

Technology Management: Construction Management & Design Option

Bachelor of Science (BS)

Construction Management & Design Option

Technology management is a field of study designed to prepare technical and/or management-oriented professionals for employment in business, industry, education, and government. Technology management is primarily involved with the management, operation, and maintenance of complex technological systems while engineering and engineering technology are primarily involved with the design and installation of these systems.



Technology management: construction management & design students will...

- Be prepared for technically oriented, mid-management positions in the construction industry.
- Be prepared to communicate and function within the management, engineering, and production environments of the construction industry through incorporation of hands-on experience and management-related theory.
- Learn technical aspects of construction, including architectural drafting, and mechanics of structures and materials.
- Learn management aspects, including contracts and building codes, estimating, scheduling, and project administration.
- Be provided with practical applications of classroom experiences.

Career Planning

Career preparation is part of the mission of Southeast. In fact, more than 90% of Southeast students participate in internships, clinical opportunities, student teaching, research assistantships, and study abroad.

Professional career counselors are available for all students. The Office of Career Services in Academic Hall 057 can provide students with professional career counseling, resume critiques, practice interviews, job search strategies, career events, networking opportunities, and more.

Demonstrated Career Proficiency is a Requirement of all Southeast Students		
CL001/CL002	First Semester	Complete the FOCUS2 assessment and develop a Career Action Plan.
CL003	Junior Year	Students gain information about career planning and job searching resources.
CL004	Senior Year	Students demonstrate advanced proficiency by identifying a position in their field, developing a cover letter, and tailoring a resume for the position. Materials are critiqued to ensure preparedness for a successful job search.

Career Opportunities

- Project Manager
- Architectural Drafter
- Construction Supervisor
- Estimator
- Planner and Scheduler

Program emphases include

- Computer-aided drafting, geometric construction, lettering, sketching, orthographic projection, auxiliary views, sections, and dimensioning.
- Detailed working drawings of residential and light commercial buildings, including foundations, floor plans, elevations, sections, details, electrical, plumbing, and heating plans.
- Required internship focused on technical and/or management aspects of the construction industry.
- Basic tools and equipment related to residential and light commercial construction.
- Software programs: AutoCAD, Architectural Desktop, Revit, Microsoft Project, project management and estimating software.

Professional and Student Organizations

The Construction Management Organization (CMo) offers professional development, social interaction, and leadership opportunities to the students in the construction management and design program of the Department of Industrial and Engineering Technology. CMo also sponsors teams to a student competition in the fall.

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This is a guide based on the 2015-2016 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use DegreeWorks to monitor their individual progress.

CURRICULUM CHECKLIST
Technology Management: Construction Management & Design Option - 88 Hours Required

- ___ CH181/081/001 Basic Principles of Chemistry (5)
- ___ CM126 Computer Aided Architectural Drafting (3)
- ___ CM143 Construction Methods & Materials I (3)
- ___ CM226 Residential Architectural Drafting & Design (3)
- ___ CM243 Construction Methods and Materials II (3)
- ___ CM260 Computer Methods of Construction Managers (3)
- ___ CM310 Construction Building Codes (3)
- ___ CM315 Construction Contracts and Legal Issues (3)
- ___ CM320 Construction Cost Estimating (3)
- ___ CM322 Commercial Architectural Drafting & Design (3)
- ___ CM325 Building Mechanical & Electrical Systems (3)
- ___ CM330 Construction Planning and Scheduling (3)
- ___ CM343 Construction Surveying & Testing (3)
- ___ CM410 Construction Project Administration (3)
- ___ CM443 Construction Equipment Management (3)
- ___ IM102 Technical Communication (3)
- ___ IM301 Industrial Safety (3)
- ___ IM311 Statistical Process Control (3)
- ___ IM317 Internship (3)
- ___ IM419 Industrial Supervision (3)
- ___ MA133 Plane Trigonometry (3)
- ___ MA134 College Algebra (3)
- ___ MA139 Applied Calculus (3)
- ___ MN219 Statics and Strength of Materials (3)
- ___ MN220 Engineering Econ Analysis (3)
- ___ PH120/020 Introductory Physics I (5)
- ___ SW207 Understanding Cultural & Social Diversity (3)
- ___ UI410 Manufacturing Research in a Global Society (3)

University Studies Requirements (not already listed above):

UI100 First Year Seminar, EN100 English Composition, Artistic Expression, Written Expression, Oral Expression, Literary Expression, Behavioral Systems, Living Systems, Development of a Major Civilization, Political Systems, and two IU/UI3XX

SAMPLE FOUR-YEAR PLAN

▶	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	CM243	3
	EN100	3	IM102	3
	CM126	3	MA133	3
	CM143	3	Oral Expression	3
	MA134	3	Written Expression	3
	Total	15	Total	15
SECOND YEAR	CH181/081/001	5	CM226	3
	CM320	3	CM310	3
	IM301	3	PH120/020	5
	MA139	3	SW207	3
	Artistic Expression	3	Literary Expression	3
	Total	17	Total	17
THIRD YEAR	CM260	3	CM315	3
	CM330	3	CM322	3
	MN220	3	CM343	3
	Behavioral Systems	3	IM317	3
	Political Systems	3	MN219	3
	Total	15	Total	15
FOURTH YEAR	CM325	3	CM410	3
	CM443	3	IM419	3
	IM311	3	UI410	3
	Living Systems	3	IU/UI3XX	3
	IU/UI3XX	3	Develop of a Major Civ	3
	Total	15	Total	15

Degree requirements for all students: a minimum of 120 credit hours, completion of University Studies program, career proficiencies (CL001-004), Writing Proficiency Exam (WP003), and completion of the Measure of Academic Proficiency and Progress (MAPP) at the senior level.

Refer to the Undergraduate Bulletin or DegreeWorks for additional graduation requirements (i.e., minimum GPA and course work) for your program of study.

Revised
3/19/2015