

PHYSICS MAJOR

Four Year Plan for students starting in even years

This is a suggested program guide. It is not to be interpreted as a contract. Changes may occur. Please see your program advisor before you register for courses. Updated 7/22 RM

| YEAR | FALL | SPRING |
|-------------|---|--|
| First Year | BENV100 Becoming a Scholar 3 CEM 121 General Inorganic Chemistry 1 5 CPS 108 Computer Programming 3 MAT 135 Calculus 1 5 Total 16 | Writing Well Competency 3 Speaking and Listening Competency 3 CEM 122 General Inorganic Chemistry 2 5 MAT 136 Calculus 2 5 Total 16 |
| Second Year | Living Well Competency 2-3 Creative Expression Competency 3 Reading the Bible Competency 3 PHY 211 Physics for Science/Engineering 1 5 Total 13-14 | BENV200 Learning in Community 5 Understanding Self and Society Competency 3 Exploring the Past Competency 3 PHY 212 Physics for Science/ Engineering 2 5 Total 16 |
| Third Year | Electives 10 PHY 326 Thermal/Modern/Nuclear/Quantum 1* 5 (PHY 365 Electricity and Magnetism** 3) Total 15 | Electives/General Education 7 BENV300 Cross-cultural Experience 3 PHY 327 Thermal/Modern/Nuclear/Quantum 2* 5 Total 15 |
| Fourth Year | Religious Understanding Competency 3 Electives 9 PHY 360 Linear Electronics* 4 Total 16 | Electives 9 BENV400 Christian Values in a Global Community 2 PHY 202 Astronomy* 4 (PHY 370 Quantum Mechanics** 3) (PHY 390 Independent Study** 1-3) Total 15 |

124 total hours to complete graduation requirements (this includes 2 hours of arts and lecture credit)

Boldface print denotes major course requirement

*Alternate year courses

**Courses taught as Directed Study or Independent Study. These count as electives.

***Students in the physics calculus track can enroll in physics their first year and chemistry their second year (with approval from their PHY 211 course instructor).

() Electives recommended for students interested in graduate school or engineering programs.

The following courses are strongly recommended as electives

- CPS 320 Numerical Analysis* (3)
- MAT 225 Multivariate Calculus (3)
- MAT 230 Linear Algebra (3)
- MAT 350 Differential Equations and Modeling* (3)

Note: The Scientific Inquiry and Critical Analysis competencies are met in the major.