University (CSU) system. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer to SDSU should consult a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Required Courses:

COMS 103	Oral Communication*	3
COMS 135	Interpersonal Communication*	3
COMS 160	Argumentation*	3

Select two of the following courses:
(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university)

COMS 180	Intercultural Communication*	3
JOUR 202	Introduction to Mass Communication*	3
ENGL 205	Critical Thinking*	3
ENGL 210	American Literature I*	3
ENGL 211	American Literature II*	3
ENGL 215	English Literature I: 800 – 1799*	3
ENGL 216	English Literature II: 1800 – Present*	3
HIST 105	Introduction to Western Civilization I*	3
MATH 119	Elementary Statistics* **or**	
PSYC 258	Behavioral Science Statistics*	3
PSYC 101	General Psychology*	3

If needed to total 18 units, select one of the following courses (not selected above):
(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university)

COMS 180	Intercultural Communication*	3
JOUR 202	Introduction to Mass Communication*	3
ANTH 103	Introduction to Cultural Anthropology*	3
ENGL 205	Critical Thinking*	3
ENGL 210	American Literature I*	3
ENGL 211	American Literature II*	3
ENGL 215	English Literature I: 800 – 1799*	3
ENGL 216	English Literature II: 1800 – Present*	3
HIST 105	Introduction to Western Civilization I*	3
MATH 119	Elementary Statistics* **or**	
PSYC 258	Behavioral Science Statistics*	3
PSYC 101	General Psychology*	3

SOCO 101	Principles of Sociology*	3
	Total Units = 18–22	

*Course also fulfills general education requirements for the CSU GE or IGETC pattern.

General Education: In addition to the courses listed above, students must complete one of the following general education options:

- The IGETC pattern (page 112) is accepted by all CSU campuses and most UC campuses and majors. It is also accepted by some private/independent or out of state universities.

- The CSU GE pattern (page 120) is accepted by all CSU campuses and some private/independent or out of state universities. It is not accepted by the UC system.

It is strongly recommended that students consult with a counselor to determine which general education option is most appropriate for their individual educational goals.

Electives as needed to meet maximum of 60 CSU-transferable units required for the degree.

Computer Business Technology

Award Type	Units
Certificate of Performance:	
Administrative Assistant	8
Website Designer	7
Certificate of Achievement:	
Administrative Assistant	18
Associate of Science Degree:	
Administrative Assistant	22*
Occupational/Technical Studies (see page 220)	18*

* and courses to meet graduation requirements, general education and electives as needed to meet the minimum of 60 units required for the degree.

Program Description

The Computer Business Technology program provides theory and hands-on training in major office systems, webpage design, and technology used to enhance productivity and communications. Students are prepared through extensive

coursework with the necessary skills and knowledge for initial employment in the field of business.

Program Learning Outcomes

Students who complete the Computer Business Technology program will be able to:

- Demonstrate proficiency in using software applications to enter data, format and organize data, complete calculations, graph data, create templates, develop professional reports, forms, and queries, and produce professional looking presentations.

- Use graphical design principles such as desktop publishing and web site development to create and enhance electronic forms of communications.

- Perform various online business transactions including the use of different search techniques.

- Identify effective business communications skills.

Career Options:

Students who complete the Computer Business Technology program will be able to work in various positions upon graduation, such as:

- Entry-level administrative assistants

- Entry-level webpage designers

- Desktop publishers

- Word processors in a variety of occupations

Faculty	Office	Telephone/Email
Wahid Hamidy	M-107M	619-388-7702 whamidy@sdccd.edu

Certificate of Performance: Administrative Assistant*

This certificate prepares students for entry-level positions as administrative assistants.

Courses:		Units
CBTE 114	Introduction to Microsoft Windows	1
CBTE 120	Beginning Microsoft Word	2
CBTE 140	Beginning Microsoft Excel	2
CBTE 180	Microsoft Office	3
	Total Units = 8	

*A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.

Note: This program is not eligible for federal financial aid in accordance with Federal regulations.

Certificate of Performance: Website Designer*

This certificate prepares students for entry-level positions as web page designers.

Courses:		Units
CBTE 127	Introduction to PowerPoint	2
CBTE 152	Beginning Microsoft Access	2
CBTE 165	Webpage Creation with Dreamweaver	3
	Total Units = 7	

*A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.

Note: This program is not eligible for federal financial aid in accordance with Federal regulations.

Certificate of Achievement: Administrative Assistant

Prepares the student for employment in business or civil service as a general office clerk, clerk-typist, file clerk, receptionist, cashier, word processor, machine transcriptionist, or other positions not requiring stenography.

Courses Required for the Major:		Units
CBTE 114	Introduction to Microsoft Windows	1
CBTE 120	Beginning Microsoft Word	2
CBTE 127	Beginning Microsoft PowerPoint	2
CBTE 140	Beginning Microsoft Excel	2
CBTE 152	Beginning Microsoft Access	2
CBTE 210	Computers in Business	3
BUSE 119	Business Communications	3
BUSE 120	Principles of Money Management	3
	Total Units = 18	

Associate of Science Degree: Administrative Assistant

Prepares the student for employment in business or civil service as a general office clerk, clerk-typist, file clerk, receptionist, cashier, word processor, machine transcriptionist, or other positions not requiring stenography.

Courses Required for the Major:		Units
CBTE 114	Introduction to Microsoft Windows	1
CBTE 122	Intermediate Microsoft Word	3
CBTE 143	Intermediate Microsoft Excel	3

CBTE 165	Webpage Creation with Dreamweaver	3
CBTE 180	Microsoft Office	3
CBTE 210	Computers in Business	3
BUSE 101	Business Mathematics	3
BUSE 119	Business Communications	3
	Total Units = 22	

For graduation requirements see **Associate Degree Requirements** on page 88.

Electives as needed to meet minimum of 60 units required for the degree.

Recommended Electives: Computer Business Technology 270; Business 150.

Computer and Information Sciences

Award Type	Units
Certificate of Performance:	
Computer Programming	12
Certificate of Achievement:	
Computer and Information Sciences	31
Associate of Science Degree:	
Computer and Information Sciences	31*

* and courses to meet graduation requirements, general education and electives as needed to meet the minimum of 60 units required for the degree.

Program Description

The focus of the Computer and Information Sciences program is on the function and use of the computer. The program includes general study of computer languages as well as utilization and application of computer software.

Program Learning Outcomes

Students who complete the Computer and Information Sciences program will be able to:

• Successfully follow a specification.

• Successfully create electronic documents.

Career Options

The Computer and Information Sciences program prepares students with a basic understanding of programming principles, procedures and specifications. Students completing the program curriculum may also be qualified for entry-level employment in the area of computer support, application training and software testing.

Faculty	Office	Telephone/Email
John Couture	M-107L	619-388-7698 jcouture@sdccd.edu
Alex Stiller-Schulman	M-107O	619-388-7695 astiller@sdccd.edu

Certificate of Performance: Computer Programming*

This Certificate of Performance in computer programming requires completion of the courses listed below and is meant to prepare students who are planning on preparing for entry-level positions in computer programming and/or information technology. The Certificate of Performance also offers students the opportunity to learn or enhance computer programming skills.

Courses:		Units
CISC 186	Visual Basic Programming	4
CISC 190	Java Programming	4
CISC 192	C/C++ Programming	4
	Total Units = 12	

*A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.

Note: This program is not eligible for federal financial aid in accordance with Federal regulations.

Certificate of Achievement: Computer and Information Sciences

Courses Required for the Major:		Units
ACCT 116A	Financial Accounting	4
ACCT 116B	Managerial Accounting	4
BUSE 119	Business Communications	3
BUSE 140	Business Law & the Legal Environment	3
CISC 181	Principles of Information Systems	4
CISC 186	Visual Basic Programming	4
ECON 120	Principles of Macroeconomics	3
MATH 119	Elementary Statistics	3
CISC Elective(s)*		3
	Total Units = 31	