

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. 100% of programs offer our students an internship, study-abroad program, clinical opportunity, student teaching or research internship.

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

Demonstrated Career Proficiency is a Requirement of all Southeast Students		
CL001	First Semester	Students connect academic career planning by completing an online career assessment
CL002	Second Semester	Students learn more about resources available to enhance academic and career planning
CL003	Junior Year	Students learn about continued career planning, job search strategies, and networking
CL004	Senior Year	Students learn about resume development, professional communication, interviewing, and transitioning to the first job from college

Career Opportunities

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

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.

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
(573) 651-5090
www.semo.edu/advising
advisingnorth@semo.edu

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This is a guide based on the 2017-2018 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****Required Courses:**

- ___ CH181/081/001 Basic Principles of Chemistry (5)
- ___ IM300 Technical Communication (3)
- ___ IM301 Industrial Safety (3)
- ___ IM311 Statistical Process Control (3)
- ___ IM419 Industrial Supervision (3)
- ___ IM506 Projects in IET (3)
- ___ MA133 Plane Trigonometry (3)
- ___ MA134 College Algebra (3)
- ___ MA139 Applied Calculus (3)
- ___ MN220 Engineering Economic Analysis (3)
- ___ MN260 Technical Computer Programming Applications (3)
- ___ PH120/020 Introductory Physics I (5)
- ___ SW207 Understanding Cultural & Social Diversity (3)
- ___ UI410 Manufacturing Research in a Global Society (3)

Industrial & Safety Management Option – 42 hours:

- ___ ET160 Basic Electricity & Electronics (3)
- ___ ET304 Introduction to PLCs (3)
- ___ EV453 Occupational Health (3)
- ___ EV454 Risk Assessment Applications (3)
- ___ EV455 Industrial Hygiene (3)
- ___ IM313 Facilities Planning (3)
- ___ IM315 Work Measurement (3)
- ___ IM411 Total Quality Assurance (3)
- ___ IM417 Manufacturing Resource Analysis (3)
- ___ MN120 Fundamentals of Engineering Design Processes (3)
- ___ MN170 Industrial Materials & Testing (3)
- ___ MN203 Industrial Materials & Process I (3)
- ___ MN304 Industrial Materials & Processes II (3)

University Studies Requirements (not already listed above) – 36 hours:

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

SAMPLE FOUR-YEAR PLAN

▶	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	IM300	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	Elective	3
Total	15	Total	15	
FOURTH YEAR	EV454	3	EV455	3
	IM313	3	IM417	3
	IM411	3	IM506	3
	Behavioral Systems	3	UI410	3
	Elective	2		
Total	14	Total	12	

Degree requirements for all students: a minimum of 120 credit hours, completion of University Studies program, completion of 39 senior division hours (300-599), 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 Degree Works for additional graduation requirements for your program.

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

Revised
3/31/2017