

PHYSICS EDUCATION

Bachelor of Science in Education (BSED)

This is a guide based on the 2025-2026 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.

SAMPLE FOUR-YEAR

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 Psychological Development in Adolescence (3)**
- SE307 Content Literacy Methods for Middle and High School (3)
- SE320 Techniques of Teaching Science (3)
- SE350 Pedagogy 1: Principles of Effective Teaching (3)
- SE355 Field Experience II (3)
- SE365 Pedagogy 2: Secondary School-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 and Secondary Students with Special Literacy Needs (3)
- SE465 Student Teaching (12)

Physics Education – 59-62 Hour Major - No minor required

Required Courses:

- PH230/030 General Physics I (5)
- PH231/031 General Physics II (5)
- PH345 Experimental Methods I (3)
- PH360 Modern Physics (3)
- PL425 Scientific Reasoning (3)

Choose 3-4 Hours From:

- BI332 General Ecology (4)
- EV360 Recycling & Waste Mgt (3)
- GO305 Environmental Geoscience (3)
- GO372 Earthquakes & Society (3)

Choose 3 Hours From:

- BS108 Biology for Living (3)
- BS218 Biologic Science: A Process Approach (3)

Choose 4-7 hours:

- CH181/184 Basic Principles of Chemistry (3+1)

OR

- CH184/185 General Chemistry I Lab (3+1)

AND

- CH186 General Chemistry II (3)

Choose 3 Hours From:

- GO110 Physical Geology (3)
- GO318 Earth Science: A Process Approach (3)
- GO320 Oceanography (3)
- GO418 Meteorology (4)

Choose 3 hours at the 300-599 level:

- EPxxx
- PHxxx

Choose 4 Hours From:

- CS101 Introduction to Computer Programming (3)
- EP100 Introduction to Engineering (3)
- EP240 Circuit Analysis I (3)
- EP261 Engineering Mech: Statics (3)
- EP262 Engineering Mech: Dynamics (3)
- EP263 Mechanics of Materials (4)
- EP305 Digital & Analog System Design (3)
- EP310 Microcontroller & Embedded Systems (3)
- EP340 Electronic Circuits (3)
- EP462 Materials Science (3)
- PH328 Energy (3)
- PH341 Optics (3)
- PH370 Mechanics (3)
- PH371 Electrodynamics (3)
- PH400 Topics in Physics & Engineering (3)
- PH473 Quantum Mechanics (3)
- PH475/476 Literature of Physics (1-2)
- PH478/479 Undergraduate Research (1-2)
- PH490/491 Independent Study in Physics (1-2)
- PH570 Mathematical Physics (3)

Choose 5 hours from CS101 or PH or EP electives (5)

Additional Requirements:

- MA140 Analytic Geometry & Calculus I (5)
- MA145 Analytic Geometry & Calculus II (4)
- MA244 Analytic Geometry & Calculus III (4)

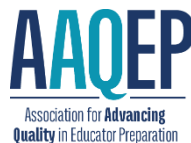
General Education Requirements – some requirements may be fulfilled by coursework in major program
 Social and Behavioral Sciences (6); Constitution requirement (3); Written Communication (6); Oral Communication (3); Natural Sciences (7 hours, from two disciplines, one to include a lab); Mathematics (3); Humanities & Fine Arts (9 hours, from at least two disciplines); Additional requirements 5 hours (to include UI100 for native students); Civics examination

	Fall		Spring	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	1	BS218 or BS108	3
	CS101/Physics elective	3	EN100	3
	EP100	3	MA145	4
	MA140	5	PH230/030	5
	Chemistry requirement	4	General Education	3
	Total	16	Total	18
SECOND YEAR	MA244	4	ED280	3
	PH231/031	5	Environmental Science	3-4
	PY222	3	Physics Elective	3
	General Education	3	General Education	3
	General Education	3	General Education	3
	Total	18	Total	18-19
Milestone: Admission to the Teacher Preparation Program				
THIRD YEAR	EX390	3	PL425	3
	PH345	3	SE307	3
	PH360	3	SE355	3
	SE350	3	SE365	4
	Geoscience elective	3	Physics Elective	3
	General Education	3		
Total	18	Total	16	
Milestone: Maintain a 3.0 GPA in content courses and in professional education courses.				
FOURTH YEAR	SE320	3	EF400	1
	SE380	3	SE465	12
	SE385	3		
	SE390	3		
	General Education	3		
	Total	15	Total	13
Milestone: Passing score on MO state assessment, passing score on MEES, 3.0 GPA in content courses and in professional education courses.				

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 the General Education program, and completion of 39 senior division hours (300-599). Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

This program could lead to licensure or certification. However, Southeast's program either does not meet, or we cannot determine if it meets, the licensure or certification requirement in all states. Please consult our State Authorization page, Licensure tab, to determine information specific to your state: <https://semo.edu/online/student-resources/stateauth.html>.



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3/20/2025

2025-2026 degree map



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PHYSICS EDUCATION

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ADMISSION TO THE TEACHER PREPARATION PROGRAM

To be eligible for enrollment in the majority of courses offered by the Teacher Preparation Program and required for a teaching degree (BSE, BSFCSE, BME), students must be admitted to the Teacher Preparation Program (TPP). Applications can be found at <https://semo.edu/colleges-departments/education-health/educator-preparation/admission.html>. Students should apply for admission to the TPP upon having met the following entrance criteria:

1. 42 hours of coursework completed.
2. Have a GPA of 2.75 or higher.
 - a. Individual that are below a 2.75, they can meet with the Associate Dean to appeal for provisional admission to the Teacher Preparation Program.
 - b. If the individual is granted admission, they will have to:
 - i. Work with the Associate Dean on a plan to improve their GPA to meet the requirements for graduation/certification.
 - ii. Will be provide a list of support services to help in the process of improving their GPA.

OR

Have a previous four-year degree from an accredited college/university or an associate degree from an accredited two-year college.

3. The following course requirements met:
 - a. A minimum grade of 'C' in CF/PY120 The Child (Elementary, Early, and Exceptional) or PY222 Psychological Development in Adolescence (Middle and Secondary)
 - b. A minimum grade of 'B' in ED280 Introduction to Education as a Profession or ME222 Principles of Teaching Music.
4. International students must also have a minimum IELTS score of 7.0, TOEFL score of 95, PTE score of 64, or Duolingo score of 125. This requirement is for non-United States citizens who are not native English speakers. Students from countries where English is known to be the official language of education are exempt from English proficiency verification.

RETENTION IN THE TEACHER PREPARATION PROGRAM

After admission, students must continue to meet the following requirements for retention in the TPP:

1. Demonstrate continued eligibility for interaction with schoolchildren by completing an MSHF/FBI background check through the use of the MSHF/FBI background check system. (A current background check is required for participation in all field and clinical experiences.);
2. Pass all professional education courses with a minimum grade of 'C.' A minimum grade of 'C' must be obtained in all prerequisite courses before a student can be enrolled in subsequent coursework. Students who, after two attempts, have still not earned a minimum grade of 'C' in a particular professional education course will be removed from the Teacher Preparation Program.
3. Demonstrate behavior appropriate for teaching professionals. Appeals related to removal from the TPP can be found at <https://semo.edu/colleges-departments/education-health/educator-preparation/admission.html>

GRADUATION REQUIREMENT - A final 3.0 GPA in both pedagogy and content coursework is required for graduation.

TEACHER CERTIFICATION

Upon completion of Southeast's Teacher Preparation Program an individual is eligible to be recommended for a Missouri Teaching Certificate if the student has the following:

1. A final 3.0 GPA in both pedagogy and content coursework;
2. A passing score on the appropriate licensure exam(s) as required by the Missouri Department of Elementary and Secondary Education;
3. A passing score on the Teacher Candidate Instrument of the Missouri Educator Evaluation System;
4. MSHF/FBI background clearance from no earlier than one year prior to the date of the application for certification.

ADDITIONAL NOTES: Regardless of printed program requirements, any changes or additions mandated by the State of Missouri will become effective on the date cited by the regulations.

Students transferring into education programs should be aware of the need to be eligible for admission to the teacher preparation program immediately upon transfer. They should contact the Candidate Status and Certification Officer well in advance of the time of transfer. It is especially important that transfer students make arrangements for having ACT and/or MoGEA scores transferred to the University .

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2025-2026 *degree map*

