

# Civil Engineering, M.S.

## DEPARTMENT

BS in Civil Engineering, B.S.  
MS in Civil Engineering, M.S.  
MS in Civil Engineering-Water Resources & Environmental Engineering Option, M.S.  
BS in Geomatics Engineering, B.S.

## REQUIREMENTS

Department of Civil and Geomatics Engineering

### Master of Science in Civil Engineering Requirements

(See also Admission to Graduate Standing, Advancement to Candidacy, Program Requirements, and Criteria for Thesis and Project.)

**Mission.** Located in California's Central Valley, the M.S. in Civil Engineering (MSCE) Program offers a graduate program of excellence that provides opportunities for advanced education and research in civil and geomatics engineering. The program's mission is to offer a curriculum that combines preparation for professional practice as well as preparation for research and further advanced studies.

**Admission.** The requirements for graduate admission to California State University, Fresno must be met. Graduate Record Examination (GRE) scores must be received by the application deadline for International Student applicants and within 30 days after the application deadline for Domestic Student applicants. The minimum score considered passing on the quantitative section is 146 (new scale) / 550 (old scale). Also, applicants should possess a bachelor's degree in civil engineering, geomatics engineering, or a related field from an institution accredited by the Accreditation Board for Engineering and Technology and must have a 3.0 grade point average in the last 60 semester-units of engineering courses attempted, on the basis of 4.0 being A, or the approval of the Graduate Committee of the Department of Civil and Geomatics Engineering. If an applicant's preparation is deemed insufficient by the Graduate Committee of the Department of Civil and Geomatics Engineering, the applicant is required to take additional courses which are specified in writing to remove the deficiency. Such courses, taken as an unclassified student, are in addition to the minimum of 30 semester hours credit for the master's degree in engineering. The department graduate program coordinator shall appoint an interim graduate adviser for each student when that student is accepted into the graduate program. The coordinator will take into account student interests and correlated faculty interests when making this appointment.

**Continuation in the Program.** Students should select a graduate adviser before completing 12 units of graduate study and advancing to candidacy. Other members of his or her graduate committee shall be selected in consultation with the graduate adviser if the student has selected Plan A. This committee shall consist of a total of three members, two of whom must be tenure/tenure track faculty. The graduate student shall notify the department's Graduate Committee with a letter signed by both the student and the graduate adviser of the membership of the students' Graduate Committee. This letter shall be placed in the student's academic folder.

A graduate student may change their graduate adviser, but such change should be made before advancing to candidacy. The student, together with his or her new graduate adviser, completes a contract program of study within the first two semesters of changing advisors. The changing of advisors and the contract program of study must be approved by the department's Graduate Program Coordinator. Any disputes shall be resolved by the department's Graduate Committee.

A student must pass CE 210 with a grade of B or higher and satisfactorily complete a written examination administered in CE 210 before being eligible for Advancement to Candidacy; this satisfies both the university's graduate writing requirement and demonstrates the student has sufficient technical proficiency to continue in the program. If a passing grade on the writing component is not achieved, students who have a passing grade on the sum total of other course requirements will receive an "Incomplete" and must pursue the completion of the writing requirements independently from the course and in collaboration with his/ her graduate advisor. Students have two semesters to resolve incomplete work and avoid a failing grade in the course, which would likely lead to disqualification from the graduate program based on low GPA.

Any semester for which the grade point average falls below 3.0 shall result in placing the affected graduate student on probation. A second offense shall lead to disqualification. For additional information, please refer to the Division of Research and Graduate Studies, Administrative Academic Probation, Academic Disqualification.

The M.S. in Civil Engineering requires the completion of 30 units following one of three programs of study.

**Plan A (Thesis)**

- a. 200-series engineering courses, including CE 210 (see note 1) (12-24 units)
- b. 100-series CE or GME technical area courses (see notes 2 and 5) (0-6 units)
- c. Courses outside the department (see notes 3, 4, and 5) (0-6 units)
- d. Thesis CE 299 (6 units)

**Total (30 units)**

**Plan B (Project)**

- a. 200-series engineering courses, including CE 210 (15-27 units)
- b. 100-series CE or GME technical area courses (see notes 2 and 5) (0-6 units)
- c. Courses outside the department (see notes 3, 4, and 5) (0-6 units)
- d. Project CE 298 (3 units)

**Total (30 units)**

**Plan C (Comprehensive Exam)**

- a. 200-series engineering courses, including CE 210 (18-30 units)
- b. 100-series CE or GME technical area courses (see notes 2 and 5) (0-6 units)
- c. Courses outside the department (see notes 3, 4, and 5) (0-6 units)
- d. Comprehensive Final Examination (0 units)

**Total (30 units)**

**Advising Notes**

1. CE 210 should be taken during the semester following completion of 6 units of graduate level coursework.
2. Select from CE 125, 131, 134, 136, 137, 141, 142, 143, 144, 147, 148, 151, 153, 155, and 191T; GME 125, 126, 135, 145, 152, 153, 161, 174, 175, and 191T
3. 100-series and 200-series courses outside civil and geomatics engineering are in disciplines best suited to the student's career preparation, as approved by the program adviser and graduate program coordinator, and including but not limited to all engineering disciplines, construction management, mathematics, statistics, management, business, geology, physics, chemistry, health science, biology, and biochemistry.
4. A minimum grade of B is required. Similar courses previously taken and counted towards another degree are excluded.
5. No more than 6 units of 100-series coursework (from all disciplines) permitted unless approved by the graduate program coordinator and under no circumstances shall the total exceed 9 units.

## FACULTY

For faculty phone numbers and e-mail, see the campus directory.

For more on the faculty, see the Civil Engineering faculty pages and the Geomatics faculty pages. The faculty pages are updated by the department or program.