

Suggested four-year plan for the B.A. in Physics (Model 1)

First Year - First Semester

- [ENG 101 - College Composition](#) Credits: 3
- [MAT 126 - Calculus I](#) Credits: 4
- [PHY 100 - Introduction to Physics and Astronomy](#) Credits: 1
- [PHY 121 - Physics for Engineers and Physical Scientists I](#) Credits: 4
- or
- [PHY 111 - General Physics I](#) Credits: 4
- Human Value/Social Context and Ethics Elective I Credits: 3

First Year - Second Semester

- [MAT 127 - Calculus II](#) Credits: 4
- [PHY 122 - Physics for Engineers and Physical Scientists II](#) Credits: 4
- or
- [PHY 112 - General Physics II](#) Credits: 4
- Human Values/Social Context and Ethics Elective II Credits: 3
- Elective Credits: 3

Second Year - First Semester

- [CHY 121 - General Chemistry I](#) Credits: 3
- [CHY 123 - General Chemistry Laboratory I](#) Credits: 1
- [MAT 228 - Calculus III](#) Credits: 4
- [PHY 200 - Career Preparation in Physics and Engineering Physics I](#) Credits: 1
- [PHY 261 - Physical Measurements Laboratory I](#) Credits: 2
- [PHY 236 - Introductory Quantum Physics](#) Credits: 3

Second Year - Second Semester

- [MAT 259 - Differential Equations](#) Credits: 3
- [PHY 223 - Special Relativity](#) Credits: 1
- [PHY 231 - Mathematical Methods in Physics](#) Credits: 3
- [PHY 241 - Computational Physics](#) Credits: 3
- [PHY 262 - Electronics](#) Credits: 2
- Human Value/Social Context and Ethics Elective or Elective Credits: 3

Third Year - First Semester

- [PHY 364 - Modern Experimental Physics](#) Credits: 2
- [PHY 451 - Mechanics](#) Credits: 3
- [PHY 454 - Electricity and Magnetism I](#) Credits: 3
- Human Value/Social Context and Ethics Elective(s) and/or Elective(s) and/or Physics Elective(s) Credits: 6

Third Year - Second Semester

- [PHY 365 - Mechanics Laboratory](#) Credits: 2
- Human Value/Social Context and Ethics Elective(s) and/or Elective(s) and/or Physics Elective(s) Credits: 12

Fourth Year - First Semester

- [PHY 400 - Career Preparation in Physics and Engineering Physics II](#) Credits: 1
- [PHY 481 - Project Laboratory in Physics I](#) Credits: 3
- Human Value/Social Context and Ethics Elective(s) and/or Elective(s) and/or Physics Elective(s) Credits: 12

Fourth Year - Second Semester

- Human Value/Social Context and Ethics Elective(s) and/or Elective(s) and/or Physics Elective(s) Credits: 15
-

Suggested four-year plan for the B.A. in Physics (Model 2)

Designed for students who desire a degree in Physics but who wish greater breadth in background in other areas of science, such as biological, geological, chemical or environmental sciences. The program outlined below enables a student to begin a major in Physics during the sophomore year.

First Year - First Semester

- [ENG 101 - College Composition](#) Credits: 3
- [PHY 100 - Introduction to Physics and Astronomy](#) Credits: 1
- Human Value/Social Context and Ethics Elective I Credits: 3
- Electives Credits: 9

First Year - Second Semester

- Human Value/Social Context and Ethics Elective II Credits: 3
- Electives Credits: 12

Second Year - First Semester

- [CHY 121 - General Chemistry I](#) Credits: 3
- [CHY 123 - General Chemistry Laboratory I](#) Credits: 1
- [MAT 126 - Calculus I](#) Credits: 4
- [PHY 121 - Physics for Engineers and Physical Scientists I](#) Credits: 4
- or
- [PHY 111 - General Physics I](#) Credits: 4
- [PHY 200 - Career Preparation in Physics and Engineering Physics I](#) Credits: 1
- Human Value/Social Context and Ethics Elective III Credits: 3

Second Year - Second Semester

- [MAT 127 - Calculus II](#) Credits: 4
- [PHY 122 - Physics for Engineers and Physical Scientists II](#) Credits: 4
- or
- [PHY 112 - General Physics II](#) Credits: 4

- Human Value/Social Context and Ethics Elective and/or Elective Credits: 6

Third Year - First Semester

- [MAT 228 - Calculus III](#) Credits: 4
- [PHY 261 - Physical Measurements Laboratory I](#) Credits: 2
- [PHY 236 - Introductory Quantum Physics](#) Credits: 3
- [PHY 472 - Geometrical and Fourier Optics](#) Credits: 3
- Human Value/Social Context and Ethics Elective V₁ Credits: 3

Third Year - Second Semester

- [MAT 259 - Differential Equations](#) Credits: 3
- [PHY 223 - Special Relativity](#) Credits: 1
- [PHY 231 - Mathematical Methods in Physics](#) Credits: 3
- PHY 241 - Computational Physics Credits: 3
- [PHY 262 - Electronics](#) Credits: 2
- Human Value/Social Context and Ethics Elective or Elective Credits: 3

•

Fourth Year - First Semester

- [PHY 364 - Modern Experimental Physics](#) Credits: 2
- [PHY 400 - Career Preparation in Physics and Engineering Physics II](#) Credits: 1
- [PHY 451 - Mechanics](#) Credits: 3
- [PHY 454 - Electricity and Magnetism I](#) Credits: 3
- [PHY 481 - Project Laboratory in Physics I](#) Credits: 3
- Human Value/Social Context and Ethics Elective or Elective or Physics Elective Credits: 3

Fourth Year - Second Semester

- [PHY 365 - Mechanics Laboratory](#) Credits: 2
- Human Value/Social Context and Ethics Elective(s) and/or Elective(s) and/or Physics Elective(s) Credits: 13