

PHYSICS MAJOR, BACHELOR OF ARTS (BA)

The Bachelor of Arts degree allows the student to acquire a physics degree with strong emphasis in one or more related fields of study. This degree is ideal preparation for graduate work in such areas as geophysics, biophysics and physical chemistry. Physics graduates also commonly enter graduate schools in engineering fields.

Notes on University Graduation Requirements (UGR):

- 60 upper-division credits are required to graduate (this major has 25)—please see your Physics advisor or Department Chair;
- a Senior Capstone/Senior Thesis class is a university requirement for graduation—please see your Physics advisor or Department Chair;
- two years of a single high school foreign language or one year of a single college-level foreign language is required.

Required Physics Courses

PHYS 151	GENERAL PHYSICS I	4
PHYS 152	GENERAL PHYSICS II	4
PHYS 153	GENERAL PHYSICS III	4
PHYS 221	GENERAL PHYSICS IV	4
PHYS 361	CLASSICAL MECHANICS I	4
PHYS 371	QUANTUM PHYSICS I: INTRODUCTION	4

Required Laboratory Courses

PHYS 161	MECHANICS LABORATORY	1
PHYS 162	HEAT AND OPTICS LABORATORY	1
PHYS 163	ELECTRONICS LABORATORY I	1
PHYS 263	ELECTRONICS LABORATORY II	1

Required Supporting Courses

MATH/HONS 161	CALCULUS I	5
MATH 162	CALCULUS II	5
MATH 163	CALCULUS III	5

Electives—any 300- or 400-level PHYS course except PHYS 390 or PHYS 497 may be chosen as electives. 17

Total Credits 60

University Competencies and Proficiencies

- English (<http://catalog.ewu.edu/undergraduate-degree/#newitemtext>)
- Quantitative and Symbolic Reasoning (<http://catalog.ewu.edu/undergraduate-degree/#mathcompproficienciestext>)
- Placement and Clearance Exams (<http://catalog.ewu.edu/placement/>)
- Prior Learning/Sources of Credit AP, CLEP, IB (<http://catalog.ewu.edu/prior-learning/>)

General Education Requirements (<http://catalog.ewu.edu/undergraduate-degree/#generaleducationrequirementsger>) (GER)

- Minimum Credits—180 cumulative credit hours
 - 60 upper-division credits (300 level or above)
 - 45 credits in residence (attendance) at Eastern, with at least 15 upper-division credits in major in residence at Eastern
- Minimum Cumulative GPA ≥ 2.0

Breadth Area Core Requirements (<http://catalog.ewu.edu/undergraduate-degree/#generaleducationcorerequirementsger>) (BACR)

- Humanities and Arts (<http://catalog.ewu.edu/undergraduate-degree/#humanitiesandfineartsgectext>)
- Natural Sciences (<http://catalog.ewu.edu/undergraduate-degree/#naturalsciencesgectext>)
- Social Sciences (<http://catalog.ewu.edu/undergraduate-degree/#socialsciencesgectext>)

University Graduation Requirements (<http://catalog.ewu.edu/undergraduate-degree/#universitygraduationrequirementsger>) (UGR)

- Diversity Course List (<http://catalog.ewu.edu/undergraduate-degree/#cultureandgenderdiversityintheuslisttext>)
- Foreign Language (<http://catalog.ewu.edu/undergraduate-degree/#foreignlanguageger>) (for Bachelor of Arts)
- Global Studies Course List (<http://catalog.ewu.edu/undergraduate-degree/#internationalstudiesrequirementtext>)
- Minor or Certificate (<http://catalog.ewu.edu/undergraduate-degree/#majorminororcertificateger>)
- Senior Capstone Course List (<http://catalog.ewu.edu/undergraduate-degree/#capstonecourselisttext>)

All admitted students must officially Declare a Major (<https://inside.ewu.edu/center-for-academic-advising-and-retention/academic-planning-tools/declare-your-major/>) by the time they reach 90 credits (junior standing).

Application for Graduation (use EagleNET (<https://inside.ewu.edu/eaglenet/>)) must be made at least two terms in advance of the term you expect to graduate (undergraduate and post-baccalaureate).

Use the Catalog Archives (<https://catalog.ewu.edu/archives/>) to determine two important catalog years (<http://catalog.ewu.edu/undergraduate-degree/#activecatalogruletext>).

SOAR (<https://soar.ewu.edu/selfservice/general/home.html>) calculates based on these two catalog years.

1. The catalog *in effect at the student's first term* of current matriculation is used to determine **BACR** (Breadth Area Credit Requirements) and **UGR** (Undergraduate Graduation Requirements).
2. The catalog *in effect at the time the student declares a major or minor* is used to determine the program requirements.

Students who successfully earn a BA in Physics from EWU should be able to do the following:

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