

Requirements of the College of Science: A minimum of 128 credit hours is required for a Bachelor of Science (B.S.) or a Bachelor of Arts (B.A.) degree, of which 42 credit hours must be earned in 300- and/or 400-level courses.

General Education Requirements: All degree-seeking students are required to meet general education requirements. Students are responsible for ensuring that courses chosen satisfy these requirements and are encouraged to consult with their academic advisor. Introduction to University Life is required for all newly admitted freshmen (not required for transfer students).

Technical Electives: (10 credit hours)

Any 300- and/or 400-level course in physics, chemistry, mathematics, or engineering as approved by the advisor.

Sample Physics Major Schedule

B.S. in Physics

| | | Total ch | * Tri-C | Equivalent courses | * Lakeland | * Lorain |
|-----------------------|---|-----------------|----------------|--------------------|--------------------|-----------------|
| Year 1 Fall | PHY 241 University Physics I | 5 | PHYS 2310 | PHYS 2410 | PHYS 2410 | PHYS 251 |
| | MTH 181 Calculus I | 4 | MATH 1610 | MATH 2500 | MATH 2500 | MTHM 181 |
| | ENG 101 College Writing I | 4 | ENG 1010 | ENGL 1110 or 1111 | ENGL 1110 or 1111 | ENGL 161 |
| | Gen Ed Elective (Social Science) | 3 | | | | |
| | ASC 101 Orientation | 1 | | | | |
| | | <u>17</u> | | | | 17 |
| Spring | MTH 182 Calculus II | 4 | MATH 1620 | MATH 2600 | MATH 2600 | MTHM 182 |
| | PHY 242 University Physics II | 5 | PHYS 2320 | PHYS 2420 | PHYS 2420 | PHYS 252 |
| | ENG 102 College Writing II | 3 | ENG 1020 | ENGL 1120 | ENGL 1120 | ENGL 162 |
| | Gen Ed Elective (Art & Humanities) | 3 | | | | |
| | Gen Ed Elective (Social Diversity) | 3 | | | | |
| | | <u>18</u> | | | | 35 |
| Year 2 Fall | MTH 281 Multivariable Calculus | 4 | MATH 2310 | MATH 2700 | MATH 2700 | MTHM 281 |
| | CIS 260 Introduction to Programming | 4 | ITMP 2650 | ITCS 1820 and 2820 | ITCS 1820 and 2820 | CISS 226 |
| | CHM 261/266 General Chemistry I and lab | 5 | CHEM 1300/130L | CHEM 1500 | CHEM 1500 | CHMY 171 |
| | Gen Ed Elective (Social Science) | 3 | | | | |
| | | | <u>16</u> | | | |
| Spring | CHM 262/267 General Chemistry II, and lab | 5 | CHEM 1310/131L | CHEM 1600 | CHEM 1600 | CHMY 172 |
| | Elective | 3 | | | | |
| | Gen Ed Elective (Art & Humanities) | 3 | | | | |
| | Gen Ed Elective (Social Diversity) | 3 | | | | |
| | | <u>14</u> | | | | 65 |
| Year 3 Fall | PHY 350 Electricity and Magnetism | 4 | | | | |
| | PHY 330 Introduction to Modern Physics | 4 | | | | |
| | PHY 396 Physics Seminar | 4 | | | | |
| | Elective | 3 | | | | |
| | Elective | 3 | | | | |
| | | <u>18</u> | | | | 83 |
| Spring | PHY 340 Mechanics and Vibrations | 4 | | | | |
| | Elective | 3 | | | | |
| | Elective | 3 | | | | |
| | Elective | 3 | | | | |
| | | <u>13</u> | | | | 96 |
| Year 4 Fall | PHY 450 Optics and Electromagnetic Waves | 4 | | | | |
| | PHY 455 Optics Laboratory | 4 | | | | |
| | PHY 440 Quantum Physics I | 4 | | | | |
| | Elective | 3 | | | | |
| | | | <u>15</u> | | | |
| Spring | PHY 474 Thermal Physics | 4 | | | | |
| | PHY 475 Statistical Physics | 4 | | | | |
| | PHY 441 Quantum Physics II | 4 | | | | |
| | PHY 493 Advanced Topics in Physics | 2 | | | | |
| | Elective | 3 | | | | |
| | | <u>17</u> | | | | 128 |

*All equivalent community college course work must be completed before transferring to CSU. Talk to your advisor for further details.