

# Bachelor of Science in Construction Management

## About This Program

The Bachelor of Science in Construction Management is designed to provide the necessary foundation in business, science, mathematics, and engineering required for the management of construction projects of all sizes. The program will also instill an understanding of the importance of ethics, safety, professionalism, and socioeconomic concerns in resolving technical problems through synthesis, planning, and design.

## ABET ACCREDITATION

The Construction Management BS degree is accredited by the Applied and Natural Science Accreditation Commission of [ABET](https://catalog.uta.edu/engineering/civil/undergraduate/construction-management-bs/www.abet.org) (<https://catalog.uta.edu/engineering/civil/undergraduate/construction-management-bs/www.abet.org>) under the commission's General Criteria and the Program Criteria for Construction Management.

## PROGRAM EDUCATIONAL OBJECTIVES

The program is designed so that a few years following graduation students will be able to:

- Successfully manage the construction process from pre-construction through final completion.
- Apply leadership, team building, and communication skills to effectively solve problems and positively impact the overall construction process.
- Commit to continued professional growth through advanced degrees and/or certifications and be able to take initiative to grow in their positions and assume leadership roles within their chosen profession.

## STUDENT OUTCOMES

Upon completion of the degree, students will be able to:

1. Identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.
2. Formulate or design a system, process, procedure or program to meet desired needs.
3. Develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
4. Communicate effectively with a range of audiences.
5. Understand ethical and professional responsibility and the impact of technical and/or scientific solutions in a global, economic, environmental, and societal contexts.
6. Function effectively on teams that establish goals, plan task, meet deadline, and analyze risk and uncertainty.

## Admissions Criteria

Admission as a Construction Management major is subject to the relevant requirements and policies of the University of Texas at Arlington and of the UTA College of Engineering.

## ADMISSION TO THE PROFESSIONAL PROGRAM

For admission to the professional program in Construction Management students must meet the requirements for admission to the College of Engineering in addition to the following added stipulations:

- Each student must complete all pre-professional courses stipulated under "Program Curriculum" with a minimum grade of C in each course.
- A minimum 3-calculation GPA of 2.25 is required in: a) all courses, b) all math, science, and engineering courses, and c) all program specific courses.

## Curriculum

### Foundations

General Core Requirements (<https://catalog.uta.edu/academicregulations/degree/requirements/generalcore/requirements/>)

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Students must complete specific courses in certain core areas as part of the pre-professional program.

In addition to the specified courses, students must choose 6 hours of U.S. History, 6 hours of Political Science, 3 hours of Language, Philosophy, & Culture, 3 hours of Creative Arts, 3 hours of Social & Behavioral Science, and 3 hours of Foundational Component from the UTA General Education Core Requirements.

For Communication select:

ENGL 1301

RHETORIC AND COMPOSITION I

In addition to ENGL 1301, select one of the following:

COMS 1301	FUNDAMENTALS OF PUBLIC SPEAKING <sup>2</sup>
COMS 2302	PROFESSIONAL AND TECHNICAL COMMUNICATION FOR SCIENCE AND ENGINEERING
ENGL 1302	RHETORIC AND COMPOSITION II

For Mathematics select:

MATH 1303	TRIGONOMETRY
MATH 1308	ELEMENTARY STATISTICAL ANALYSIS

For Life & Physical Sciences select:

PHYS 1441	GENERAL COLLEGE PHYSICS I
PHYS 1442	GENERAL COLLEGE PHYSICS II

#### CM Pre-Professional Program

Additional hours required in core.		2
UNIV-EN 1131	STUDENT SUCCESS	1
or ENGR 1101	ENTRANCE TO ENGINEERING FOR TRANSFER STUDENTS	
ACCT 2301	PRINCIPLES OF ACCOUNTING I	3
CM 1311	CONSTRUCTION DRAFTING <sup>1</sup>	3
CM 1331	CONSTRUCTION SURVEYING	3
CM 2311	INTRODUCTION TO CONSTRUCTION MANAGEMENT	3
CM 2313	CONSTRUCTION MATERIALS AND METHODS	3
CM 2315	INTRODUCTION TO MECHANICS FOR CONSTRUCTION	3
CM 2331	CONSTRUCTION DOCUMENTS	3
Select one of the following:		3
MATH 1301	CONTEMPORARY MATHEMATICS	
MATH 1302	COLLEGE ALGEBRA	
MATH 1315	COLLEGE ALGEBRA FOR ECONOMICS & BUSINESS ANALYSIS	

#### CM Professional Program (Specialization)

MANA 3318	MANAGING ORGANIZATIONAL BEHAVIOR	3
CM 3313	CONSTRUCTION ESTIMATING I	3
CM 3315	CONSTRUCTION LAW AND ETHICS	3
CM 3331	MECHANICAL AND ELECTRICAL SYSTEMS	3
CM 3335	SOILS AND FOUNDATION IN CONSTRUCTION	3
CM 3337	CONSTRUCTION ADMINISTRATION AND ECONOMICS	3
CM 3339	CONSTRUCTION SAFETY	3
CM 3341	CONSTRUCTION DESIGN	3
CM 4306	BUILDING CONSTRUCTION CONTRACTS	3
CM 4315	CONSTRUCTION ESTIMATING II	3
CM 4317	CONSTRUCTION SCHEDULING	3
CM 4331	CONSTRUCTION MANAGEMENT CAPSTONE	3
CM 4351	BUILDING INFORMATION MODELING FOR CONSTRUCTION MANAGEMENT	3
CM 4357	SUSTAINABLE BUILDING PRACTICE	3
Select three of the following:		9
CM 4332	CONSTRUCTION FIELD OPERATIONS	
CM 4334	DRONES & ADVANCED CONSTRUCTION TECHNOLOGY	
CM 4335	GEOTECHNICAL ASPECTS OF CONSTRUCTION	
CM 4337	LAND AND SITE DEVELOPMENT	

CM 4353	RESIDENTIAL AND COMMERCIAL CONSTRUCTION
CM 4359	INDUSTRIAL INTERNSHIP I
CM 4360	INDUSTRIAL INTERNSHIP II

**Total Hours****120**<sup>1</sup> Satisfies Computer Use Competency requirements.<sup>2</sup> Satisfies Oral Communication Competency requirements.

## Program Completion

### ACADEMIC RULES, REGULATIONS, AND POLICIES

The rules, regulations, and policies of the University of Texas at Arlington and of the UTA College of Engineering are set forth in other sections of this catalog. It is the responsibility of each student to follow the applicable published rules. Failure to follow these rules may be grounds for dismissal from the program.

### COURSE REQUISITES

- A student must have the written approval of their program advisor to register for any course that will satisfy a requirement of their degree program.
- A student must have specific written permission of their program advisor to register at a different institution for any course that will satisfy a requirement of their degree program.
- A student may not attempt a CE Department course without satisfying all current requisite requirements. A prerequisite course requirement is satisfied by earning a grade of C or better. A co-requisite course requirement is satisfied by earning a grade of C or better or by concurrent enrollment in the course at UTA.
- A student may not drop a course which is co-requisite to a CE Department course without also dropping the CE Department course.
- All pre-professional courses in the BSCM program need to be completed prior to transition to professional program and enrollment in 3000 and 4000 level CM courses. However, students are allowed to enroll in 3000 level CM courses for only one semester while in process of completing 1000 and 2000 level courses.
- CM 4331 (CM Capstone) is offered in summer sessions and limited to enrollment of students who just have this course remaining for graduation or this course plus only one CM Elective course.

## Advising Resources

### Location:

Nedderman Hall 425

### Email:

ceugadvising@uta.edu

### Phone:

817-272-0279

### Web:

Advisor Information &amp; Scheduling an Appointment