

## NEW GRADUATE STUDENTS

Conditional  
Admittance

Classified  
Admittance

Complete  
Prerequisite Course  
Worksheet

### During the First Year Complete All<sup>§</sup> Deficiencies:

- One year of OO programming
- **CECS 228** Discrete Struct. with Computing Applications
- **CECS 285** Computer Org. and Assembly Language
- **CECS 323** Database Fundamentals
- **CECS 326** Operating Systems
- **CECS 328** Data Structures & Algorithms
- **CECS 341** Computer Architecture & Org.
- **CECS 343** Intro. to Software Engineering
- **EE 380** or **Math 380** Probability, Statistics and Stochastic Modeling
- One of the following:  
**CECS 419, 424, 444**

<sup>§</sup> Entering students are limited to a maximum of 4 deficiencies.

**NOTE:** While every effort is made to assure the accuracy of this document, the official CSULB Catalog should also be consulted. Please contact the graduate advisor if you have any concerns.

# MSCS: Option in Computer Science

- Students must complete a minimum of 30 graduate and approved upper-division course units.
- At least 21 units must be at the graduate level of instruction.
- You must maintain an average GPA of 3.0 to remain in good standing.

## Four Courses (12 units) of Required ("Core") Courses Consisting of:

1. **CECS 528 Advanced Analysis of Algorithms (3)** Prereq: CECS 228 and 326 with grade of "C" or better.
  2. **One course from the following:**
    - **CECS 526 Advanced Operating Systems (3)** Prereq: CECS 228 and 326 all with a grade of "C" or better.
    - **CECS 530 Advanced Computer Arch. I (3)** Prereq: CECS 341 or 440 with a grade of "C" or better.
  3. & 4. **Two courses from the following MSCS Application Courses:**
    - **CECS 521 Database Architecture (3)** Prereq: CECS 328 and 323 or 431 with a grade of "C" or better.
    - **CECS 531 Advanced Computer Architecture II (3)** Prereq: CECS 530 with a grade of "C" or better.
    - **CECS 543 Advanced Software Engineering (3)** Prereq: CECS 343 or 443 with a grade of "C" or better.
    - **CECS 546 Fault Tolerant Computing Systems (3)** Prereq: CECS 530 with a grade of "C" or better.
- **CECS 572 Advanced Computer Networking (3)** Prereq: CECS 327 or 474 with a grade of "C" or better.
  - **CECS 575 Object-Oriented Analysis and Design (3)** Prereq: CECS 475 and 443 or 543 with a grade of "C" or better.

- + 18 Units for the Comprehensive Exam *OR*
- + 12 units for the Thesis Option *OR*
- + 15 units for the Project Option

From the following list of electives:

CECS 408,	CECS 406,	CECS 419/519,
CECS 423,	CECS 424,	CECS 428,
CECS 429/529,	CECS 444,	CECS 445,
CECS 447,	CECS 448,	CECS 449,
CECS 451,	CECS 453,	CECS 455,
CECS 460,	CECS 461/561,	CECS 463,
CECS 470,	CECS 472,	CECS 474,
CECS 475,	CECS 476,	CECS 478/578,
CECS 491,	CECS 492,	CECS 521,
CECS 524,	CECS 526,	CECS 528,
CECS 530,	CECS 531,	CECS 532,
CECS 543,	CECS 544,	CECS 545,
CECS 546,	CECS 547	CECS 549,
CECS 550,	CECS 551,	CECS 552,
CECS 553,	CECS 570.	CECS 572,
CECS 574,	CECS 575,	CECS 590,
CECS 694,	CECS 697*†	

- Requires Advancement to Candidacy
  - † Requires consent of instructor
- Note:** Courses may not be double-counted.

## Advancement to Candidacy

To Advance students must have:

- Completed all deficiencies with grades of "C" or better;
- Attained an overall grade point average (GPA) of 3.0 and be in Good Standing;
- Completed at least 12 units in the core requirement applicable to the degree with a GPA of at least 3.0 for the completed MSCS units;
- Have fulfilled the Graduation Writing Assessment Requirement (GWAR); and have their program of studies approved by the CECS department graduate advisor.

## Comprehensive Examination\*

## Thesis with an Oral Defense\*†

Which requires a total of 6 units from the following (at least 3 units from CECS 698\*†):

- CECS 697\*† Directed Research (1-3)
- CECS 698\*† Thesis or Industrial Project (2-6)

## Project with an Oral Defense\*†

Which requires a total of 3 units of  
CECS 697\*† Directed Research (1-3)

**DEGREE AWARDED**