

88-06

October 7, 1988

**SUBJECT: MASTER OF SCIENCE IN COMPUTER SCIENCE**

This program, recommended by the Academic Senate at its meeting of April 23, 1987, received the concurrence of the President on April 30, 1987, and was approved by the Chancellor on September 12, 1988.

**The Programs**

The Master of Science in Computer Science is offered by the Department of Computer Science and Engineering, School of Engineering. Two options are offered: the M.S. in Computer Science - Option in Computer Science and Engineering, and the M.S. in Computer Science -- Option in Computer Science and Mathematics.

The Option in Computer Science and Engineering offers advanced study in the theory, analysis, design, and applications of both computer hardware and software. The Option in Computer Science and Mathematics offers advanced work in modeling software systems, the mathematics of operating systems, and analysis of algorithms.

**Prerequisites**

-- Engineering Option

1. A bachelor's degree in computer science, engineering, science, or other appropriate discipline, with a minimum grade point average (GPA) of 2.7 in the last 60 units attempted.
2. Credit in the following courses or their equivalents: CSE 321, 340, 346, 440, 442, 444; EE 310; MATH 233.
3. Students must consult with the program graduate advisor prior to enrolling in any course for the program.

-- Mathematics Option

1. A bachelor's degree from an accredited college or university, with a minimum grade point average (GPA) of 2.7 in the last 60 units attempted.
2. Credit in the following courses or their equivalents: CSE 321, 325, 326, 333, 424, 440, 444; MATH 323.

**Advancement to Candidacy**

Students applying for advancement to candidacy must:

1. have completed all undergraduate deficiencies with grades of C or better;
2. have attained an overall grade point average (GPA) of 3.0.
3. complete at least 12 units applicable to the degree with a GPA of at least 3.0;
4. must have passed a qualifying examination on computer fundamentals;
5. have passed the CSULB Writing Proficiency Examination; and
6. have their program of studies approved by the CSE department graduate advisor.

**Requirements for the Degree**

-- Engineering Option (code 6-4010)

Students must complete a minimum of 30 graduate and approved upper-division course units including the following:

- a. at least 18 units in the CSE or EE departments;
- b. at least 18 units at the graduate level of instruction;
- c. EE 540, and at least 6 units from the following: CSE 544, 550, 552, 572; EE 542, 545;
- d. CSE 526, 528 or 529, and 543.

-- Mathematics Option (code 6-4011)

Students must complete a minimum of 30 graduate and approved upper-division course units including the following:

- a. at least 18 units of computer science coursework;
- b. at least 18 units at the graduate level of instruction;
- c. CSE 526, 528, 529, and 543.
- d. CSE 550 or EE 540.

All students must complete either:

- a. EE 640 and a comprehensive examination; or
- b. a thesis with oral defense which requires completion of CSE 697 (2 units) and 698 (4 units).

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**EFFECTIVE: FALL 1988**