SOUTHEAST MISSOURI STATE UNIVERSITY · 1873

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.

ACCREDITED BY ATMAE
The Association of Technology, Management, and Applied Engineering

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 sheer 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.

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.

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

COLLEGE OF SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

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Degree Map 2018-2019

This is a guide based on the 2018-2019 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: 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)
___MA116 Precalculus A (3)
___MA117 Precalculus B (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 – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 3 hours
- Constitution requirement – 3 hours
- US History 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)

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	IM300	3
	EN100	3	MA117	3
	CH181/081/001	5	MN170	3
	MA116	3	University Studies	3
	MN120	3	University Studies	3
	Total	**17**	**Total**	**15**
SECOND YEAR	ET160	3	MN260	3
	IM301	3	MN304	3
	MA139	3	University Studies	3
	MN203	3	University Studies	3
	PH120/020	5	University Studies	3
	Total	**17**	**Total**	**15**
THIRD YEAR	ET304	3	IM419	3
	EV453	3	MN220	3
	IM311	3	SW207	3
	IM315	3	University Studies	3
	University Studies	3	Elective	3
	Total	**15**	**Total**	**15**
FOURTH YEAR	EV454	3	EV455	3
	IM313	3	IM417	3
	IM411	3	IM506	3
	University Studies	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), 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.*

Revised 10/23/2018

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