

Construction Management and Technology, MS

ESCONSTMS

Program description

Degree awarded: MS Construction Management and Technology

The transdisciplinary MS program in construction management and technology allows students with a bachelor's degree in construction or a related field such as architecture, business or engineering to broaden and improve their professional capabilities in construction. This meets the growing need for professionals with advanced technical, management and applied research skills in the construction industry.

The program allows a candidate's plan of study to reflect individual interests and career goals. Courses are offered in several areas, allowing a student to tailor their degree to their interests:

- commercial and residential areas
- construction management --- project, program and company
- facilities management --- maintenance, operation, renovation or decommissioning of existing facilities
- heavy construction --- infrastructure development
- specialty construction

This program is facilitated by the faculty of the Del E. Webb School of Construction.

At a glance

- **College/School:** [Ira A. Fulton Schools of Engineering](#)
- **Location:** [Tempe](#) or [Online](#)

Accelerated program options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an **accelerated bachelor's plus master's degree** with:

Construction Management and Technology, BS

Acceptance to the graduate program requires a separate application. Students typically receive approval to pursue the accelerated master's during the junior year of their bachelor's degree program. Interested students can learn about eligibility requirements and [how to apply](#).

Degree requirements

30 credit hours and a thesis, or

30 credit hours and a written comprehensive exam, or

30 credit hours including the required applied project course (CON 593)

Required Core (6 credit hours)

Project Management and Controls Core Area (3 credit hours)

CON 502 Front-end Planning (3)

CON 530 Facilities Operations and Maintenance (3)

CON 532 Facilities Project Management (3)

CON 534 Retrofit Construction (3)

CON 540 Construction Productivity (3)

CON 541 Public Works Capital Construction (3)

CON 545 Construction Project Management (3)

CON 548 Sustainable Construction (3)

CON 551 Alternative Project Delivery Methods (3)

CON 557 Principles of Leadership for Project Managers (3)

CON 567 Advanced Procurement Systems (3)

CON 589 Construction Company Financial Control (3)

Construction Technology Core Area (3 credit hours)

CON 508 Engineering and Construction Failures (3)

CON 509 Advanced Concrete Materials (3)

CON 510 Sustainable Bio-based Construction (3)

CON 531 Facility Management: Building Energy Management (3)

CON 554 Trenchless Construction Methods (3)

CON 570 Introduction to Advanced Technology Facilities (3)

CON 571 Construction of Advanced Technology Facilities (3)

CON 575 Information Technology in Construction (3)

Electives or Research (18--24 credit hours)

Culminating Experience (0--6 credit hours)

CON 593 Applied Project (3)

CON 599 Thesis (6)

written comprehensive exam (0)

Additional Curriculum Information

Students choose one three-credit-hour course from each of the core areas listed above for a total of six credit hours. If a course is chosen as a core area course, it cannot be used as an elective course simultaneously.

The number of electives and research is adjusted depending on the culminating experience chosen by the student.

Admission requirements

Applicants must fulfill the requirements of both the Graduate College and the Ira A. Fulton Schools of Engineering.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. current resume
4. an evaluation of the student's academic and professional background
5. personal statement
6. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide [proof of English proficiency](#) by meeting the Graduate College English proficiency requirements regardless of their current residency.

Applicants required to demonstrate English proficiency and seeking a teaching assistantship must demonstrate proficiency in spoken English, and a score of 55 or better on the Speaking Proficiency English Assessment Kit or a score of 26 on the speaking portion of the TOEFL is required.

Applicants are expected to be competent in basic construction topics.

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about [ASU tuition and financial aid](#) options to find out which will work best for them.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may [view the program's ASU Online page](#) for program descriptions and to request more information.

Application deadlines

Fall

Spring [expand](#)

[expand](#)

Career opportunities

Graduates of the construction management and technology program are well prepared for numerous types of careers, depending upon which subject area they focused their coursework:

- commercial and residential --- real estate developers, commercial construction managers, managers and supervisors of health care and special industrial building projects or home production systems, and managers or supervisors of sustainable or green construction
- construction management --- project managers, project engineers, estimators or schedulers who can eventually become principals of firms engaged in the construction of industrial, commercial or residential projects
- facilities management --- managers who supervise the maintenance, operation, renovation or decommissioning of existing facilities
- heavy construction --- supervisors of the construction and maintenance of public works such as highways, airports, bridges, utility systems and water or waste treatment facilities
- specialty construction --- organizers, leaders and managers of the building process at the subcontractor or contractor level working with mechanical and electrical systems, and in management at specialty contracting firms, such as those who do work in control systems, electrical distribution or HVAC systems for large and complex facilities such as data centers, health care organizations and semiconductor manufacturing plants as well as commercial facilities

Contact information

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