

**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.
- Expect to find employment 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.

**Career Planning**

A St. Louis Outreach Office, located in Chesterfield, Mo., provides career exploration assistance, resume critiques, interview tips, job search strategies, 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.
<p><b>Career Services</b>, located in Academic Hall 057, provides professional career advising to guide students in their career development.</p>		

**Career Opportunities**

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

**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  
semo.edu/costa

**For advising**  
College of Science, Technology and  
Agriculture Advising Center  
(573) 651-5930  
semo.edu/costa/advising/index.htm

**Technology Management: Sustainable Energy Systems Management Option**
**Bachelor of Science (BS)**
**Degree Map**

This is a guide based on the 2014-2015 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: SUSTAINABLE ENERGY SYSTEMS MANAGEMENT OPTION - 85 Hours**

- \_\_\_ CH181/081/001 Basic Principles of Chemistry (5)
- \_\_\_ 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 Energy Management (3)
- \_\_\_ IM102 Technical Communication (3)
- \_\_\_ IM301 Industrial Safety (3)
- \_\_\_ IM311 Statistical Process Control (3)
- \_\_\_ IM419 Industrial Supervision (3)
- \_\_\_ IM455 Sustainable & Green Manufacturing (3)
- \_\_\_ IM506 Projects in IET (3)
- \_\_\_ MA133 Plane Trigonometry (3)
- \_\_\_ MA134 College Algebra (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)
- \_\_\_ UI360 Recycling & Waste Management (3)
- \_\_\_ UI387 Environmental Law & Public Policy (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

**SAMPLE FOUR-YEAR PLAN**
**Technology Management: Sustainable Energy Systems Management Option**

Requirements for the 2014-2015 Undergraduate Bulletin

▶	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
<b>FIRST YEAR</b>	UI100	3	IM102	3
	EN100	3	IM301	3
	ET160	3	MA133	3
	MA134	3	Literary Expression	3
	Oral Expression	3	Written Expression	3
	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>15</b>
<b>SECOND YEAR</b>	CH181/081/001	5	ET365	3
	MA139	3	PH120/020	5
	MN220	3	SW207	3
	Artistic Expression	2	Political Systems	3
	Behavioral Systems	3		
	<b>Total</b>	<b>17</b>	<b>Total</b>	<b>14</b>
<b>THIRD YEAR</b>	ET426	3	ET463	3
	FM504	3	FM544	3
	IM311	3	FM554	3
	MN260	3	IM419	3
	Living Systems	3	Elective	3
	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>15</b>
<b>FOURTH YEAR</b>	FM564	3	ET470	3
	IM455	3	FM565	3
	IM506	3	UI387	3
	UI360	3	UI410	3
	Elective	2	Develop of a Major Civ	3
	<b>Total</b>	<b>14</b>	<b>Total</b>	<b>15</b>

**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 freshman and senior levels

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

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