

## Department Requirements (Total Department Units: 30.5-39.5)

| <i>2011-12<br/>Course No.</i> | <i>Previous<br/>Course No.</i> | <i>Title</i>   | <i>Units</i> | <i>Institution &amp;<br/>Course No.</i> | <i>Grade</i> | <i>Units<br/>(s/q)</i> | <i>Term</i> |
|-------------------------------|--------------------------------|--|--------------|---|--------------|------------------------|-------------|
| • CS 101                      | .....(COMSC 101/1)             | .....Computer Concepts.....                                  | 3.0          |   |              |                        |             |
| • CS 120                      | .....(COMSC 120)               | .....Java Programming.....                                   | 3.0          |   |              |                        |             |
| • CS 130                      | .....(COMSC 130)               | .....Introduction to UNIX.....                               | 1.5          |   |              |                        |             |
| • CS 135                      | .....(COMSC 135/35)            | .....Programming Fundamentals.....                           | 3.0          |   |              |                        |             |
| • CS 137                      | .....(COMSC 137/37)            | ....."C" Programming <b>OR</b> .....                         | 3.0          |   |              |                        |             |
| CS 140                        | .....(COMSC 140)               | .....Object-Oriented Programming Using C++.....              | 4.0          |   |              |                        |             |
| • MATH 104                    | ....(none).....                | .....Elem Alg & Intr Algebra w/ Study Skills <b>OR</b> ..... | 10.0         |   |              |                        |             |
| MATH 107                      | ....(11).....                  | .....Intermediate Algebra <b>OR</b> .....                    | 4.0          |   |              |                        |             |
| MATH 111                      | ....(none).....                | .....Interm. Algebra for Math, Sci. & Bus. Majors....        | 5.0          |   |              |                        |             |
| • PHIL 205                    | .....(5).....                  | .....Introduction to Logic.....                              | 3.0          |   |              |                        |             |
| • PHYS 102                    | .....(2).....                  | .....Introduction to Physics for Science Majors.....         | 4.0          |   |              |                        |             |

*Plus two courses from the following:*

|           |                             |  |     |  |  |  |  |
|-----------|-----------------------------|--|-----|--|--|--|--|
| • CIS 203 | .....(none).....            | .....Novell NetWare System Administration.....       | 4.0 |  |  |  |  |
| • CS 111  | .....(COMSC 111)            | .....HTML and Webmastering.....                      | 3.0 |  |  |  |  |
| • CS 131  | .....(COMSC 131/31)         | .....Assembly Language Programming.....              | 4.0 |  |  |  |  |
| • CS 137  | .....(COMSC 137/37)         | ....."C" Programming.....                            | 3.0 |  |  |  |  |
| • CS 140  | .....(COMSC 140)            | .....Object-Oriented Programming Using C++.....      | 4.0 |  |  |  |  |
| • CS 145J | .....(COMSC 145J/145/45) .. | .....Introduction to Data Structures <b>OR</b> ..... | 3.0 |  |  |  |  |
| CS 145P   | .....(COMSC 145P/145/45) .. | .....Introduction to Data Structures.....            | 3.0 |  |  |  |  |

Note: A course may not be used to satisfy more than one requirement (double counting is not allowed).

**Certificate of Achievement Requirements:** Complete all department requirements for the certificate with a cumulative grade point average (GPA) of 2.0 or better. Candidates for a Certificate of Achievement are required to complete at least 20% of the department requirements through SBCC. Pass/no Pass grading is not permitted in those courses needed to fulfill department requirements.

### **Additional Program Information**

For further information, contact the Counseling Center, 965-0581, Ext. 2285, or Jackie Kuehn, Department Chair, 965-0581, Ext. 2693. Check your certificate progress with DARS U-Achieve at [www.sbccc.edu/DARS](http://www.sbccc.edu/DARS).

## Programs of Study (In alphabetical order)

Accounting (AS)  
 Accounting/Assistant Bookkeeper I-IV [I-III (D); IV (C)]  
 Accounting Information Systems I-III (SCA)  
 Acute Care CNA (SCA)  
 Administration of Justice (AA/AS/C) – 3 emph. available for AS & C, 1 for AA  
 Advanced Studies in Alcohol and Drug Counseling (SCA)  
 Alcohol and Drug Counseling (AA/C)  
 Animation (AA/C)  
 Anthropology (AA)  
 Applied Photography (AA/C)  
 Art (AA) - 2 emphases available  
 Associate Child Care Teacher (C)  
 Automotive Services & Technology (AS/C)

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Baking and Pastry (SCA)  
 Biological Sciences (AA)  
 Bio-Medical Sciences (D)  
 Black Studies (AA)  
 Bookkeeping (SCA)  
 Business Admin. (AA/C/SCA) – 3 emphases available for AA, 2 for C, 2 for SCA  
 Business Communications (SCA)

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Cancer Information Management (AS/C)  
 Certified Nursing Assistant (SCA)  
 Chemistry (AA)  
 Chicano Studies (AA)  
 Cisco Networking Associate (SCA)  
 Cisco Networking Professional (SCA)  
 Commercial Diving (SCA)  
 Commercial Music (C)  
 Communication (AA) - 2 emphases available  
 Computer App. & Office Managem. (AS/C) - 2 emphases available  
 Computer Information Systems (AS) – Emph. in System Administration available  
 Computer Network Engineering (AS/C)  
 Computer Networking Technology (SCA)  
 Computer Proficiency Online (SCA)  
 Computer Science (AS/C)  
 Cosmetology (AS/C)  
 Creative Writing (C) – 2 emphases available  
 Culinary Arts (AS/C)

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Database Programming and Applications Development (C)  
 Diagnostic Medical Sonography (C)  
 Digital Darkroom and Color Management for RGB (SCA)  
 Diversity Issues in ECE (C)  
 Drafting/CAD (AS/C)

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Early Childhood Education (AS/C)  
 Economics (AA)  
 Emergency Medical Technician/Basic (SCA)  
 Engineering (AA/AS)  
 English (AA)  
 Entrepreneurship (SCA) – 3 emphases available  
 Environmental Horticulture (AS/C) - 4 emphases available for AS, 1 for C  
 Environmental Studies (AA)  
 Esthetician (SCA) – 2 levels available  
 Ethnic Studies (AA)

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Film Production (AA)  
 Film Studies (AA)  
 Finance (AA/C)  
 French (AA)

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Game Design (D)  
 Geography (AA)  
 Geological Sciences (AA)  
 Global Studies (AA)  
 Graphic Design & Photography – Graphic Design Concentration (AA/C)  
 Graphic Design (C)  
 Great Books Curriculum (D)

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Health Care IT Workforce Training (SCA)  
 Health Information Technology (AS)  
 Help Desk and Desktop Support (SCA) – 2 levels available

History (AA)  
 Home Health Aide (SCA)  
 Honors (C/C with highest honors) – 2 emphases available  
 Hospitality (AS/C)  
 Hospitality Operations Specialist (SCA)  
 Human Resource Hospitality Specialist (SCA)

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Infant/Toddler Development (C)  
 Information Technology Management (SCA)  
 Interior Design (AA/C)  
 International Business (AA/C)  
 International Marketing Communication (SCA)  
 Introduction to Teaching English as a Foreign Language (SCA)

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Journalism (AA/C) – 3 emphases available

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Landscape Operations (SCA)  
 Law & Society (AA) - Emphasis in Criminal Justice available  
 Liberal Arts & Sciences (AA) – 4 emphasis available  
 Liberal Studies (AA) – Emphasis in Education

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Manicure (SCA)  
 Marine Diving Technician (AS/C)  
 Marine Science (D)  
 Marketing (AA/C)  
 Mathematics (AA)  
 Media Arts (AA/C)  
 Media Design and Development (SCA)  
 Medical Coding Specialist (C)  
 Microsoft Office Development (SCA)  
 Microsoft SQL Server Database Administration (SCA)  
 Microsoft Windows System Administration and Security (SCA)  
 Middle East Studies (AA)  
 Mobile Application Developer (SCA)  
 Mobile Device Administration (SCA)  
 Mobile Media Core (SCA)  
 Music (AA/D)

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Native American Studies (AA)  
 Natural History (AA/D)  
 Nursing - ADN (AS)

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Office Assistant (SCA)

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PC Support/Network Management (C)  
 Personal Chef Training (SCA)  
 Philosophy (AA)  
 Photo Design (SCA) – 3 awards available  
 Physical Education (AA) - 3 emphases available  
 Physics (AA/AS)  
 Political Science (AA)  
 Post-Professional Practice in ADC (C)  
 Print and Color Management for CMYK (SCA)  
 Psychology (AA)

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Radiography (AS)  
 Real Estate (AS/C)

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Sales and Marketing (SCA)  
 School-Age Care (C)  
 Sociology (AA)  
 Spanish (AA)  
 Sustainable Horticulture (SCA)

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Technical Writing (SCA)  
 Theatre Arts (AA) - 3 emphases available and 1 department award  
 Transfer – CSU General Education Breadth Pattern (C)  
 Transfer – IGETC (C)

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Virtualization System Administration (SCA)  
 Vocational Nursing (AS/C)

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Water Science (C) - 4 options available  
 Web Journalism (SCA)  
 Web Marketing and Media Design (SCA)  
 Web Programming (SCA)  
 Web Server Administration (SCA)



Santa Barbara City College

# Computer Science

2011-12

## Certificate of Achievement in Computer Science

Computer Science has grown dramatically over the last decade, until it now affects each of us in our daily lives. We come into contact with ten or more different computer systems each day. These range from automatic bank tellers and "intelligent" cash registers, to automobile fuel monitoring systems.

The Computer Science Department teaches students how to design and implement the computer software that brings intelligence to computer systems. Santa Barbara City College's Computer Science program includes introductory to advanced topics. It is designed to provide general education, transfer and occupational training.

## Careers in Computer Science

Graduates of the Computer Science major pursue a wide variety of careers in technical positions, e.g. systems analysis, software engineering, logic design, device research, and in management. Many take initial positions with large corporations, and others with small, newly established firms. Some become entrepreneurs and consultants.

***SBCC: Your Open Door to Educational Excellence***

Key: (AA)=Associate in Arts; (AS)=Associate in Science; (C)=Certificate of Achievement; (D)=Department Award; (SCA)= Skills Competency Award