

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.

Becoming Career Ready...

/ Faculty with relevant industry experience work closely with students by providing them with career-ready practical experience and a technology-based curriculum in the state-of-the-art Otto & Della Seabaugh Polytechnic building.

/ Construction Management & Design graduates work in the construction industry, including the building of all types of public, residential, commercial and industrial structures. Examples of job titles building surveyor, building services engineer, construction manager, project manager, site engineer and sustainability consultant.

/ 100% of Southeast programs offer real-world experience. Construction Management and Design students earn this experience through a 240-hour internship and a capstone course for students to work in teams to solve open-ended industrial projects and/or participate in a student competition. Students also gain valuable hands-on experience through labs that accompany the course work.

/ The path to a successful career starts with you! You can maximize your career development by working closely with Career Services and Southeast faculty – they are here to help you connect your passions, interests and skills to jobs and opportunities in the field. Career Services provides professional career counseling and coaching, resume critiques, practice interviews, job search strategies, career events, networking opportunities and more.

Career Opportunities:

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

Program emphases include:

- Computer-aided modeling, design and drafting, auxiliary views, sections, and dimensioning.
- Detailed working drawings of residential and commercial buildings, including foundations, floor plans, elevations, sections, details, electrical, plumbing and heating plans.
- Coursework includes core construction management concepts like estimating, scheduling and contract administration.
- Required internship focused on technical and/or management aspects of the construction industry.
- Hands-on experience utilizing tools and equipment related to residential and commercial construction.
- Software programs: AutoCAD, Revit, Microsoft Project, Microsoft Office Suite, On-Screen Takeoff, Procore, 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 Engineering and Technology. CMo is a student chapter of the Associated General Contractors of Missouri (AGCMO). CMo also sponsors teams to a student competition in the fall.

Special Options with Technology Management

Southeast Missouri State University offers an accelerated master's degree for current Southeast technology management students. For more information, please see the MS: Technology Management degree map.

Southeast also offers a Master of Science in Technology Management.

Transfer and Dual Credit Students

If you have dual credit or transfer credit, please visit our transfer course equivalencies guide at semo.edu/transfercredit.

To learn more
Office of Admissions
(573) 651-2590
admissions@semo.edu
semo.edu

To explore
the College of Science,
Technology, Engineering and
Mathematics online, visit
semo.edu/stem

For advising
Center for Academic Advising
semo.edu/advising

Technology Management: Construction Management & Design Option**Bachelor of Science (BS)**

This is a guide based on the 2019-2020 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 Degree Works to monitor their individual progress.

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

- ___ CH181/081/001 Basic Principles of Chemistry (5)
- ___ CM260 Computer Methods of Construction Managers (3)
- ___ CM330 Construction Planning and Scheduling (3)
- ___ IM300 Technical Communication (3)
- ___ IM301 Industrial Safety (3)
- ___ IM311 Statistical Process Control (3)
- ___ IM419 Industrial Supervision (3)
- ___ MA116 Precalculus A (3)
- ___ MA117 Precalculus B (3)
- ___ MA139 Applied Calculus (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)

Construction Management & Design Option:

- ___ 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)
- ___ 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)
- ___ CM343 Construction Surveying & Testing (3)
- ___ CM410 Construction Project Administration (3)
- ___ CM443 Construction Equipment Management (3)
- ___ IM317 Internship (3)
- ___ MN319 Statics and Strength of Materials (3)

General Education Requirements – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 6 hours
- Constitution Requirement – 3 hours
- Written Communication – 6 hours
- Oral Communication – 3 hours
- Natural Sciences – 7 hours (from two disciplines, one to include a lab)
- Mathematics – 3 hours
- Humanities & Fine Arts – 9 hours (from at least two disciplines)
- Additional requirements – 5 hours (to include UI100 for native students)
- Civics examination

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	CM243	3
	EN100	3	IM300	3
	CM126	3	MA117	3
	CM143	3	General Education	3
	MA116	3	General Education	3
	Total	15	Total	15
SECOND YEAR	CH181/081/001	5	IM301	3
	CM226	3	MA139	3
	CM310	3	PH120/020	5
	CM320	3	SW207	3
	General Education	3	General Education	3
	Total	17	Total	17
THIRD YEAR	CM260	3	CM315	3
	CM330	3	CM322	3
	MN220	3	CM343	3
	General Education	3	IM317	3
	General Education	3	MN319	3
	Total	15	Total	15
FOURTH YEAR	CM325	3	CM410	3
	CM443	3	IM419	3
	IM311	3	UI410	3
	General Education	3	General Education	3
	Elective	2		
	Total	14	Total	12

Degree requirements for all students: a minimum of 120 credit hours, completion of the General Education program, completion of 39 senior division hours (300-599), Writing Proficiency Exam (WP003).

Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.