

Technology Management: Sustainable Energy Systems Management Option
Bachelor of Science (BS)
Sustainable Energy Systems 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.



Technology management: sustainable energy systems management students will learn green energy technology skills targeted on energy efficiency and management, sustainable facilities planning and design, sustainable green construction, sustainable and green manufacturing and renewable energy sources such as biomass, biofuels, solar power and wind energy technologies.

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.

/ Sustainable Energy Systems Management graduates work in green economic sectors associated with energy management, energy efficiency, energy conservation, renewable energy generation, sustainable and green manufacturing, and green facilities planning and design. Examples of job titles include sustainability specialist, production supervisor, sustainability consultant, energy auditor, public relations specialist and corporate sustainability strategist.

/ 100% of Southeast programs offer real-world experience. Sustainable Energy Systems Management students earn this experience through a senior design capstone course for students to work in teams to solve open-ended industrial projects. Students also gain valuable hands-on experience through required labs that accompany the technology 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:

- Energy Management
- Energy Efficiency
- Energy Conservation
- Green Facilities Planning and Design
- Renewable Energy Generation
- Sustainable and Green Manufacturing

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: Sustainable Energy Systems Management 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: SUSTAINABLE ENERGY SYSTEMS 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 Econ 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)

SUSTAINABLE ENERGY SYSTEMS MANAGEMENT OPTION – 42 hours

- ___ ET160 Electricity & Electronics (3)
- ___ ET365 Industrial Electrical Power (3)
- ___ ET426 Sustainable Energy Technology (3)
- ___ ET463 Photovoltaic System Analysis & Design (3)
- ___ ET470 Energy Management – Industrial Processes (3)
- ___ FM504 Facilities Management (3)
- ___ FM544 Sustainable Construction Materials & Technology (3)
- ___ FM554 Facilities Operation and Supervision (3)
- ___ FM564 Sustainable Facility Planning and Design (3)
- ___ FM565 Building Automation & Technology (3)
- ___ IM555 Sustainable & Green Manufacturing (3)
- ___ UI360 Recycling & Waste Management (3)

Choose one course:

- ___ EV453 Occupational Health (3)
- ___ UI386 Environmental Health (3)
- ___ UI387 Environmental Law & Public Policy (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	IM300	3
	EN100	3	IM301	3
	ET160	3	MA117	3
	MA116	3	General Education	3
	General Education	3	General Education	3
Total	15		Total	15
SECOND YEAR	CH181/081/001	5	ET365	3
	MA139	3	PH120/020	5
	MN220	3	SW207	3
	General Education	2	General Education	3
	General Education	3		
Total	17		Total	14
THIRD YEAR	ET426	3	ET463	3
	FM504	3	FM544	3
	IM311	3	FM554	3
	MN260	3	IM419	3
	General Education	3	Elective	3
Total	15		Total	15
FOURTH YEAR	FM564	3	ET470	3
	IM506	3	FM565	3
	IM555	3	UI387	3
	UI360	3	UI410	3
	Elective	2	General Education	3
Total	14		Total	15

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

Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements (i.e., minimum GPA and course work) for your program of study.