PHYSICS/SECONDARY MAJOR, BACHELOR OF ARTS IN EDUCATION (BAE)

This major satisfies the endorsement for grades 5–12.

Notes:

- see the Education Department for prerequisites, core requirements and additional SLOs;
- this major does not require the completion of a minor–students are encouraged to complete a secondary endorsement in at least one other subject area.

Required Secondary Education Core		
30–hour multicultural education field requirement		
EDUC 200 & EDUC 303 & EDUC 309	ADMISSION TO TEACHER EDUCATION and FOUNDATIONS OF ASSESSMENT and FOUNDATIONS OF SECONDARY CLASSROOM MANAGEMENT (these three courses must be taken concurrently)	7
EDUC 201	INTRODUCTION TO EDUCATION	3
EDUC 341	SECONDARY STRATEGIES, MANAGEMENT, ASSESSMENT	4
EDUC 413	CONTENT AREA LITERACY: MANAGEMENT AND ASSESSMENT FOR SECONDARY EDUCATION CANDIDATES	4
EDUC 420	ADMISSION TO PROFESSIONAL CANDIDACY	1
EDUC 426	SECONDARY STUDENT TEACHING 7-12	15
PSYC 304	EDUCATIONAL PSYCHOLOGY	5
SPED 363	INTRODUCTION TO SPECIAL EDUCATION	4
Required Physics/Secondary Courses		
CHEM 151	GENERAL CHEMISTRY	5
CHEM 152	GENERAL CHEMISTRY	5
PHYS 151	GENERAL PHYSICS I	4
PHYS 152	GENERAL PHYSICS II	4
PHYS 153	GENERAL PHYSICS III	4
PHYS 161	MECHANICS LABORATORY	1
PHYS 162	HEAT AND OPTICS LABORATORY	1
PHYS 163	INSTRUMENTATION LAB I	1
PHYS 164	INSTRUMENTATION LAB II	1
PHYS 221	GENERAL PHYSICS IV	4
PHYS 371	INTRODUCTION TO QUANTUM PHYSICS	4
PHYS 390	PHYSICS TEACHING METHODS	1
MATH 161	CALCULUS I	5
MATH 162	CALCULUS II	5
MATH 163	CALCULUS III	5
SCED 390	SECONDARY SCIENCE TEACHING METHODS	1
Electives–choose from any 300- 400-level PHYS courses, except PHYS 497.		18
Total Credits		112

For information on General Education, see Undergraduate Degree (http://catalog.ewu.edu/archives/2015-2016/undergraduate-degree) .

Student Learning Outcomes—students will

Note: see Education for additional SLOs.

- demonstrate knowledge of the basic concepts of physics (such as mechanics, thermodynamics and electricity and magnetism);
- write effectively using the language of physics;
- make and interpret laboratory measurements in physics.