

Physics

Major

A major in Physics consists of a minimum of 28 semester hours in classroom and laboratory physics courses, along with a minimum of 16 semester hours of Mathematics courses as tool courses for the major.

Required Courses

| Item # | Title | Credits |
|--------|--|---------|
| MA 213 | Calculus I | 4.0 |
| MA 223 | Calculus II | 4.0 |
| MA 233 | Calculus III | 4.0 |
| MA 332 | Introduction to Differential Equations | 4.0 |
| PY 201 | College Physics I | 4.0 |
| PY 202 | College Physics II | 4.0 |
| PY 321 | Analytic Mechanics: Statics | 4.0 |
| | Sub-Total Credits | 28 |

16 additional hours of course work in 300-level courses

| Item # | Title | Credits |
|--------|---|-------------|
| | Choose Three: PY 301, PY 302, PY 303 or PY 365 | 12.0 |
| PY 301 | Circuits | 4.0 |
| PY 302 | Electricity and Magnetism | 4.0 |
| PY 303 | Light | 4.0 |
| PY 365 | Quantum Theory & Spectroscopy | 4.0 |
| | Sub-Total Credits | 16 |
| | Choose one: PY 304, PY 321, PY 322, or PY 323 | 4.0 |
| PY 304 | Materials Science for Engineers | 4.0 |
| PY 321 | Analytic Mechanics: Statics | 4.0 |
| PY 322 | Analytic Mechanics: Dynamics | 4.0 |
| PY 323 | Thermodynamics | 4.0 |
| | Sub-Total Credits | 16 |
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Students who do not place into calculus will need to take additional hours in mathematics. Students interested in further study in physics should take additional courses in physics, chemistry, math, and computer science. It is strongly recommended that physics majors have at least one internship or research experience as PY 465/466 in addition to the above.

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| | Total Credits | 44 |
|--|---------------|----|