

Suggested four-year plan for the BS in Physics

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
- Human Values/Social Context and Ethics Elective I₁ Credits: 3

First Year - Second Semester

- [COS 125 - Introduction to Problem Solving Using Computer Programming](#) Credits: 4
- or
- [COS 220 - Introduction to C++ Programming](#) Credits: 3
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- [MAT 127 - Calculus II](#) Credits: 4
- [PHY 122 - Physics for Engineers and Physical Scientists II](#) Credits: 4
- Human Values/Social Context and Ethics Elective II₁ 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 Elective₁ or Elective Credits: 3
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Third Year - First Semester

- [PHY 364 - Modern Experimental Physics](#) Credits: 2
- [PHY 451 - Mechanics](#) Credits: 3
- [PHY 454 - Electricity and Magnetism I](#) Credits: 3
- [PHY 472 - Geometrical and Fourier Optics](#) Credits: 3
- Human Values/Social Context and Ethics Elective₁ or Elective Credits: 3

Third Year - Second Semester

- [PHY 365 - Mechanics Laboratory](#) Credits: 2
- [PHY 455 - Electricity and Magnetism II](#) Credits: 3
Mathematics Elective Credits: 3
- Human Values/Social Context and Ethics Elective(s)¹ and/or Elective(s) and/or Physics Elective Credits: 9

Fourth Year - First Semester

- [PHY 400 - Career Preparation in Physics and Engineering Physics II](#) Credits: 1
- [PHY 469 - Quantum and Atomic Physics](#) Credits: 3
- [PHY 480 - Physics of Materials](#) Credits: 3
- [PHY 481 - Project Laboratory in Physics I](#) Credits: 3
- Human Values/Social Context and Ethics Elective(s)¹ and/or Elective(s) and/or Physics Elective Credits: 6

Fourth Year - Second Semester

- [PHY 463 - Statistical Mechanics](#) Credits: 3
Human Values/Social Context and Ethics Elective(s)¹ and/or Elective(s) and/or Physics Elective Credits: 12