A Course of Study for

COMPUTER SCIENCE - Transfer

Computer systems managers may plan, organize, direct, and coordinate computer-related activities such as programming, computer operations, and data processing. Programmers write and maintain computer programs. They follow programming procedures to write detailed instructions to the computer to solve storage, processing, retrieval, mathematical, business, engineering, and scientific problems. Some additional careers include web-master, network specialist, or artificial intelligence manager.

This major may also lead to many other careers. For additional possibilities, visit the Career Services Center on campus to utilize computerized career information systems and other valuable career resources.

**TRANSFER**

Students planning to transfer to a four-year college should complete the lower-division major requirements and the general education pattern for the appropriate transfer institutions. Santa Monica College has articulation agreements for this major with the following UC, CSU, and private institutions. Exact major requirements for these and other UC and CSU campuses can be found online at [www.assist.org](http://www.assist.org). Articulation agreements with private institutions can be found online at [www.smc.edu/articulation](http://www.smc.edu/articulation).

Admission to computer science programs is very competitive. Students should complete all lower-division requirements prior to transfer to be competitive for admission. Additionally, to be minimally eligible to transfer to a UC campus, transfer students must complete 60 UC transferable semester units with a minimum of 2.4 GPA to include: two English Composition courses and four (4) General Educational courses chosen from at least two of the following areas: Arts & Humanities; Sociology & Behavioral Sciences; Physical & Biological Science. Please see a counselor for additional information.

This sheet lists information regarding non-engineering Computer Science related majors. For Engineering related Computer Science majors, please refer to the Engineering sheet.

**UNIVERSITY OF CALIFORNIA, BERKELEY**

This major is offered by the College of Letters and Science (L&S). Students must complete either:

1. The L&S Essential Skills Requirements (Reading & Composition, Foreign Language, and Quantitative Reasoning) or
2. The IGETC by the end of the spring term that precedes fall enrollment at Berkeley.

To be competitive for admission purposes, the department advises prospective transfer students to take UC-transferable courses in:

1. Data structures—even if not officially comparable to Berkeley’s CS 61B, and
2. Java (preferred) or C++

The entire computer science 61 series is also offered during the Berkeley summer session. The department recommends that, when possible, students take one of these courses during the summer session prior to transfer.

**B.A. COMPUTER SCIENCE**: MATH 7, 8, 13 and 15

**UNIVERSITY OF CALIFORNIA, DAVIS**

**B.S. COMPUTER SCIENCE**: CS 17, 50*, 52*, CS 10* or MATH 10*; MATH 7*, 8*, 11*, 13*, 15

**COMPLETE ONE OF THE FOLLOWING GROUPS:**

(Chemistry 11 and 12) or
(Chemistry 11 and 12 and Biology 21, 22) or
(Physics 21, 22, 23 and Math 11)

*Must be completed prior to transfer.

**UNIVERSITY OF CALIFORNIA, IRVINE**

**B.S. INFORMATION AND COMPUTER SCIENCE**: CS 55, 56, 20B (CS 52 recommended); MATH 7, 8, 13

**ADDITIONAL INFORMATION ON REVERSE. SUBJECT TO CHANGE WITHOUT NOTICE.**

*www.assist.org

*Please access the above web-site for the most updated articulation information.*
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UNIVERSITY OF CALIFORNIA, SANTA CRUZ

IGETC is not recommended. The School of Engineering strongly discourages the use of IGETC as students will use non-engineering classes to complement challenging courses in the major.

B.A. COMPUTER SCIENCE: CS 50 or 52 or 55; MATH 10 or CS 10; MATH 7 and 8, 13 and 15
B.S. COMPUTER SCIENCE: CS 50 or 52 or 55; CS 10 or MATH 10; MATH 7 and 8, 13 and 15; PHYSICS 21 and 22 and 23 or CHEMISTRY 11 and 12

B.S. INFORMATION SYSTEMS MANAGEMENT: (Baskin School of Engineering): required courses for admission: CS 50 or 52 or 55; MATH 7 and 8 or 28 (formerly 23) and 29 (formerly 24); MATH 10; ECONOMICS 1, 2; required courses for graduation: MATH 13; ACCOUNTING 1

The ISM program combines the fundamental intellectual content of both Computer Science and Business Management Economics. The curriculum is designed to provide a balance of computer programming, systems analysis and design, database, and telecommunications in computer science with economics and business classes. Please see http://www.soe.ucsc.edu/programs/ism/undergraduate/ for more information.

B.S. COMPUTER GAME DESIGN: CS 50 or 55; MATH 7 and 8, 10, 13; PHILOSOPHY 2; ECONOMICS 1 or 2; PHYSICS 21 and 23

The School of Engineering recommends (but does not require) that students take additional community college courses on film and digital media production topics, including but not limited to digital art (Photoshop, Illustrator, or equivalent), digital modeling (3D Studio Max, Maya, or equivalent), and digital film production (Final Cut Pro, Premiere, or equivalent).

It is also recommended that transfer students who intend to begin their studies in the fall quarter take course CMPS 101: Algorithms and Abstract Data Types during the summer session at UCSC just prior to entry. Since many game engineering elective courses require CMPS 101 as a prerequisite, this gives transfer students a broader array of course choices during their first year at USC.

Admission to our Computer Science: Computer Game Design major is selective.

Students will only be considered if they have completed most or all of the Foundation Courses. Students are encouraged to complete as many as possible of the lower-division courses in the major before applying for admission to UCSC.

CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO

B.S. COMPUTER SCIENCE: CS 50 or 55; CS 52 or 208; CS 10 or MATH 10; MATH 7, 8; select two courses from the following: MATH 8, 11, 13, 13 and 15; select one series from the following: CHEMISTRY 11 and 12 or PHYSICS 21, 22 and 23; select one course from the following: BIOLOGY 21; BOTANY 1; CHEMISTRY 11; MICROBIOLOGY 1; PHYSICS 21; ZOOLOGY 5

CALIFORNIA STATE UNIVERSITY, CHANNEL ISLANDS

B.S. INFORMATION TECHNOLOGY: MATH 52; CS 17; select one course from the following: CS 51, 52, 55; select one course from the following: CHEMISTRY 11; PHYSICS 6; BIOLOGY 21; select a minimum of 8-10 units of CSU transferable coursework from the CS department. Complete CSU GE Pattern.

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS

B.S. COMPUTER SCIENCE: CS 17, 20A, 20B; MATH 7, 8, 10; PHYSICS 21 and 22 and 23

CALIFORNIA STATE UNIVERSITY, NORTHBRIDGE

Transfer students will be admitted into the Computer Science pre-major. Upon successful completion of pre-major requirements they may apply for admissions into the Computer Science major by submitting a change of major form to Admissions and Records, signed by the Computer Science department chair or designee.

Upper-division transfer students applying as Computer Science majors do not have to complete Critical Thinking prior to admission.

B.S. COMPUTER SCIENCE: PRE-MAJOR REQUIREMENTS: CS 17, 20A or 208, 52 or 55; MATH 7; PHILOSOPHY 9; ENGLISH 1; SPEECH 1 or 2 or 6 or 11; additional lower-division requirements for the major: MATH 8, 13; select one sequence from the following: BIOLOGY 21 and 22 and 23 or (CHEMISTRY 11 and 12) or (PHYSICS 21 and 22); select an additional course from the following: BIOLOGY 23; CHEMISTRY 11; GEOGRAPHY 3 and GEOPHYSICS 105 (lab) at CSUN; GEOLOGY 5; GEOLOGY 5; GEOLOGY 4 or GEOLOGY 1 and GEOLOGY 102 (lab) at CSUN; PHYSICS 21

Please Note: No grade lower than a C (2.0) will be accepted on transfer from another institution to satisfy Computer Science requirements.

Santa Monica College has articulation agreements for this major (see www.smc.edu/articulation for exact requirements) with the following private and out-of-state institutions:

KAPLAN UNIVERSITY

B.S. INFORMATION TECHNOLOGY: Complete SMC A.A. Computer Science to include: CS 15, 70; CIS 50
B.S. INFORMATION TECHNOLOGY/WEB MULTIMEDIA AND ANIMATION: Complete SMC A.A. Website Software Specialist to include: CIS 50, 54; CS 85

ADDITIONAL INFORMATION ON REVERSE. SUBJECT TO CHANGE WITHOUT NOTICE.

*www.assist.org
*Please access the above web-site for the most updated articulation information.
LOYOLA MARYMOUNT UNIVERSITY - COLLEGE OF SCIENCE & ENGINEERING

CS 55, 56, 208; MATH 7, 8; Complete at least twelve semester units of science electives including a 2-semester sequence of laboratory science. Students may select from the following to complete the 2-semester laboratory sequence. The remaining units may be chosen from any LMU transferable science courses listed on separate document located in Transfer/Counseling or at www.smc.edu/articulation: ANATOMY 1 and PHYSIOLOGY 3 or BIOLOGY 21 and 22 and 23; or CHEMISTRY 11 and 12 or 21 and 22 and 24; or PHYSICS 21 and 22 or 8 and 9

NATIONAL UNIVERSITY

National University accepts IGETC and CSU GE certification. Please see www.smc.edu/articulation for course to course articulation.

B.S. COMPUTER SCIENCE: MATH 7; CS 10 or MATH 10; CS 33

REGIS UNIVERSITY - Can be completed on-line

B.S. COMPUTER NETWORKING
B.S. COMPUTER SCIENCE

Please see www.smc.edu/articulation for more information - Online Bachelor Degree Programs

UNIVERSITY OF PHOENIX

B.S./B.A. COMPUTER SCIENCE

Please see www.smc.edu/articulation for more information.