EAST CENTRAL UNIVERSITY
PHYSICS—TEACHER CERTIFICATION CONCENTRATION 0351
2026-27 Catalog Year

Requirements for Bachelor's Degrees

- 30 hours at ECU
- 60 hours at senior level college
- 40 hours upper level courses
- OSRHE computer proficiency requirement

I. General Education 40 hours

17 hours (BIOL 1114, CHEM 1114, COMM 1113, MATH 1513, and PSYCH 1113) counted in the major. Demonstrate novice high competency in a foreign language or complete a Foreign Language or American Language course with a C or higher.

II. Major in Physics- Teacher Certification Concentration 30 hours

A. Required in the Physics Core 20 hours

- PHYS 2115 Engineering Physics I
- PHYS 2225 Engineering Physics II
- PHYS 3013 Modern Physics
- PHYS 3412 Junior Physics Laboratory

B. Required for Concentration in Teacher Certification 13 hours

- B/C/P 4113 Methods of Teaching Biological and Physical Science
- PHYS 1314 Astronomy
- PHYS 4113 Mechanics I
- PHYS 4113 Electricity and Magnetism

C. Required Electives 2 hours

Two hours physics electives (not PHYS 3222 or 4222)

III. Related Work 39-45 hours

A. Required Related Work 32-38 hours

- BIOL 1114 General Biology
- CHEM 1114 General Chemistry I
- CHEM 1214 General Chemistry II
- COMM 1113 Fundamentals of Human Communication
- GEOG 1214 Earth Science
- MATH 1513 College Algebra †
- MATH 1713 Trigonometry †
- MATH 2825 Calculus and Analytic Geometry I
- MATH 3025 Calculus and Analytic Geometry II
- PSYCH 1113 General Psychology

B. Required Related Work Electives 7 hours

Seven hours chemistry electives

IV. Minor (Required)

Professional Education is used as the minor and no other minor is required.

V. Professional Education 30 hours

- EDUC 2402 Survey of Excep Child
- PSYCH 3463 Child and Adolescent Psych.
- EDUC 2012 Foundations of Educ
- EDUC 2361 Foundations of Educ Technology
- EDUC 2211 Field Experience I
- EDPSY 3513 Educ Psych
- EDUC 3001 Field Experience II
- EDUC 4052 Effective Teaching in Secondary Education
- EDUC 4611 Field Experience III
- EDUC 4632 Education Technology Integration Strategies
- EDUC 4262 Student Teaching Seminar I
- EDUC 4282 Student Teaching Seminar II
- EDUC 4974 Sup Student Tchg Secondary School
- EDUC 4974 Sup Student Tchg Secondary School

VI. Total Hours Required 122-128 hours

VII. Special Requirements

† With department approval, students may omit MATH 1513 and/or MATH 1713 and begin with MATH 2825