

# Bachelor of Science Degree - Catalog 126

## Freshman Year

| First Semester                                   | (Th-Pr) | Cr | Second Semester                                 | (Th-Pr) | Cr |
|--|---------|----|---|---------|----|
| ENGL 104 Comp. and Rhetoric                      | (3-0)   | 3  | CHEM 107 Gen. Chem. for Engr. Students          | (3-3)   | 4  |
| HIST 105 History of the U.S. <sup>1</sup>        | (3-0)   | 3  | HIST 106 History of the U.S. <sup>1</sup>       | (3-0)   | 3  |
| <b>MATH 171 Analytic Geom. and Calculus</b>      | (4-0)   | 4  | <b>MATH 172 Calculus</b>                        | (4-0)   | 4  |
| <a href="#">PHYS 101 Topics in Cont. Physics</a> | (1-0)   | 1  | <a href="#">PHYS 208 Electricity and Optics</a> | (3-3)   | 4  |
| <a href="#">PHYS 218 Mechanics</a>               | (3-3)   | 4  | *KINE 199 Required Physical Activity            | (0-2)   | 1  |
| *KINE 198 Health and Fitness Activity            | (0-2)   | 1  |   |         | 16 |
|  |         | 16 |   |         |    |

## Sophomore Year

| First Semester                                      | (Th-Pr) | Cr | Second Semester                              | (Th-Pr) | Cr |
|---|---------|----|--|---------|----|
| <b>MATH 221 Several Variable Calculus</b>           | (4-0)   | 4  | <b>MATH 311 Topics in Applied Math</b>       | (3-0)   | 3  |
| <b>MATH 308 Differential Equations</b>              | (3-0)   | 3  | <a href="#">PHYS 225 Electronic Circuits</a> | (3-3)   | 4  |
| <a href="#">PHYS 221 Optics and Thermal Physics</a> | (3-0)   | 3  | <a href="#">PHYS 309 Modern Physics</a>      | (3-0)   | 3  |
| POLS 206 American Nat'l. Govt.                      | (3-0)   | 3  | POLS 207 State & Local Govt.                 | (3-0)   | 3  |
| Humanities elective <sup>1</sup>                    |         | 3  | English literature elective <sup>2</sup>     |         | 3  |
|   |         | 16 |  |         | 16 |

## Junior Year

| First Semester                                       | (Th-Pr) | Cr | Second Semester                                  | (Th-Pr) | Cr |
|--|---------|----|--|---------|----|
| <b>MATH 412 Theory of Partial Diff. Eqs.</b>         | (3-0)   | 3  | <b>MATH 407 Complex Variables</b>                | (3-0)   | 3  |
| <a href="#">PHYS 302 Adv. Mechanics</a>              | (4-0)   | 4  | <a href="#">PHYS 305 Adv. Elec. and Magn. II</a> | (3-0)   | 3  |
| <a href="#">PHYS 304 Adv. Elect. and Magn. I</a>     | (3-0)   | 3  | <a href="#">PHYS 327 Exptl. Physics</a>          | (2-3)   | 3  |
| Communication elective <sup>3</sup>                  |         | 3  | <a href="#">PHYS 412 Quantum Mechanics I</a>     | (3-0)   | 3  |
| Social and behavioral sciences elective <sup>1</sup> |         | 3  | Electives <sup>4</sup>                           |         | 5  |
|  |         | 16 |  |         | 17 |

## Senior Year

| First Semester                                       | (Th-Pr) | Cr | Second Semester                                  | (Th-Pr) | Cr |
|--|---------|----|--|---------|----|
| <a href="#">PHYS 401 Computational Physics</a>       | (3-0)   | 3  | <a href="#">PHYS 425 Physics Lab</a>             | (0-6)   | 2  |
| <a href="#">PHYS 408 Thermo. and Stat. Mechanics</a> | (4-0)   | 4  | <a href="#">PHYS 485 Problems</a>                |         | 2  |
| <a href="#">PHYS 414 Quantum Mechanics II</a>        | (3-0)   | 3  | <a href="#">Physics elective<sup>5</sup></a>     |         | 3  |
| <a href="#">PHYS 426 Physics Lab</a>                 | (0-6)   | 2  | Visual and performing arts elective <sup>1</sup> |         | 3  |
| Electives <sup>4</sup>                               |         | 3  | Electives <sup>4</sup>                           |         | 6  |
|  |         | 15 |  |         | 16 |

- NOTES:
- Any course in this category from the approved University Core Curriculum list of courses.
  - Choose from ENGL 203, 212, 221-222, 227-228, 231-232, 312-317, 319, 321-323, 330, 333-340, 350, 352-354, 362, 365, 374-378, 390, 412, 414, 431.
  - To be selected from ENGL 203, 210, 235, 236, 241 and 301.
  - Electives should be chosen in consultation with the student's academic advisor. If a student has not fulfilled the 6 hours international and cultural diversity requirement of the University Core Curriculum found on page 18 with courses used to meet other areas of the Core, they must fulfill this requirement with 6 of their elective hours.
  - Any 400-level physics elective.