

# Bachelor of Arts Degree - Catalog 130

## 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  |
| <a href="#">MATH 171 Analytic Geom. and Calculus</a> | (4-0)   | 4  | <a href="#">MATH 172 Calculus</a>               | (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  |   |         | 15 |
|  |         | 15 |   |         |    |

## Sophomore Year

| First Semester                                      | (Th-Pr) | Cr | Second Semester                                   | (Th-Pr) | Cr |
|---|---------|----|---|---------|----|
| <a href="#">MATH 221 Several Variable Calculus</a>  | (4-0)   | 4  | <a href="#">MATH 311 Topics in Applied Math I</a> | (3-0)   | 3  |
| <a href="#">MATH 308 Differential Equations</a>     | (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  | Elective <sup>2</sup>                             |         | 3  |
| KINE 199 Required Physical Activity                 | (0-2)   | 1  | KINE 198 Health and Fitness Activity              | (0-2)   | 1  |
|   |         | 14 |   |         | 14 |

## Junior Year

| First Semester                                   | (Th-Pr) | Cr | Second Semester                                      | (Th-Pr) | Cr |
|--|---------|----|--|---------|----|
| <a href="#">PHYS 302 Adv. Mechanics</a>          | (4-0)   | 4  | <a href="#">PHYS 327 Experimental Physics</a>        | (2-3)   | 3  |
| <a href="#">PHYS 304 Adv. Elect. and Magn. I</a> | (3-0)   | 3  | <a href="#">PHYS 412 Quantum Mechanics I</a>         | (3-0)   | 3  |
| POLS 207 State and Local Govt.                   | (3-0)   | 3  | Communication elective <sup>3</sup>                  |         | 3  |
| Humanities elective <sup>1</sup>                 |         | 3  | Social and behavioral sciences elective <sup>1</sup> |         | 3  |
| Electives <sup>2</sup>                           |         | 2  | Electives <sup>2</sup>                               |         | 3  |
|  |         | 15 |  |         | 15 |

## Senior Year

| First Semester   | (Th-Pr) | Cr | Second Semester   | (Th-Pr) | Cr |
|--|---------|----|---|---------|----|
| <a href="#">PHYS 420 Concepts, Conn., &amp; Comm.</a> <sup>6</sup> | (1-0)   | 1  | <a href="#">PHYS 401 Computational Physics</a> <sup>4</sup> | (3-0)   | 3  |
| <a href="#">Physics elective</a> <sup>5</sup>                      |         | 3  | <a href="#">PHYS 491 Research</a> <sup>6</sup>              |         | 1  |
| Electives <sup>2</sup>   |         | 12 | Visual and performing arts elective <sup>1</sup>            |         | 3  |
|  |         | 16 | Electives <sup>2</sup>                                      |         | 9  |
|  |         |    |   |         | 16 |

- NOTES:
- Any course in this category from the approved University Core Curriculum list of courses.
  - A minor field must be selected in conference with the student's advisor. In addition, 6 hours of courses must be in the area of international and cultural diversity. These may be in addition to other University Core Curriculum courses, or if a course in this category satisfies another area of the Core, it can be used to meet both requirements.
  - To be selected from ENGL 203, 210, 235, 236, 241 and 301.
  - To register for PHYS 401 a student must be able to program in a high level language, such as FORTRAN or C. This prerequisite can be satisfied by taking CPSC 206 or the equivalent.
  - Any 300- or 400-level physics elective, except 306, 307, and the writing intensive courses, 420 and 491.
  - Approved W course designation.