Construction Management and Technology, BS

ESCONMGTBS

Program description

The BS program in construction management and technology allows students to specialize in construction and facility management. Students learn to organize, lead and manage the building construction business processes related to real estate, facility and infrastructure projects.

Construction management is the most vital function on a job site. Construction managers represent the interests of the building owner or the contractor and interact with architects, engineers, subcontractors, vendors and suppliers to ensure the success of construction projects in the built environment.

This program focuses on the business of construction and technology, such as building information modeling.

Students learn the basics of design; the construction methods specific to each type of construction (heavy, residential, commercial, specialty); and the process of sustainable or green construction. They learn how to estimate, schedule and control the costs of a project and what it takes to manage the people involved and the various types of contracts. Graduates possess the computer, management, technical and people skills they need to succeed.

This is one of two construction programs in the state of Arizona and one of approximately 80 accredited programs in the nation.

This program is accredited by the American Council for Construction Education: https://www.acce-hq.org/

Accredited by the Applied and Natural Science Commission of ABET, https://www.abet.org, under the General Criteria and the Construction Management Criteria.

At a glance

• College/School: <u>Ira A. Fulton Schools of Engineering</u>

• Location: <u>Tempe</u>

• Second language requirement: No

• First required math course: MAT 170 - Precalculus

• Math intensity: Moderate

Required courses (Major Map)

2024 - 2025 Major Map Major Map (Archives)

Concurrent program options

Students pursuing concurrent degrees (also known as a "double major") earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

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, MS

Public Administration, MPA

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.

Admission requirements

General university admission requirements:

All students are required to meet general university admission requirements.

<u>First-year</u> | <u>Transfer</u> | <u>International</u> | <u>Readmission</u>

Additional requirements:

The admission standards for majors in the Ira A. Fulton Schools of Engineering, shown below, are higher than minimum university admission standards. International students must meet the same admission standards, with the possible additional requirement of a minimum English language proficiency test score. If the university requires an English proficiency test score from the applicant, then admission to engineering requires a minimum TOEFL iBT score of 79 (internet-based test, taken in a testing center), a

minimum IELTS score of 6.5, a minimum PTE score of 58, a minimum Duolingo English score of 105, or a minimum Cambridge English exam score of 176.

First-year admission:

- minimum 1210 SAT combined evidence-based reading and writing plus math score or minimum 24
 ACT combined score, or a minimum high school cumulative GPA of 3.00 in ASU competency
 courses, or class ranking in top 25% of high school class, and
- 2. no high school math or science competency deficiencies

Transfer admission requirements:

Transfer students with fewer than 24 transferable college credit hours:

- 1. minimum transfer GPA of 3.00 for fewer than 24 transfer hours, and
- 2. no high school math or science competency deficiencies, and
- minimum 1210 SAT combined evidence-based reading and writing plus math score (or 1140 if taken prior to March 5, 2016) or minimum 24 ACT combined score, or a minimum high school cumulative GPA of 3.00 in ASU competency courses, or class ranking in top 25% of high school class

Transfer students with 24 or more transferable college credit hours must meet either the primary or the secondary criteria (not both):

Primary criteria

- 1. minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- 2. no high school math or science competency deficiencies (if ASU Admission Services requires submission of a high school transcript)

Secondary criteria

- 1. minimum transfer GPA of 2.50 for 24 or more transfer hours, and
- 2. minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses)

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about <u>ASU tuition and financial aid</u> options to find out which will work best for them.

Change of Major Requirements

<u>Admission requirements</u> for many majors in the Ira A. Fulton Schools of Engineering are higher than university admission standards.

Students should visit the <u>Change of Major form</u> for information about how to change a major to this program.

Transfer options

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use MyPath2ASU® to outline a list of recommended courses to take prior to transfer.

ASU has <u>transfer partnerships</u> in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and they help students save time and money in their college journey.

Global opportunities

Global experience

Students enhance their resumes with the valuable experience they gain through <u>study abroad</u>. With over 300 programs available, study abroad allows students to tailor their experience to their unique interests and skill sets. Students in construction management and technology are able to gain hands-on experience, heightened cultural competency, and leadership and critical thinking skills while studying abroad. They earn ASU credit for completed courses while staying on track for graduation, and they may apply financial aid and scholarships toward program costs.

Career opportunities

The construction management and technology program provides a foundation for those who wish to pursue careers as project managers, project engineers, estimators or schedulers and eventually become principals of firms engaged in the construction of industrial, commercial or residential projects.

Graduates of the heavy construction emphasis area are prepared for careers related to public works such as highways, airports, bridges, utility systems and water or waste treatment facilities.

Graduates of the commercial and residential emphasis areas are prepared for careers in real estate development, home production systems, commercial construction, health care and special industrial building projects. They are also prepared to enter the sustainable or green construction market.

Graduates of the specialty construction emphasis are prepared to organize, lead and manage the building process at the subcontractor level and for careers as contractors working with mechanical and electrical systems. They are also prepared for careers in management at specialty contracting firms, such as those

with expertise in control systems, electrical distribution or heating, and ventilation and air conditioning systems for large and complex facilities such as data centers, health care organizations, semiconductor manufacturing plants and commercial facilities.

Example job titles and salaries listed below are not necessarily entry level, and students should take into consideration how years of experience and geographical location may affect pay scales. Some jobs also may require advanced degrees, certifications or state-specific licensure.

Career	*Growth	*Median salary
Construction Manager	4.5%	\$101,480

^{*} Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).



Professional licensure

ASU programs that may lead to professional licensure or certification are intended to prepare students for potential licensure or certification in Arizona. Completion of an ASU program may not meet educational requirements for licensure or certification in another state. For more information, students should visit the <u>ASU professional licensure</u> webpage.

Students should note that not all programs within the Fulton Schools of Engineering lead to professional licensure.

Contact information

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