessarily a postsecondary degree.

Computer support specialists usually get on-the-job training after they are hired. For many workers, this training lasts for about 3 months. The training period may be longer for more complex jobs.

To keep up with changes in technology, many computer support specialists continue their training throughout their careers.

Advancement
Entry-level support specialists often work on simple problems. Over time, they may advance to positions that handle questions on complex software or equipment. Many of these workers advance to other IT positions, such as network and computer systems administrators or software developers. Some become managers in the computer support services department. For more information, see the profiles on network and computer systems administrators and software developers.

Important Qualities

Interpersonal skills. Computer support specialists must be patient and sympathetic. They must often help people who are frustrated with the software or hardware they are trying to use.
Listening skills. Support workers must be able to understand the problem that their customer is describing and know when to ask questions to clarify the situation.
Problem-solving skills. Support workers must identify both simple and complex computer problems, analyze them, and provide a proper solution.
Speaking skills. Support workers must describe the solution to a computer problem in a way that a nontechnical person can understand.

Writing skills. Strong writing skills are useful for preparing instructions and email responses for employees and customers.

Texas Southmost College	South Texas College	Texas State Technical College	The University of Texas at Brownsville	The University of Texas - Pan American
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Computer Information Systems (AAS)	Computer Support Specialist (CERT)			
Technology (AS)	Information Security Specialist (CERT)			

Local Employers

A Specialist Transit	**Brownsville**	**Frost Bank**	**Harlingen**
Agency Nurses	**Harlingen**	**Morningside Elementary School**	**Brownsville**
Amaya Surveying CO	**Brownsville**	**On Call Answering Svc**	**San Benito**
Brewer Office Systems	**Harlingen**	**Roser & J Cowan Logistical Svc**	**Brownsville**
Brown Leal & Assoc	**Harlingen**	**Wells Fargo Bank**	**Brownsville**

Career Options
(Specific Job Types)

- Information Technology Specialist (IT Specialist)
- Support Specialist
- Computer Technician
- Computer Support Specialist
- Help Desk Analyst

- Technical Support Specialist
- Network Support Specialist
- Electronic Data Processing Auditor (EDP Auditor)
- Network Technician
- Computer Specialist

Salary Ranges

The wage occupation ***Computer support specialist*** aggregates data for these 2 occupations:
Computer Network Support Specialists ----- **Computer User Support Specialists**

Location	Pay Period	2011				
		10%	25%	Median	75%	90%

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		10%	25%	Median	75%	90%
United States	Hourly	$13.93	$17.78	$22.91	$30.06	$39.03
	Yearly	$29,000	$37,000	$47,700	$62,500	$81,200
Texas	Hourly	$14.15	$18.14	$23.42	$31.87	$41.26
	Yearly	$29,400	$37,700	$48,700	$66,300	$85,800
Brownsville-Harlingen, TX MSA	Hourly	$11.90	$14.66	$17.84	$24.18	$30.10
	Yearly	$24,800	$30,500	$37,100	$50,300	$62,600
McAllen-Edinburg-Mission, TX MSA	Hourly	$11.41	$13.94	$17.48	$21.90	$28.11
	Yearly	$23,700	$29,000	$36,400	$45,600	$58,500

Professional Associations linked to the Careers

For more information about computer support specialists, visit
Technical Services Industry Association
Help Desk Institute (HDI)

For more information about computer careers, visit
Association for Computing Machinery
Institute of Electrical and Electronics Engineers Computer Society
Computing Research Association

For more information about IT education, visit
National Workforce Center for Emerging Technologies

For information about opportunities for women pursing IT careers, visit
National Center for Women and Information Technology

Sources

The information provided in this document was collected from the following sources:

- Occupational Outlook Handbook (http://www.bls.gov/ooh/)
- O*NET OnLine (http://www.onetonline.org/)
- Texas CARES (http://www.texascaresonline.com/)
- CareerOneStop (http://www.careeronestop.org/)