

# Construction Management

## The Field of Construction Management

The student who chooses the construction management major becomes qualified for leadership and responsibility in the construction industry. Students work to develop expertise in executing architectural and engineering graphics, applying engineering principles, managing resources, representing construction-related suppliers and manufacturers, and leading diverse project teams.

## The Construction Management Degree

For students seeking challenging futures in vital industries, Fresno State offers a valuable degree in construction management. The program is designed to arm the graduate with techno-scientific theory and practice and to provide training in the basic principles of supervision and management.

The principle components of the degree program are (1) construction management, (2) physical science, (3) business management, and (4) General Education.

## The Major

- The construction management degree is accredited by the American Council for Construction Education (ACCE)

- Recognized for its diverse faculty who represent the makeup of professionals in the field.
- Well-equipped modern laboratories and facilities. Special equipment includes computers, computer graphics, and materials testing equipment.
- Student clubs are affiliated with several key industry organizations including the Associated General Contractors of America, the American Institute of Constructors, Construction Management Association of America, and the National Association of Women in Construction. There is also Sigma Lambda Chi, which is the national honorary professional fraternity in construction.

## The Minor

The minor provides an opportunity for students from interrelated disciplines such as civil engineering, surveying, mechanical engineering, city and regional planning, interior design, industrial technology, and business management to gain a level of expertise in the working atmosphere and environment of related professions and fields. Students in the minor acquire an interdisciplinary core of information for participation in their chosen professional fields.

## General Preparation

Students desiring to major in construction management

should be interested in the design, management, technical, and leadership aspects of construction.

## High School Preparation

Students should meet California State University's admission requirements in terms of college preparatory course requirements, grade point average, and test scores. They should also prepare by taking courses in construction, architectural drawing, physics, trigonometry, and calculus. Courses relating to communication and/or interpersonal relationships are also desirable.

## College Program

Students should consult the university's *General Catalog* for specific major and university requirements. Community college transfers should consult their catalogs to ensure that courses taken are CSU transferable (baccalaureate level).

## General Education

Students should complete as many of the Fresno State General Education requirements as possible during the freshman and sophomore years, whether they are attending California State University, Fresno or a community college. Community colleges can certify up to 39 of the units required in Fresno State's General Education pattern.

California State University, Fresno

Construction Management Program

559.278.6056

[www.csufresno.edu/construction](http://www.csufresno.edu/construction)

B.S. in Construction Management

Minor in Construction Management

FRESNO STATE

Discovery. Diversity. Distinction.

# Construction Management

## Course Requirements

Since changes may occur, students should consult the *General Catalog* and a Fresno State adviser prior to registering for courses.

### Lower Division (60 units)

Freshman-Sophomore level courses (may be taken at a community college)

Construction Management Orientation (CM 1S)  
Construction Graphics (CM 4)  
Construction Materials and Assemblies (CM 7S)  
Construction Contracts and Specifications (CM 20)  
Calculus I (MATH 75)  
Calculus II (MATH 76)  
Mechanics and Wave Motion (Phys 4A)  
General Chemistry (CHEM 3A) or Natural Disasters and Earth Resources (EES 1)  
Essentials of Accounting (ACCT 3)  
Microeconomics or Macroeconomics (ECON 40 or 50)  
Engineering Surveying (GME 15)  
Engineering Mechanics: Statics (CE 20)  
Statistical Analysis I (DS 73)

**Note:** All lower division students are considered “pre-construction management major” students until they successfully complete the following requirements: (a.) Complete all of the following courses: MATH 75, MATH 76, PHYS 4A, PHYS 4AL, CM 1S, CM 4, CM 7S, CM 20, CE 20, GME 15, and GME 15L. (b.) Attain a “C” in 8 of the 11 courses listed above, with no course to be repeated more than twice. (c.) Have a cumulative and campus grade point average of at least 2.00.

### Upper Division (60 units)

Junior-Senior level courses (to be taken at Fresno State)

Advanced Construction Structures (CM 107)  
Estimating and Bidding (CM 110)  
Scheduling and Control (CM 116)  
Construction Law (CM 122)  
Building Mechanical, Electrical, and Plumbing Systems (CM 140)  
Construction Project Controls (CM 170)  
Construction Management Capstone I (CM 180AS)  
Construction Management Capstone I (CM 180B)

Construction Management Senior Seminar (CM 181)  
Construction Soils and Foundations (CM 127)  
Internship/Work Experience (CM 193)  
Engineering and Entrepreneurship (ENGR 105W) or Business Communications (BA 105W)  
Administrative Principles of Management (MGT 104)  
Global Business (BA 104)

In addition to the core upper division requirements, students are required to take the following elective courses:

Construction Management “Technical” Elective (3 units – pick from listed CM courses)  
Construction Management “Methods” Elective (3 units – pick from listed CM courses)  
Construction Management “Sector” Elective (3 units – pick from listed CM courses)  
Business Electives (6 units – any upper division business course)

### Construction Management Minor

Students from interrelated disciplines will acquire professional and specialized Construction knowledge and skills. The minor is a preparation for participation in the building-related professions that solve the infrastructure needs of society and the environment.

### Required Core Courses (16 units)

Construction Management Orientation (CM 1S)  
Construction Graphics (CM 4)  
Construction Materials and Assemblies (CM 7S)  
Construction Contracts and Specifications (CM 20)  
Estimating and Bidding (CM 110)  
Scheduling and Control (CM 116)

### Additional Elective Courses (6 units)

The student will select two additional construction courses in consultation with a faculty adviser. Emphasis may be placed upon a variety of specialization areas including building systems (CM 140 and CM 166), design-build (CM 131 and CM 132), building construction (CM 127 and CM 150), or heavy construction (CM 127 and CM 151).

**Total (22 units)**

**For additional information, write**

**California State University, Fresno Construction Management Program**

2320 East San Ramon  
M/S EE94  
Fresno, California  
93740-8030

**Visit or call**

**Construction Management Program**

Engineering East  
Building, Room 192  
559.278.6056  
559.278.4475 Fax

[www.csufresno.edu/engineering](http://www.csufresno.edu/engineering)

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**PLEASE NOTE:** This document is for general informational purposes only. The information is subject to change; consult the appropriate department or an academic adviser. Entering freshmen must follow the revised General Education program effective fall 1999 and thereafter. The university catalog and schedule of courses are available online at [www.fresnostate.edu/ClassSchedule](http://www.fresnostate.edu/ClassSchedule) and [www.fresnostate.edu/catalog](http://www.fresnostate.edu/catalog).

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