

California State University, Long Beach

POLICY STATEMENT

August 22, 1983

Number: 83-11

File: B.S. Computer
Sciences

This degree program, recommended by the Academic Senate in its meeting of March 31, 1983 and authorized by the Chancellor on August 16, 1983, was approved by the President on August 22, 1983.

SUBJECT: BACHELOR OF SCIENCE DEGREE IN COMPUTER SCIENCE

The Bachelor of Science degree in Computer Science is jointly offered by the departments of Computer Science and Engineering and of Mathematics and Computer Science. Two degree options are offered:

1. Option in Computer Science and Engineering, offered in the School of Engineering
2. Option in Computer Science and Mathematics, offered in the School of Humanities

The choice of one of the above two options and the further selection of elective courses within that option allow the student a wide spectrum of degree emphases to suit his/her career goal.

Option in Computer Science and Engineering (code 3-4327)

This option, offered in the Department of Electrical Engineering, is an engineering-oriented computer science program. This program builds on a strong base of mathematics, physics and engineering science. It includes a core of standard electrical engineering courses as well as courses in digital circuitry, computer organization, programming languages, system software, microprocessors and computer applications. Opportunity to explore a particular area of interest is provided by elective units in the senior year.

Requirements:

Lower Division: Chemistry 111A; Physics 151, 152, 154; at **least three units of a life science course**; Mathematics 122, 123, 224; EE 101, 210, 242.

Upper Division: Economics 300; Mathematics 321, 343, 346A or 370A; EE 310, 330, 340, 342, 346, 347L, 370, 370L, 440, 442, 444, 480, 494; approved electives to total 135 units.

Option in Computer Science and Mathematics (code 3-6667)

The Computer Science and Mathematics option, offered in the Department of Mathematics, provides a program of study covering **the major areas of computer science and the mathematics used in computer science and its applications. The core curriculum includes introduction to programming, computer systems and organizations, files processing, data structures, programming languages and their compilers, numerical methods, operating systems, and supporting mathematical courses.** The student has ample opportunity to choose elective computer-related course work **in electrical engineering and business.**

Requirements:

Lower Division: English 101 or 317; Electrical Engineering 101; Mathematics 122, 123, 224, 270, 272; and Physics 151, 152.

Upper Division: Mathematics 321, 323, 325, 326, 343, 324 or 345 or 346, 364A or 380; 422. Electrical Engineering 440, 444; and approved electives to total 132 units.

The high school student planning to enter the program for either option in computer science is advised to pursue a strong program **in science and mathematics. Deficiencies in some of the above areas may result in an extension of the time required to complete a program in this option.**

EFFECTIVE: Immediately

Obsolète