

**Bachelor of Science in Education (BSED)****Technology & Engineering Education**

The Technology & Engineering Education program is designed to prepare individuals to teach comprehensive, action-based technology & engineering education. Upon graduation, students will develop technical and teaching competencies to prepare them to teach high school students (grades nine through twelfth grades). Areas of content study include: communication technology; energy & power technology; materials & processes technology; and organization & administration skills.

**Technology & Engineering Education students will...**

- Experience real-world involvement in current Technology & Engineering Education programs, preparing them to become successful educators within the high school classroom and lab settings.
- Take hands-on courses that will prepare them to teach comprehensive, action-based Technology & Engineering Education courses. Examples of content courses include:
  - Electronics & Robotics Courses
  - Woodworking & Welding Courses
  - Construction Courses
  - Machining Courses
  - Engineering Technology Courses
  - Drafting Courses
  - Technical Graphics Courses
  - Content Technique Courses
  - Organization & Administration Courses

**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.

**Internship and Employment Opportunities of Recent Graduates**

- With only two Technology & Engineering Education Programs in the state of Missouri, Southeast Missouri State University being one of these, placement rates are extremely high for graduating students. Technology & Engineering Education Teachers are in high demand in the state of Missouri.
- Prior to graduation, students will have numerous opportunities to observe current Technology & Engineering Education programs, allowing them to learn from professional educators within the middle school and high school classroom and lab settings.
- To prepare students for a successful career in Technology & Engineering Education, students will work side-by-side with professional educators in current Technology & Engineering Education programs, gaining valuable hands-on application processes within the middle school and high school classroom and lab settings.

**Admission Requirements**

- 42 course hours completed
- 2.75 cumulative GPA
- Missouri Educator Profile (MEP) results on file with the Office of the Associate Dean of the College of Education
- Score of 220 or higher on all sections of the Missouri General Education Assessment (MoGEA)
- The following course requirements met
  - A grade of C or above in PY222 Development of the Adolescent
  - A grade of B or above in ED280 Introduction to Education as a Profession

**Additional Information**

The state of Missouri has high expectations for future educators. Students matriculating into education programs must meet the following standards to be recommended for licensure following degree completion.

Students graduating spring 2017 or later must maintain a 3.0 GPA in both content and pedagogy courses. In addition students must pass the Missouri Content Assessment Exam and the Missouri Pre-Service Teacher Assessment for recommendation for licensure. Students must also fulfill other assessments such as the Missouri Educator Profile and be cleared through a FBI background check.

**Special Options with Secondary Education**

Southeast offers a Master of Arts in Secondary Education: Educational Studies or Educational Technology.

**Transfer and Dual Credit Students**

If you have dual credit or transfer credit, please visit our transfer course equivalencies guide at [semo.edu/transfercredit](http://semo.edu/transfercredit).

**To learn more**  
Office of Admissions  
(573) 651-2590  
[admissions@semo.edu](mailto:admissions@semo.edu)  
[semo.edu](http://semo.edu)

**To explore**  
the College of Education, Health and  
Human Studies online, visit  
[semo.edu/education-health](http://semo.edu/education-health)

**For advising**  
Center for Academic Advising  
[semo.edu/advising](http://semo.edu/advising)

**Bachelor of Science in Education (BSED)**

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**

"Critical Courses" are italicized and bold. Data shows that students who have completed this course in the first two years and have earned the noted grade are most likely to complete this program of study.

**Education Courses – 47 Hours Required**

A grade of 'C' or better is required in education courses, with the exception of ED280 which requires a grade of 'B' or better.

- \_\_\_ **ED280** **Introduction to Education as a Profession (3)**
- \_\_\_ EF400 Student Teaching Seminar (1)
- \_\_\_ EX390 Psychology and Education of the Exceptional Child (3)
- \_\_\_ **PY222** **Adolescent Psychology (3)**
- \_\_\_ SE307 Content Literacy Methods for Middle and High School (3)
- \_\_\_ SE316 Techniques of Teaching Technology Education (3)
- \_\_\_ SE350 Pedagogy 1: Principles of Effective Teaching (3)
- \_\_\_ SE355 Field Experience II (3)
- \_\_\_ SE365 Pedagogy 2: Interdisciplinary Methods and Technology (4)
- \_\_\_ SE380 Advanced Field Experience (3)
- \_\_\_ SE385 Pedagogy 3: Advanced Methods of Middle and Secondary Teaching (3)
- \_\_\_ SE390 Instructional Interventions for Middle & Secondary Students with Special Literacy Needs (3)
- \_\_\_ SE465 Student Teaching (12)

**Technology & Engineering Education – 44 Hour Major - No Minor Required**

15 hours of the major need to be 300-500 level courses

(A grade of 'C' or better is required in all courses within the major.)

Required Courses:

- \_\_\_ AG 303 Agricultural Mechanization (3)
- \_\_\_ CM 143 Construction Methods and Materials I (3)
- \_\_\_ ET 160 Basic Electricity & Electronics (3)
- \_\_\_ ET 304 Fundamentals of Programmable Logic Controllers (3)
- \_\_\_ GM 180 Introduction to Technical Graphics (3)
- \_\_\_ IE 401 Technology Education Management (3)
- \_\_\_ IE 593 Principles and Practices of Technical Subjects (3)
- \_\_\_ IE 596 Foundations of Career and Technical Education (3)
- \_\_\_ MN 120 Fundamentals of Engineering Design Processes (3)
- \_\_\_ MN 221 Solid Modeling & Rapid Prototyping (3)

Choose 6 hours from:

- \_\_\_ CM 226 Residential Architectural Drafting and Design (3)
- \_\_\_ CM 243 Construction Methods and Materials II (3)
- \_\_\_ CM 320 Construction Cost Estimating (3)
- \_\_\_ ET 365 Industrial Electrical Power (3)
- \_\_\_ ET 426 Sustainable Energy Technologies (3)
- \_\_\_ GM 200 Vector and Bitmapped Graphics for Industry (3)
- \_\_\_ IE 590 Assessment for Career and Technical Education (3)
- \_\_\_ IE 592 Selection and Organization of Subject Matter (3)
- \_\_\_ IE 597 Coordination of Cooperative Education (3)
- \_\_\_ MN 170 Engineering Materials and Testing (3)
- \_\_\_ MN 203 Industrial Materials and Processes I (3)
- \_\_\_ MN 324 Mechanical Design Processes (3)

**Additional requirements:**

- \_\_\_ CH 181 Basic Principles of Chemistry (5)
- \_\_\_ MA 116 Precalculus A (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
<b>FIRST YEAR</b>	UI100	3	MN120	3
	EN100	3	Content Elective	3
	IE596	3	University Studies	3
	MA116	3	University Studies	3
	University Studies	3	University Studies	3
	University Studies		University Studies	3
	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>18</b>
Milestone: Maintain 2.75 cumulative GPA; Maintain 3.0 GPA in Content				
<b>SECOND YEAR</b>	CM143	3	AG303	3
	CH181	5	<b>ED280</b>	3
	<b>PY222</b>	3	ET160	3
	University Studies	3	University Studies	3
			University Studies	3
			University Studies	3
	<b>Total</b>	<b>14</b>	<b>Total</b>	<b>18</b>
Milestone: Maintain 2.75 cumulative GPA; Maintain 3.0 GPA in Content & Education Courses (earn a "B" or higher in ED280); 42 hours completed; Pass MoGEA; Complete MEP; MoPTA				
<b>THIRD YEAR</b>	EX390	3	ET304	3
	GM180	3	IE593	3
	IE401	3	SE307	3
	MN221	3	SE355	3
	SE350	3	SE365	4
	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>
Milestone: Maintain 2.75 cumulative GPA; Maintain 3.0 GPA in Content & Education Courses; Maintain 3.0 GPA in Pedagogy; MoPTA				
<b>FOURTH YEAR</b>	SE316	3	EF400	1
	SE380	3	SE465	12
	SE385	3		
	SE390	3		
	Content elective	3		
	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>13</b>
Milestone: All content & professional education coursework complete & passing score on MO Content Exam (before student teaching); 2.75 cumulative GPA, 3.0 GPA in Content & Education Courses; MoPTA; Successful completion of Student Teaching				

A "Milestone" signifies a significant stage for a student in the completion of a degree.

**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 (MAP) at the senior level. Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.