

Physics major course requirements

For a B.A. with a major in Physics (see reverse for B.S.)

Required in Physics (33 credit hours)

- ___ Phys 201 – Physics I (5) [Fall]
- ___ Phys 203 – Calculus-Based Physics II (5) [Spring]
- ___ Phys 204 – Modern Physics (5) [Spring]
- ___ Phys 207 – Introduction to Electronics (2) [Fall]
- ___ Phys 311 - Classical Mechanics (4) [Fall]
- ___ Phys 350 – Advanced Physics Laboratory (2) [Spring]
- ___ Phys 360 - Junior Seminar (1) [full-year course, meets once a week]
- ___ Phys 460 - Senior Seminar (1) [full-year course, meets once a week]

plus, 4 credit hours from the following courses:

- ___ Phys 330 - Statistical and Thermal Physics (4)
- ___ Phys 332 - Electromagnetism (4)
- ___ Phys 411 - Quantum Mechanics (4)

plus, 4 credit hours taken at the 300 level or above:

- ___ Phys 313 – Electronics (2)
- ___ Phys 314 – Digital Electronics (2)
- ___ Phys 320 - Computational Physics (2)
- ___ Phys 321 - Signal Processing (2)
- ___ Phys 325 - Topics in Contemporary Physics (2)
- ___ Phys 330 - Statistical and Thermal Physics (4)
- ___ Phys 332 - Electromagnetism (4)
- ___ Phys 380 - Topics (1-4)
- ___ Phys 411 - Quantum Mechanics (4)
- ___ Phys 490 - Independent Study (1-4)
- ___ Phys 491 - Internship (1-4)
- ___ Phys 498 - Senior Thesis (1-4)
- ___ Phys 499 - Senior Honors Thesis (0-4)

Required in Related Departments (17 credit hours)

- ___ Math 201 - Calculus I (4)
- ___ Math 202 - Calculus II (4)
- ___ One additional math course. Either
 - ___ Math 212 - Multivariable Calculus (4) OR
 - ___ Math 215 - Differential Equations (4)
- ___ Lab-based science course. (5) from among the following
 - ___ Biol 170 – Concepts of Biology: Biological Information, Reproduction, and Evolution (5)
 - ___ Biol 180 – Concepts of Biology: Energy and Resources in Biology (5)
 - ___ Comp 150 – Computer Programming I (5)
 - ___ Chem 121 - Models of Chemical Systems (5) with Chem 162 – Chemical Structure and Analysis (5) also recommended
 - ___ Esci 101 – Introduction to Environmental Science (5)

For a B.S. with a major in Physics (see reverse for B.A.)

Required in Physics (43 credit hours)

- ___ Phys 201 – Physics I (5) [Fall]
- ___ Phys 203 – Calculus-Based Physics II (5) [Spring]
- ___ Phys 204 – Modern Physics (5) [Spring]
- ___ Phys 207 – Introduction to Electronics (2) [Fall]
- ___ Phys 311 - Classical Mechanics (4) [Fall]
- ___ Phys 350 – Advanced Physics Laboratory (2) [Spring]
- ___ Phys 360 - Junior Seminar (1) [full-year course, meets once a week]
- ___ Phys 460 - Senior Seminar (1) [full-year course, meets once a week]

plus, 4 credit hours from the following courses:

- ___ Phys 330 - Statistical and Thermal Physics (4)
- ___ Phys 332 - Electromagnetism (4)
- ___ Phys 411 - Quantum Mechanics (4)

plus, 2 credit hours of research from:

- ___ Phys 490 - Independent Study (1-4)
- ___ Phys 491 - Internship (1-4)
- ___ Phys 498 - Senior Thesis (1-4)
- ___ Phys 499 - Senior Honors Thesis (0-4)

plus, 12 **additional** credit hours at the 300 level or above:

- ___ Phys 313 – Electronics (2)
- ___ Phys 314 – Digital Electronics (2)
- ___ Phys 320 - Computational Physics (2)
- ___ Phys 321 - Signal Processing (2)
- ___ Phys 325 - Topics in Contemporary Physics (2)
- ___ Phys 330 - Statistical and Thermal Physics (4)
- ___ Phys 332 - Electromagnetism (4)
- ___ Phys 380 - Topics (1-4)
- ___ Phys 411 - Quantum Mechanics (4)
- ___ Phys 490 - Independent Study (1-4)
- ___ Phys 491 - Internship (1-4)
- ___ Phys 498 - Senior Thesis (1-4)
- ___ Phys 499 - Senior Honors Thesis (0-4)

Required in Related Departments (30 or 31 credit hours)

- ___ Math 201 - Calculus I (4)
- ___ Math 202 - Calculus II (4)
- ___ Math 212 - Multivariable Calculus (4)
- ___ Math 215 - Differential Equations (4)
- ___ Comp 150 - Computer Programming I (5)
- ___ Two additional courses from the following (9 or 10)
 - ___ Biol 170 – Concepts of Biology: Biological Information, Reproduction, and Evolution (5)
 - ___ Biol 180 – Concepts of Biology: Energy and Resources in Biology (5)
 - ___ Comp 250 – Computer Programming II (4)
 - ___ Chem 121 – Models of Chemical Systems (5)
 - ___ Chem 162 – Chemical Structure and Analysis (5)
 - ___ Esci 101 – Introduction to Environmental Science (5)