The Department of Polytechnic Studies offers the MS degree in Technology Management with different option areas. The program consists of a core section (six courses), two research based courses, and 3-4 option specific elective courses. The Master of Science in Technology Management program at Southeast can be completed with the following options:

- Cybersecurity
- Facilities Management
- Industrial Education/Training & Development
- Manufacturing Systems
- Telecommunications Systems
- Workplace Environment & Health Safety
- Customized

Technology Management students will...

The curricula for the graduate program have been designed to incorporate appropriate theories and practices utilized in "real-world" applications for addressing the needs of modern industries. Technology Management students will:

- Understand management and its direct role in industry
- Learn production planning, applications of scientific techniques for quality control, assurance and management of production processes.
- Enhance their leadership positions in industry and related enterprises
- Serve as effective leaders, supervisors, and managers in technical enterprises
- Become managers in a technology based environment

Career Planning

The Technology Management Program is designed to:

- Develop advanced competencies needed by technical managers, supervisors, and related positions in world-class industries and related enterprises.
- Prepare students to serve as effective leaders, supervisors, and managers in technical enterprises.
- Broaden the career potential of individuals through the ability to implement systems, increase productivity, and improve product quality.
- Develop a broad perspective needed for those employed in, or aspiring to, positions of responsibility in industry

Internship and Employment Opportunities of Recent Graduates

Our program is designed to serve technical managers, production supervisors, engineers, technicians, and related types of individuals who wish to study full-time or part time to enhance their leadership in industry and related enterprises.

Potential careers for graduates of MS Technology Management program includes job titles such as:

- Lean Director
- Project Manager QA/QC Manager
- Safety Supervisor
- Facility Managers
- Technical Managers
- Engineering Managers
- Production Supervisors

The department provides opportunities for its students to participate in experiential learning opportunities with industries in Southeast Missouri and St. Louis where they engage in research related activities to solve "real world" application problems. Examples of industries that has participated in such activities includes but not limited to:

- Proctor & Gamble
- TG Missouri
- Tyco Health Care
- Missouri Department of Transportation
- Southeast Missouri State University
- Facilities Management
- Technology Resource Center
- Missouri Research Corporation

Admission Requirements

1. For consideration, applicants must hold a baccalaureate degree from an accredited college or university in industrial/engineering technology, engineering, industrial/technical education, or related fields with coursework or significant background in engineering economics quality control, and process management. An applicant with another degree, with a portfolio that can verify a record of successful industrial experience as a technical manager, can be admitted after completing the required prerequisite courses.

2. Consideration for regular admission is based on an undergraduate grade point average of at least 3.25 on a 4.0 scale. Students who do not meet the regular admission requirements may be conditionally admitted and allowed to complete only nine graduate semester hours. Upon completion of the nine semester hours at Southeast, the student must have a grade point average of 3.33 on a 4.0 to be considered for full admission to the program. For more information, please check our website: http://www.semo.edu/iet/academics/ms.html
COLLEGE OF SCIENCE, TECHNOLOGY, AND AGRICULTURE

MS: Technology Management

Master of Science (MS)

This is a guide based on the 2016-2017 Graduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on factors such as dual enrollment, remediation, and summer enrollment. Students meet with an academic advisor each semester and use DegreeWorks to monitor their progress.

CURRICULUM CHECKLIST

Technology Management Core Courses
The core group consists of the following courses (all are required):

- __FM504 Facilities Management (3)
- __IM600 Managing Technology Innovation (3)
- __IM602 Advanced Quality Concepts (3)
- __IM603 Technology Supervision in Diverse Workplace (3)
- __IM605 Innovation for a Lean Enterprise (3)
- __IM606 Knowledge Management (3)
- __IM691 Methods of Research in Technology Management (3)
- __IM692 Modeling and Simulation, GR698 (0) and 12 option hours
  OR
- __IM693 Applied Research Project, GR699 (0) and 9 option hours
  OR
- __IM694 Thesis, GR699 (0) and 9 option hours

Choose nine to twelve hours from one option:

3D ANIMATION & GAMING

- __GM525 Virtuality in Gaming (3)
- __GM580 Motion Capture Technology (3)
- __GM585 Computer Special Effects (3)
- __GM680 Stereoscopic Imaging (3)

Cybersecurity

- __CY501 Introduction to Cybersecurity (3)
- __CY510 Information Security and Assurance (3)
- __CY520 Information Security in Systems Administration (3)
- __CY610 Web Application Security (3)
- __CY620 Computer Forensics (3)

Facilities Management

- __CM510 Building Information Modeling (3)
- __ET570 Energy Management (3)
- __EV654 Risk Assessment Applications (3)
- __FM554 Facilities Operation and Supervision (3)
- __IM506 Projects in Industrial & Engineering Technology (3)

Industrial Education/Training & Development

- __IE590 Assessment for Career & Technical Education (3)
- __IE592 Selection & Organization of Subject Matter (3)
- __IE593 Principles & Practices of Industrial Technical Teaching (3)
- __IE595 Teaching Adults in Career & Technical Education (3)
- __IE596 Philosophy in Career & Technical Education (3)
- __IE597 Coordination of Cooperative Education (3)

Manufacturing Systems

- __ET568 Industrial Controls (3)
- __ET570 Energy Management (3)
- __IM617 Manufacturing Resource Analysis (3)
- __MN512 Advanced Manufacturing Systems (3)
- __MN616 Manufacturing Seminar (3)

Telecommunications Systems

- __TN552 Networking I (3)
- __TN563 LAN Switching (3)
- __TN564 Telecommunications & Networking II (3)
- __TN565 Network Management (3)
- __TN566 IP Telephony (3)
- __TN625 Wireless Communications & Mobile Data Networks (3)
- __TN635 Network Security (3)

Options, continued:

Workplace Environment & Health Safety

- __EV551 Hazardous Material Assessment (3)
- __EV563 Occupational Health (3)
- __EV654 Risk Assessment Applications (3)
- __EV655 Industrial Hygiene (3)
- __EV660 Introduction to Toxicology (3)
- __EV661 Business Strategies for Corp. Env. Mgmt. (3)
- __EV666 HAZWOPER (3)

Customized

Developed with consent of advisor to meet individual career needs of the student, which may include Independent Study and/or Problems in Industrial & Engineering Technology courses

1. Recommended sequence of required coursework:

   First semester: 3 core courses
   Second semester: 3 core courses
   Third semester: IM691 and 2 elective courses
   Fourth semester:
   - Degree path 1: Thesis and 1 elective
   - Degree path 2: IM693 and 1 elective
   - Degree path 3: IM692 and 2 electives

Degree Requirements

The Master of Science in Technology Management program requires a minimum of 33 semester credit hours consisting of:

- 6 core courses
- Graduate research course
- Three to four elective courses based on the chosen focus area
- Applied Research Project/Thesis / graduate paper: depends on the chosen degree path. For more information on requirements and a listing of required courses, visit our department website http://www.semo.edu/et/academics/ims.html

2. Why should I study Technology Management at Southeast?

The MS Technology Management program at Southeast is designed with the help from industries we serve in the southeastern Missouri and St. Louis regions. It is also designed to serve technical managers, production supervisors, engineers, technicians, and related types of individuals who wish to study full-time or part-time to prepare for or enhance their leadership positions in industry and related enterprises. Upon completing the program, graduates will serve as effective leaders, supervisors, and managers in technical enterprises.

The Department of Polytechnic Studies is recognized as a "Center of Excellence in Advanced Manufacturing Technology" and has programs accredited by the National Association of Industrial Technology. The programs are housed in the Otto and Della Seabaugh Polytechnic Building.