COMPUTER SCIENCE MAJOR
Transfer Requirements

CAREER OPPORTUNITIES: Computer Science is a rapidly changing field and one that has demand for highly trained professionals. An option within the Engineering Major focuses on the construction and design of a computer's electrical components, compilers and operating systems, and information transmission reliability. Within the Mathematics Major, a focus on computer science emphasizes artificial intelligence, computer graphics, database management systems, language and computation.

NOTE: Many programs are impacted, requiring high GPA and screening of prerequisites. Due to the competitive nature of the Computer Science major, students are advised to complete as many courses required for the major prior to transfer. *Computer Science 3 offered in the fall semester only; Computer Science 30 & Math 210 is offered in the spring semester only.

B.S.: Computer Science 2, 3*, and 16; Mathematics 190-191, 210*; Physics 1A-1B-1C-1D or Physics 130 & 132 & 134 at CSUDH. The minor in Computer Science does not require physics.

Computer Science 2, 3, 16, 40; Mathematics 190-191, 210*; Biology 10; Physics 1A-1B-1C; or Geology 1, & 3, 2 & 4 or Chemistry 1A and Chemistry 125 at CSUF. Scientific computing track: Math 190, 191, 210, 220, 270;

Requirements for both the B.S. in Computer Science, option in Computer Engineering and the B.S. Computer Science, option in Computer Science: Minimum grade of "C" in each course:
Computer Science 2, 3; Engineering 1; Math 190-191, 210* or 220; 12 units of science approved electives to include a two semester sequence from the following: Chemistry 1A-1B; Physics 1A-1B-1C (Students must take Physics 1A-1B to receive credit for CSULB's Physics 151); remaining units are to be taken from Biology 10 or Biology 17 & 18 or Anatomy 30 or Anatomy and Physiology 34A-34B. Minors available in Computer Science, Web and Technology Literacy, and Computer Science Applications do not require physics. See catalog for more information.

B.S.: English 1C; Computer Science 3; Mathematics 190-191, 210*, 220; Physics 1A-1B-1C-1D

B.S. available in College of Engineering and Computer Science
Computer Science 2; Mathematics 190, 191, 210*; Select one sequence from: Biology 101 & 102, Chemistry 1A & 1B, or Physics 1A & 1C. Select an additional science course outside of the sequence previously selected with corresponding lab: Biology 101, Chemistry 1A, Geography 1 & 6, Geology 1 & 3, Geology 2 & 4. A grade of “C” or better is required in all lower division major courses. See www.assist.org for AP credit info. Computer Science minor requirements: Computer Science 2.

Computer Science 2, 3, 30*; ECHT 130; Mathematics 190 & 191, 210*, 220, 270; Physics 1A & 1B & 1C; Biology 10

Impacted Program: Computer Science 2, 3*, Mathematics 190 & 191, 210*, 220, 270, one course from Mathematics 150 or Psychology 9A or Sociology 109; one sequence from Physics 1A & 1C or Chemistry 1A & 1B or Biology 101 & 102.

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CALIFORNIA STATE UNIVERSITY, SAN LUIS OBISPO (2014-2015) [www.csc.calpoly.edu](http://www.csc.calpoly.edu)

One course from Computer Science 1 or 3*, Computer Science 30*; Mathematics 190-191, 210*, 220, 270; Psychology 8; Physical Science electives: Select one sequence (12 quarter units) from: Chemistry 1A & 1B or Physics 1A-1B-1C-1D (or 1 yr. Physics series at Cal Poly). One additional science elective from: Biology 8, 10, or 102, or Chemistry 1A or Physics 1A or Microbiology 33.


ECC's Computer Science 2 and 30 articulates as Berkeley's Computer Science 61B (students must complete COMPSCI 47B at UCB to complete the requirement). With few exceptions, transfer students must take CS 61A and 61C during their first semester(s) at Berkeley. The entire CS 61 series is also offered during the Berkeley summer session. The dept. recommends that students take these courses during the summer sessions prior to transfer.

B.A. Degree in Computer Science (offered by the College of Letters and Science)-- **requires either IGETC by the end of the spring term that precedes fall enrollment at UCB** or UCB's Reading & Composition, Foreign Language, and Quantitative Reasoning. Computer Science 2, 30*; Mathematics 190, 191, 220, 270.


B.S. Computer Science (College of Letters and Science): Computer Science 1, 30*; Mathematics 190, 191, 210*, 220, 270; One of the following sequences: Chemistry 1A-1B or Physics 1A-1B-1C-1D.


B.S. Computer Science: Computer Science 2, 3*, 30*; Mathematics 190, 191, 210, 220, 270

B.S. Informatics: CS 2, 3, 30; Math 150 or Psychology 9A or Sociology 109

B.S. Computer Game Science: Computer Science 2, 3*, 30*, Math 190, 191, 210, 220, 270; Physics 3A

UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA) [www.cs.ucla.edu](http://www.cs.ucla.edu)

For the B.S. in Computer Science, B.S. in Computer Science and Engineering, or B.S. in Mathematics with specialization in Computing, please refer to the separate guide sheet in Engineering for UCLA.


B.S. Computer Science: Computer Science 2, 30*; Mathematics 190, 191, 210, 220, 270; Physics 1A-1B-1C; Biology 10 or 102; **Note:** IGETC is an acceptable general education program for this major or the Bourns College of Engineering Breadth, available from [www.assist.org](http://www.assist.org).

UNIVERSITY OF CALIFORNIA, SAN DIEGO (UCSD) (2014-2015) [www.cse.ucsd.edu](http://www.cse.ucsd.edu)

Computer Science B.A. and B.S.: Computer Science 2, 3*; Math 190, 191, 210*, 220, 270; Physics 1A-1C or Chemistry 1A-1B or Biology 101-102-103

UNIVERSITY OF CALIFORNIA, SANTA CRUZ (UCSC) (2014-2015) [www.cse.ucsc.edu](http://www.cse.ucsc.edu)

B.A Computer Science: Computer Science 1, 2 (both must be completed with a B grade or better to be comparable to UCSC CMPS 12A-12B); Math 190 and 191 or Math 160 and 161;

B.S. Computer Science: Computer Science 1, 2 (both must be completed with a B grade or better to be comparable to UCSC CMPS 12A-12B); Math 190, 191, 210, 220; Physics 1A-1B-1C or 3A-3B or Chemistry 1A-1B

B.S. Computer Game Design: Computer Science 1, 2; Math 190, 191, 210; Physics 1A or 3A; Philosophy 3; Economics 1 or 2; 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). *IGETC is not recommended as GE will be completed at UCSC.

LOYOLA MARYMOUNT UNIVERSITY (LMU) (2014-2015) [www.lmu.edu](http://www.lmu.edu)

Computer Science B.S. emphasis in: Games and Animation, Business Applications, Scientific Computing: Computer Science 2, 3* or 4; Math 190, 191; One lab science from the following: Anatomy 32, Anatomy and Physiology 34A, Anatomy and Physiology 34B, Biology 8, 11, 10, 101, 102, Chemistry 1A, 1B, 4, 7A, 7B, 20; Oceanography 10; Physics 1A, 1B, 1C, 1D, 2A, 2B, 3A, 3B, 11 and 12 (both), Physiology 31

UNIVERSITY OF SOUTHERN CALIFORNIA (USC) [www.cs.usc.edu](http://www.cs.usc.edu); [www.usc.edu/dept/ARR/articulation](http://www.usc.edu/dept/ARR/articulation)

For the B.S. in Computer Science and B.S. in Computer Engineering, please refer to the transfer guide on USC’s website.

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