Ira A. Fulton Schools of Engineering
ARIZONA STATE UNIVERSITY

school of sustainable engineering and the built environment

construction management & technology

Currently, students can choose a specialty in one of two areas: Construction Management and Facility Management. The Construction Management specialty allows students seeking upper level management positions in various sectors of the construction industry to improve their competency in project, program, and company management. The Facility Management specialty supports the needs of the student desiring a career in the maintenance, operation, renovation, or decommissioning of existing facilities.

It is the responsibility of each student to understand and observe all procedures and requirements specified by the Graduate College and the faculty in DEWSC. The faculty and graduate advisor provide academic advice and assistance; however, the ultimate responsibility for meeting degree requirements remains with the student.

The faculty of the Del E. Webb School of Construction offer a graduate program leading to the MS in construction management and technology. The transdisciplinary nature of the program allows a candidate's plan of study to reflect individual interests and career goals.

The primary objective of the program is to allow 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. The program is designed to meet the growing need for professionals with advanced technical, management and applied research skills in the construction industry.

The facilities management specialty area supports the needs of the student desiring a career in the maintenance, operation, renovation or decommissioning of existing facilities. The construction management specialty area allows students seeking upper-level management positions in various sectors of the construction industry to improve their competency in project, program and company management areas.

Construction Management Faculty

- Samuel Ariaratnam, Professor
- Oswald Chong, Associate Professor
- Wanda Dalla Costa, Associate Professor
- Ricardo Eiris, Assistant Professor
- James Ernzen, Associate Professor
- Elham (Ellie) Fini, Associate Professor
- David Grau, Associate Professor
- Anthony J. Lamanna, Associate Professor
- Kristen Parrish, Associate Professor (Graduate Program Coordinator)
- Kenneth Sullivan, Assistant Professor
- Avi Wiezel, Associate Professor

Program Overview:
30 credit hours including an Applied Project, or 30 credit hours including a Capstone Course, 30 credit hours including a Thesis, or 30 credit hours with a comprehensive exam*

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)
CON 598 Building Commissions (3)*
CON 598 Advanced Building Commissioning (3)*
CON 598 Computer Vision for Builders (3)*
CON 598 Roofing Technology (3)*
CON 598 Building Indoor Air Quality (3)*
CON 598 Deep Foundation Construction (3)*
CON 598 Heavy Construction Estimating (3)*

* These specific topic courses can be petitioned to count as Construction Technology core requirement.

Electives (18-24 credit hours)

Culminating Experience (0-6)
CON 593 Applied Project (3)
CON 597 Graduate Capstone in Construction
CON 599 Thesis (6)
Comprehensive Exam (0)*

*The comprehensive exam option is only reserved for admitted PhD students that are completing a masters in passing in route to completing their PhD.

M.S. PROGRAM

The Plan of Study (iPOS) must be in accordance with Graduate College and DEWSC requirements. Assigned construction deficiency courses cannot be included on the student's iPOS and are not counted towards the 30 credit hours needed for degree completion. CON 584 Internship does not count towards the 30 credit hours needed to complete the degree. The candidate must complete at least 30 semester hours of approved course work distributed as follows:

1) Six (6) credit hours of graduate core courses - three (3) credit hours from each core area are required.

2) Eighteen (18) - twenty-four (24) hours of graduate electives

Electives can consist of any combination of CON 500 level coursework classes. Students may also take relevant graduate level courses in other departments with approval from their faculty advisor.

3) Culminating experience: zero (0) - six (6) hours

The Graduate Supervisory Committee (GSC) shall consist of three DEWSC tenure-track faculty for students pursuing the thesis route unless otherwise approved by the graduate chair. The Faculty Advisor shall serve as the chair of the GSC.