EAST CENTRAL UNIVERSITY
PHYSICS—MEDICAL PHYSICS CONCENTRATION 0353
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
A maximum of 12 hours may be applied to both the major/related work and general education.

II. Major in Physics 30 hours

A. Required in the Physics Core 15 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 Medical Physics 15 hours
- PHYS 3222 Medical Physics
- PHYS 3713 Thermodynamics
- PHYS 4222 Xray and Nuclear Physics Lab
- PHYS 4313 Introduction to Nuclear Physics

C. Required Electives 2 hours
Five hours Physics electives (3xxx-4xxx)

III. Related Work 52-61 hours
- BIOL 1114 General Biology
- BIOL 2184 Human Anatomy
- BIOL 3634 Human Physiology
- CHEM 1114 General Chemistry I
- CHEM 1214 General Chemistry II
- CHEM 3114 Organic Chemistry I
- CMPSC 1113 Computer Programming I
- COMM 1113 Fundamentals of Human Communication
- MATH 1513 College Algebra †
- MATH 1713 Trigonometry †
- MATH 2825 Calculus and Analytic Geometry I
- MATH 3025 Calculus and Analytic Geometry II
- MATH 3033 Calculus and Analytic Geometry III
- MATH 4113 Differential Equations

Select one of the following:

- BIOL 2113 Medical Terminology

- EHS 2413 Radiologic Health

Select one of the following:

- MATH 3513 Mathematical Statistics
- MATH 3583 Applied Statistics
- SOC 3833 Statistics for the Social Sciences

IV. Minor (Not Required)

V. Electives 0-10 hours

VI. Total Hours Required 120 hours

VII. Special Requirements

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

Teachers or methods courses do not count in the major.