# Physics, B.S.

| Course | Title | Semester Credit Hours |
|---|---|---|
| **Freshman Year** | | |
| **Semester 1** | | |
| ENGL 1301 | Rhetoric and Composition | 3 |
| HIST 1301 | American History to 1877 | 3 |
| MATH 2413 | Calculus I | 4 |
| PHYS 2325<br>& PHYS 2125 | University Physics I<br>and University Physics I Lab | 4 |
| UNIV 1201 | Learning in Global Context | 2 |
| | **Semester Credit Hours** | **16** |
| **Semester 2** | | |
| ENGL 1302 | Rhetoric and Composition | 3 |
| HIST 1302 | American History since 1877 | 3 |
| MATH 2414 | Calculus II | 4 |
| PHYS 2326<br>& PHYS 2126 | University Physics II<br>and University Physics II Lab | 4 |
| | **Semester Credit Hours** | **14** |
| **Sophomore Year** | | |
| **Semester 1** | | |
| MATH 3415 | Calculus III | 4 |
| PHYS 3343 | Modern Physics I | 3 |
| POLS 2301 | Government and Politics of US | 3 |
| Communications | | 3 |
| Social/Behavioral | | 3 |
| | **Semester Credit Hours** | **16** |
| **Semester 2** | | |
| CSEN 2304 | Introd to Computer Science | 3 |
| MATH 3320 | Differential Equations | 3 |
| POLS 2302 | Government and Politics of TX | 3 |
| Creative arts | | 3 |
| Lang/Phil/Culture | | 3 |
| | **Semester Credit Hours** | **15** |
| **Junior Year** | | |
| **Semester 1** | | |
| PHYS 3313 | Mechanics I | 3 |
| PHYS 4303 | Math Methods for Physicists | 3 |
| Elective | | 3 |
| Elective | | 3 |
| Minor [1] | | 3 |
| | **Semester Credit Hours** | **15** |
| **Semester 2** | | |
| PHYS 3310 | Advanced Physics Laboratory | 3 |
| PHYS 3323 | Electromagnetic Field Theory | 3 |
| Elective | | 3 |
| Minor [1] | | 3 |
| Minor [1] | | 3 |
| | **Semester Credit Hours** | **15** |

| | | |
|---|---|---|
| **Senior Year** | | |
| **Semester 1** | | |
| PHYS 3333 | Thermodynamics | 3 |
| PHYS 4191 | Physics Research Project | 1 |
| PHYS 4353 | Quantum Physics | 3 |
| Elective | | 3 |
| Minor [1] | | 3 |
| PHYS, adv. | | 3 |
| | **Semester Credit Hours** | **16** |
| **Semester 2** | | |
| PHYS 4192 | Physics Research Seminar (WI) | 1 |
| PHYS 4360 | Nuclear Physics | 3 |
| Minor, adv. [1] | | 3 |
| Minor, adv. [1] | | 3 |
| PHYS, adv. | | 3 |
| | **Semester Credit Hours** | **13** |
| | **Total Credit Hours Required:** | **120** |

[1] Or any other mathematics, natural science, engineering or computer science course, provided a recognized minor is completed and the student will complete 45 advanced hours including those required in a minor. Courses in other supporting areas may also be substituted with departmental approval.