

# IT - Computer Support Specialist

67-credit Associate of Applied Science Degree

## About the Program

The IT - Computer Support Specialist program will prepare students for entry-level positions responsible for the support of computer systems and their users.

Students will become proficient at installing, updating, and troubleshooting various software applications and will gain skills in networking and computer hardware. In addition, problem solving and interpersonal communication skills are covered.

## Potential Job Titles

- Customer Care Coordinator
- Computer Support Assistant
- Computer Support Specialist
- Technical Support Specialist
- Web Developer
- Desktop Support Specialist
- Help Desk Administrator
- Help Desk Analyst

## Credit Transfer

Credits earned in the IT - Computer Support Specialist program may be transferable to institutions offering baccalaureate degrees. Visit [www.wctc.edu/transfer](http://www.wctc.edu/transfer) for specific information. Since the details of credit transfers change from time to time, be sure to contact the intended college or university to verify credit transferability.

## Preparation for Admission

- Fill out a WCTC application
- Send \$30 non-refundable application fee
- Send high school transcript or GED/HSED
- Send any previous college transcripts
- Complete Skills Assessment test (COMPASS)
- Begin pursuing Financial Aid options

For more information call 262.691.5200.

## Required Courses

### First Semester

107-014	IT Degree Orientation	1
107-113	Computer Concepts	2+
150-191	Introduction to Networking	2
801-195	Written Communication	3+
801-196	Oral/Interpersonal Communication	3+
804-123	Math with Business Applications	3
809-199	Psychology of Human Relations	3
<b>Total semester credits</b>		<b>17</b>

### Second Semester

107-118	Information Systems Design	4
107-128	Operating Systems Management	3+
152-106	Basic Programming/Logic	4
154-111	Adv Word Processing Application	1
154-112	Adv Spreadsheet Application	1
154-113	Adv Database Application	1
631-183	Computer Hardware Diagnostics	3
<b>Total semester credits</b>		<b>17</b>

### Third Semester

150-155	Server+ Adv Server Management	3
150-192	Network Operating Systems Admin	3
152-114	Intro to SQL	3
154-131	End-User Support and Training	3
154-132	Software Analysis & Implementation	2
809-166	Intro to Ethics: Theory & App	3
<b>Total semester credits</b>		<b>17</b>

### Fourth Semester

102-151	Business Co-op I	3
150-174	Network Communication Analysis	4
809-195	Economics	3+
809-196	Introduction to Sociology	3+
	Elective	3
<b>Total semester credits</b>		<b>16</b>

+ Proficiency exam available

Curriculum is current as of catalog printing. The most current curriculum requirements for graduation will be provided upon admission to program, or review at [www.wctc.edu](http://www.wctc.edu).

**IT - Computer Support Specialist  
Required Courses**

**102-151 Business Co-Op I** 3

Focus on goal setting, interpersonal relationships, and project activities during this occupational experience. The WCTC instructor/coordinator will work closely with the work site supervisor toward common educational objectives.  
Prerequisites: Approval of Co-op Ed Office

**107-014 IT Degree Orientation** 1

Gain knowledge about IT programs and course selection, program advising resources, IT career advice, financial aid services, co-op/internship process and requirements, supportive skills for program success, test-outs, accommodation for special needs, instructor communication and graduate placements and their salaries. Learn to be an active and successful participant on IT project teams.

**107-113 Computer Concepts** 2

Study the terms, concepts, and functions associated with computers. Examine hardware devices, software applications, design techniques, numbering systems, technical problem-solving techniques, the social impact of computers, and current developments in technology. Discover the latest topics dealing with desktop/network platforms and major programming languages, telecommunications, and elementary systems design.

**107-118 Information Systems Design** 4

Practice techniques used in computer programming and systems analysis and review the structure, lines of authority, and information needs of the business enterprise. Become familiar with system projects, including preliminary investigations, setting objectives, establishing costs and benefits, and collecting data. Discuss the design techniques used in the development of specifications for outputs, inputs, and files, as well as the techniques for developing procedures and controls of typical business systems.  
Prerequisites: 152-106 (or concurrent) and 801-196; or Equivalent work experience and 107-106

**107-128 Operating Systems Management** 3

Study the functions and history of various operating systems. Discuss memory management, processor management, concurrent processing, device and file management. Understand network and system management while working with operating systems such as DOS, Windows, Unix (Linux), Macintosh, and limited midrange systems in hands-on lab exercises.

**150-155 Server+ Adv Server Mgmt** 3

Learn about server hardware technologies, including how to install, configure, and upgrade server hardware, as well as preventive maintenance, troubleshooting, and disaster-recovery techniques for servers. Prepare for the CompTIA Server+ certification exam, which validates an individual's knowledge of advanced hardware issues.  
Prerequisites: 150-191 or 107-191 or Recommend Industry Experience

**150-174 Network Communication Analysis** 4

Gain an understanding of the tools and technologies associated with the data communications industry. Examine both large-scale communications systems such as public and private Wide Area Networks and small-scale systems such as Local Area Networks, as well as network and protocol analysis, network management, security, and network design. Discuss communication services and applications.  
Prerequisites: 150-191 or 107-191

**150-191 Introduction to Networking** 2

Study network types, topology, and media, as well as local area network issues dealing with operating systems, costs, and hardware. Gain hands-on experience in hardware and software work involved in networking. Experience in using the basic functions of a computer is necessary.

**150-192 Network Operating System Admin** 3

Explore drive mapping, procedures for adding users and groups, assigning data access rights, creating login scripts, printing services, and assigning security restrictions. Learn troubleshooting and servicing techniques through lab exercises.  
Prerequisites: 150-191 or 107-191 or 605-156 (or concurrent)

**152-106 Basic Programming/Logic** 4

Learn basic programming logic and structures with a current industry language. Write interactive programs that solve business problems, and discuss file handling, sorting, writing reports, screen layouts, graphics, and utilities. Focus on problem solving using a top-down approach. Emphasize programming logic while preparing for subsequent languages.

**152-114 Introduction to SQL** 3

Follow a step-by-step introduction to the topics concerning database concepts, basic SQL SELECT statements, table creation and management, constraints, data manipulation and transaction control, additional database objects, user creation and management, restricting rows and sorting data, joining data from multiple tables, selected single-row functions, group functions, sub queries and MERGE, views, formatting readable output, and exploring SQL topics in application development. This course covers the objective of Exam 1ZO-007, Introduction to Oracle 9i: SQL and the SQL portions of 1ZO-042 Oracle Database 10g: Administration.  
Prerequisites: 152-106 or 107-106 or Equivalent work experience

**154-111 Adv Word Proc Application** 1

Learn to use the advanced commands and functions of Microsoft Word. Prepare for the Microsoft Office User Specialist (MOUS) expert exam for Word.  
Prerequisites: 107-007 or Equivalent work experience; and 107-014

**154-112 Adv Spreadsheet Application** 1

Explore the advanced commands and functions of Microsoft Excel. Prepare for the Microsoft Office User Specialist (MOUS) expert exam for Excel.  
Prerequisites: 107-008 or Equivalent work experience and 804-160 or 804-123 and 107-014

**154-113 Adv Database Application** 1

Expand knowledge to include the advanced commands and functions of Microsoft Access. Prepare for the Microsoft Office User Specialist (MOUS) expert exam for Access.  
Prerequisites: 107-009 or Equivalent work experience; and 107-014

**154-131 End-User Support and Training** 3

Learn to manage the increasing demands of desktop support and the help desk, how to support end users, and how to provide them with training for various software packages. Research software packages to evaluate a user's request, solve software problems, and learn to remain calm when the user is in a panic. Teach computer skills and concepts to the class.  
Prerequisites: 152-106 or 107-106 and 154-111 or 107-011 and 154-112 or 107-012 and 154-113 or 107-013 and 107-113 or 605-140 and 809-199

**154-132 Software Analysis & Implement** 2

Evaluate software and hardware requirements and learn the problems that occur when software is installed on incorrect hardware or operating systems.  
Prerequisites: 154-111 or 107-011 and 154-112 or 107-012 and 154-113 or 107-013 and 150-191 or 107-191 or 107-128 (or concurrent) or 107-127 and 631-115 (or concurrent) and 809-199 (or concurrent)

**631-183 Comp Hdwg Diagnostics** 3

Learn the basic functions and general repair of computers. Describe the various forms of microprocessors, coprocessors, bus structures, POST, and BIOS, and learn how to find technical support. Discover how to restore a destroyed CMOS configuration and study how floppy and hard disk drives work mechanically and electronically. Discuss methods of data storage such as IDE, RLL, MFM, ESDI, and ARLL. Study documentation and technical support issues.

**801-195 Written Communication** 3

Study and practice the transfer of information, ideas, and experiences in written form through reports, letters, memoranda, and other documents. Gain proficiency in the areas of organization, clarity, accuracy, and directness.

**801-196 Ora/Interpersonal Comm** 3

Practice the necessary skills for effective speech delivery, listening, assertiveness, conflict resolution, teamwork, and general interpersonal communication.

**804-123 Math w Business Apps** 3

Develop an understanding of real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, apply math concepts to the purchasing/buying process, apply math concepts to the selling process, and basic statistics with business/consumer applications.

**809-166 Intro to Ethics: Theory & App** 3

Gain a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations.

**809-195 Economics** 3

Discuss the major institutions and principles that underlie the contemporary American economic system, and consider topics such as the free enterprise system, supply and demand, circular flow, government involvement, the federal reserve system, economic growth and development, the effects of international trade, comparative economic systems, and global economics.

**809-196 Introduction to Sociology** 3

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multiculturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.

**809-199 Psychology of Human Relations** 3

Examine the principles of interaction as applied to human relations at home and on the job. Explore topics such, as self concept personality development, learning, motivation, emotions, stress, human relations processes, and special relationships.

**Elective Options**

150-193 Network+

Any course at the associate degree level will meet the elective requirement.