

Technology Management: Industrial & Safety Management Option

Bachelor of Science (BS)

Industrial & Safety Management 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.



Tech management: industrial & safety management students will learn...

- Production planning and control, using an enterprise resource planning software package, SAP R/3.
- Applications of management and organizational leadership and quantitative analysis of industrial and business problems.
- Application of scientific techniques for quality control, assurance, and management of production processes.
- The use of computers and computational tools involving complex industrial problems.
- Three families of Programmable Logic Controllers (PLC) including PLC-5, SLC 500, and ControlLogix as well as human machine interface such as Panelview.
- Theoretical and experimental concepts and use of test equipment in the area of industrial electronics.
- Manual and computer-aided manufacturing utilizing equipment including manual and CNC Bridgeport mills and lathes, EDM machine, and plastics processing and testing, metal arc and ultrasonic welding, casting and sandblasting, manual manufacturing tools, and break and shear for sheet metal torching.
- Materials testing using destructive and nondestructive test equipment.

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

- Production Supervisor
- Industrial Engineer
- Production Specialist
- Quality Assurance
- Sales and Estimating
- Industrial Manager

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

To explore
the College of
Science, Technology and
Agriculture online, visit
www.semo.edu/costa

For advising
Center for Academic Advising - North
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This is a guide based on the 2016-2017 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: INDUSTRIAL & SAFETY MANAGEMENT OPTION – 85 Hours**

- ___ CH181/081/001 Basic Principles of Chemistry (5)
- ___ ET160 Basic Electricity & Electronics (3)
- ___ ET304 Introduction to PLCs (3)
- ___ EV453 Occupational Health (3)
- ___ EV454 Risk Assessment Applications (3)
- ___ EV455 Industrial Hygiene (3)
- ___ IM102 Technical Communication (3)
- ___ IM301 Industrial Safety (3)
- ___ IM311 Statistical Process Control (3)
- ___ IM313 Facilities Planning (3)
- ___ IM315 Work Measurement (3)
- ___ IM411 Total Quality Assurance (3)
- ___ IM417 Manufacturing Resource Analysis (3)
- ___ IM419 Industrial Supervision (3)
- ___ IM506 Projects in IET (3)
- ___ MA133 Plane Trigonometry (3)
- ___ MA134 College Algebra (3)
- ___ MA139 Applied Calculus (3)
- ___ MN120 Fundamentals of Engineering Design Processes (3)
- ___ MN170 Industrial Materials & Testing (3)
- ___ MN203 Industrial Materials & Process I (3)
- ___ MN220 Engineering Economic Analysis (3)
- ___ MN260 Technical Computer Programming Applications (3)
- ___ MN304 Industrial Materials & Processes II (3)
- ___ PH120 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	IM102	3
	EN100	3	MA133	3
	CH181/081/001	5	MN170	3
	MA134	3	Literary Expression	3
	MN120	3	Written Expression	3
Total	17	Total	15	
SECOND YEAR	ET160	3	MN260	3
	IM301	3	MN304	3
	MA139	3	Artistic Expression	3
	MN203	3	Oral Expression	3
	PH120/020	5	Political Systems	3
Total	17	Total	15	
THIRD YEAR	ET304	3	IM419	3
	EV453	3	MN220	3
	IM311	3	SW207	3
	IM315	3	Develop of a Major Civ	3
	Living Systems	3	IU/UI3XX	3
Total	15	Total	15	
FOURTH YEAR	EV454	3	EV455	3
	IM313	3	IM417	3
	IM411	3	IM506	3
	Behavioral Systems	3	UI410	3
	IU/UI3XX	3		
Total	15	Total	12	

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
2/23/2016