

Requirements for Graduation

1. A minimum of 31 semester units of acceptable graduate-level work included in the formal program with 5000- and 6000-level courses in computer science, with 22 units completed in residence at this university. No more than nine units may be earned from 5000-level courses;
2. Advancement to candidacy;
3. Thesis presentation and defense for the Thesis option; project presentation for the Project option; or satisfactory completion of the comprehensive written examination for the Examination option;
4. The program must be completed within a seven-year period. No more than seven years may elapse between the time of registration for the earliest course listed on the program and completion of all requirements for the degree;
5. A grade point average of at least 3.0 ("B") in all graduate course work fulfilling the requirements of the Master of Science in Computer Science and a grade of "C" (2.0) or better in each course in the program;
6. For the Thesis option, the student will submit the written thesis in electronic form to the school. For the Project option, the student will submit the written project report in electronic form to the school;
7. The graduate writing requirement is met upon successful completion of term papers in the graduate courses taken by the student and the writing of the thesis or project report;
8. Any additional general requirements not cited above and listed in [Graduate Degree and Program Requirements](#).

Coursework

If you have been given conditional admission, then your acceptance letter will indicate the prerequisite undergraduate courses that you need to complete. It is recommended to complete these as soon as possible (i.e., in the first year).

There are five core graduate courses that every graduate student must take. These are CSE 6020 (Computation and Complexity Theory), CSE 6100 (Modern Computer Architecture), CSE 6300 (Theory of Algorithms and Their Analysis), CSE 6550 (Software Engineering Concepts), and CSE 6600 (Operating Systems Concepts and Theory). These courses should be completed as soon as possible.

Depending on which option you have selected (Examination, Project, or Thesis), you will be required to complete a specific number of electives. An elective is a 6000-level course that is not one of the core courses. You are also allowed to take some 5000-level courses as electives, but there is a limit on how many 5000-level courses you can take as electives. You may need or choose to take courses below 5000-level, but they will not count towards the MS. Please note

that courses that you have taken during your undergraduate degree cannot be retaken or counted towards the MS.

The following are the elective requirements for the three options:

- Examination Option: 15 units of elective coursework chosen from 5000- to 6000-level computer science courses deemed appropriate by the department graduate committee. Up to 9 units of 5000-level computer science courses may be taken.
- Project Option: 12 units of elective coursework chosen from 5000- to 6000-level computer science courses deemed appropriate by the department graduate committee. Up to 9 units of 5000-level computer science courses may be taken.
- Thesis Option: 10 units of elective coursework chosen from 5000- to 6000-level computer science courses deemed appropriate by the department graduate committee.

Please note that full-time status is 6 units. Please see the following webpage:

<https://www.csusb.edu/registrar/registration/enrollment-status>.

Advancement to Candidacy

The student must select one of the following options:

- Examination Option:
 1. Achieved classified standing;
 2. Completed or currently registered in the five required core courses as a graduate student at this university;
 3. Minimum grade point average of 3.0 ("B") in all courses completed towards the Master's degree;
 4. Completed the Advancement to Candidacy form.

- Project Option:
 1. Achieved classified standing;
 2. Completed or currently registered in the five required core courses as a graduate student at this university;
 3. Minimum grade point average of 3.0 ("B") in all courses completed towards the Master's degree;
 4. Formed a committee, consisting of the student's advisor and two other committee members;
 5. Satisfactory passage of the oral examination to be administered by the student's committee;
 6. Submitted a project proposal that was approved by the student's committee;
 7. Completed the Advancement to Candidacy form.

- Thesis Option:
 1. Achieved classified standing;
 2. Completed or currently registered in the five required core courses as a graduate student at this university;
 3. Minimum grade point average of 3.0 ("B") in all courses completed towards the Master's degree;
 4. Formed a committee, consisting of the student's advisor and two other committee members;
 5. Submitted a thesis proposal that was approved by the student's committee;
 6. Completed the Advancement to Candidacy form.

Thesis/Project Committee

The student's thesis or project committee consists of the student's advisor (who must be from the School of Computer Science and Engineering) as well as two or more additional members (at least one must be a faculty member in the School of Computer Science and Engineering).

Students enrolled in the Thesis or Project option must choose and be accepted by a major advisor prior to their advancement to candidacy and the initiation of a thesis or project. The major advisor in consultation with the student will develop a program of graduate study consisting of specific courses and an acceptable thesis or project proposal based on the student's interests, abilities and preparation. The major advisor will direct this research.

The program of graduate study as well as any subsequent modification of the thesis or project are subject to the approval of the student's committee and graduate coordinator.

Thesis Preparation, Presentation and Examination

The student must conduct a research study, and from these efforts, write a thesis acceptable to the student's thesis committee and the Dean of Graduate Studies. The thesis topic and major advisor must be included on the program of graduate study submitted with the application to candidacy, although this may be amended.

The student shall enroll in Thesis at a rate of two to six units (CSE 6972, CSE 6973, CSE 6974, or CSE 6976) per semester for all contiguous academic year semesters starting from the time of advancement to candidacy until the thesis is completed and accepted. Over that period, six units of Thesis will count toward the degree.

The student, upon completion of the thesis, must give a public presentation of the research and stand for the defense of the thesis before the faculty made up of the thesis committee and any other faculty members who wish to attend. The student is given a maximum of five years from the time the student was advanced to candidacy to finish the degree.

Project Preparation, Presentation and Examination

The student must implement and complete a project acceptable to the student's project committee and the Dean of Graduate Studies. The project topic and major advisor must be included on the program of graduate study submitted with the application to candidacy, although this may be amended.

The student shall enroll in Masters Project at a rate of two or four units (CSE 6962 or CSE 6964) per semester for all contiguous academic semesters starting from the time of advancement to candidacy until the project is completed and accepted. Over that period, four units of Masters Project will count toward the degree.

The student, upon completion of the project, must give a public presentation. The student is given a maximum of five years from the time the student was advanced to candidacy to finish the degree.

Comprehensive Written Examination (for Examination Option)

Students who have selected the Examination option are advised by the graduate coordinator. The program of study for the Examination option consists of declaring and choosing the Examination option and may not be modified to the Thesis or Project option.

The student shall enroll in CSE 6890 and CSE 6980 after consultation with the graduate coordinator and completion of the last core course(s). CSE 6890 is a graduate seminar in preparation of the comprehensive examination CSE 6980 and CSE 6980 may be repeated only once. Students enrolled in CSE 6980 must pass a comprehensive written examination on the material in the core courses.

Degree Requirements (31 units)

Required Courses (15)

CSE 6020	Computation and Complexity Theory	3
CSE 6100	Modern Computer Architecture	3
CSE 6300	Theory of Algorithms and Their Analysis	3
CSE 6550	Software Engineering Concepts	3
CSE 6600	Operating Systems Concepts and Theory	3

In rare instances past 5000-level course work may preclude a student from enrolling in a required course. In that case, the student must seek advising by the graduate coordinator who will determine a viable alternative.

Culminating Experience (16)

Sixteen units from one of the following options:	16
Total Units	31

Culminating Experience (16 units)

Examination Option (16 units)

CSE 6890	Graduate Seminar	1
CSE 6980	Comprehensive Examination	0
15 units of elective coursework chosen from 5000- to 6000-level computer science courses deemed appropriate by the department graduate committee. Up to 9 units of 5000-level computer science courses may be taken.	15	
Total Units	16	

Project Option (16 units)

CSE 6962	Masters Project (for a total of 4 units)	4
or CSE 6964	Masters Project	
12 units of elective coursework chosen from 5000- to 6000-level computer science courses deemed appropriate by the department graduate committee. Up to nine units of 5000-level computer science courses may be taken.	12	
Total Units	16	

Thesis Option (16 units)

Six units chosen from:		6
CSE 6972	Thesis	
CSE 6973	Thesis	
CSE 6974	Thesis	
CSE 6976	Thesis	
10 units of elective coursework chosen from 5000- to 6000-level computer science courses deemed appropriate by the department graduate committee.		10
Total Units		