

Bachelor of Science in Physics

Requirements

Each candidate is required to complete the University requirements for the B.S. degree (see page 2) and the following courses:

| Course Number | Course Title | Credit Hours | When Offered |
|------------------------------------|--|--------------|----------------------------------|
| PS 261 or PS 281 | College Physics I or General Physics I | 5 | PS 261 – Fall PS 281 - Spring |
| PS 262 or PS 282 | College Physics II or General Physics II | 5 | PS 262 – Spring PS 282 – Fall |
| PS 320 | Electromagnetic Theory I | 3 | Spring – Even years |
| PS 330 | Optics | 3 | Fall – Even years |
| PS 334 | Thermodynamics | 3 | Spring – Even years |
| PS 335 | Theoretical Mechanics I | 3 | Spring – Odd years |
| PS 350 | Modern Physics I | 3 | Fall – Even years |
| PS 360 | Experimental Physics | 1 or 2 | Fall/Spring |
| PS 365 | Introduction to Theoretical Physics | 3 | Fall – Odd years |
| PS 366 | Introduction to Computational Physics | 3 | Fall – Odd years |
| Two of the following: | | | |
| PS 322 | Electrical Laboratory | 2 | Fall – Odd years |
| PS 332 | Optics Laboratory | 1 | Fall – Even years |
| PS 340 | Electronics | 3 | Spring – Even years |
| PS 352 | Atomic and Nuclear Physics Laboratory | 1 | Spring – Odd years |
| Required correlated courses | | | |
| MA 151 | Calculus and Analytic Geometry I | 5 | Fall/Spring |
| MA 152 | Calculus and Analytic Geometry II | 5 | Fall/Spring |
| MA 253 | Calculus and Analytic Geometry III | 3 | Fall/Spring |

Each candidate is also required to take a written examination.

University Requirements for the Bachelor of Science Degree

- ▶ 124 total credit hours, 84 of which must be graded.
- ▶ 45 upper division credit hours (300-400 level).
- ▶ A 30-credit-hour minor chosen from the Natural Sciences, Mathematics, and Computer Information Sciences Division in departments other than the major, and with at least 20 of these credit hours in one department.
- ▶ 6 credit hours of English composition (EN 101 and EN 300).
- ▶ 3 credit hours of mathematics (MA 116 or higher).
- ▶ 3 credit hours of Washburn Experience (WU 101).
- ▶ 27 credit hours of General Education
 - ◆ 9 credit hours in Humanities (3 credit hours must be in Art, Music, or Theatre)
 - ◆ 9 credit hours in Natural Sciences, Mathematics and Statistics
 - ◆ 9 credit hours in Social Sciences

In each general education group, courses taken must be in at least two subject areas. Courses in the student's major discipline do not fulfill general education requirements.

| Humanities | Natural Sciences, Mathematics and Statistics | Social Sciences |
|---|--|---|
| <ul style="list-style-type: none"> • English (excluding EN100, EN101, EN102, EN200, and EN300) • Philosophy • Religion • Music • Art • Communication • Modern Languages • Theatre | <ul style="list-style-type: none"> • Biology • Chemistry • Physics • Astronomy • Geology • Mathematics | <ul style="list-style-type: none"> • Political Science • History • Psychology • Economics • Sociology • Anthropology • Geography |
| <p><i>Please consult the University Catalog for approved general education courses</i></p> | | |

- ▶ Cumulative grade point average of at least 2.0 and a grade of C or better in each course in the major, required correlated courses, English composition, WU 101, and MA 116.

Please direct questions to:

Dr. Karen Camarda, Chair

Department of Physics and Astronomy, Washburn University

• E-Mail: karen.camarda@washburn.edu • Phone: 785-670-2145

<http://www.washburn.edu/physics>

