

## PHYSICS MAJOR

Four Year Plan for students starting in odd 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 6/24

YEAR	FALL	SPRING
First Year	BENV100 Becoming a Scholar 3 <b>CEM 121 General Inorganic Chemistry 1<sup>***</sup></b> 5 <b>CPS 108 Computer Programming</b> 3 <b>MAT 135 Calculus 1</b> 5 Total 16	Writing Well Competency 3 Speaking and Listening Competency 3 <b>CEM 122 General Inorganic Chemistry 2<sup>***</sup></b> 5 <b>MAT 136 Calculus 2</b> 5 Total 16
Second Year	Living Well Competency 2-3 Reading the Bible Competency 3 BENV200 Learning in Community 5 <b>PHY 211 Physics for Science/Engineering 1<sup>***</sup></b> 5 Total 15-16	Creative Expression Competency 3 Exploring the Past Competency 3 Understanding Self & Society Competency 3 <b>PHY 212 Physics for Science/ Engineering 2<sup>***</sup></b> 5 Total 14
Third Year	Electives 12 <b>PHY 360 Linear Electronics*</b> 4 (PHY 365 Electricity and Magnetism** 3) Total 16	Electives 7 BENV300 Cross-cultural Experience 3 <b>PHY 202 Astronomy*</b> 4 Total 14
Fourth Year	Religious Understanding Competency 3 Elective 9 (PHY 375 Analytical Mechanics** 3) <b>PHY 326 Thermal/Modern/Nuclear/Quantum 1*</b> 5 Total 17	Electives 7 BENV400 Enduring Values Capstone 2 <b>PHY 327 Thermal/Modern/Nuclear/Quantum 2*</b> 5 (PHY 370 Quantum Mechanics** 3) (PHY 390 Independent Study** 1-3) Total 14

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.