

# Curriculum

## FRESHMAN YEAR

<i>First Semester</i>	<i>Credit</i>
Chem 1310-General Chemistry .....	4
Chem 1319-General Chemistry .....	1
Chem 1100-Intro to Lab Safety & Hazardous Materials .....	1
English 1120-Exposition & Argumentation .....	3
Math 1214-Calculus w/Analytic Geometry I .....	4
Physics 1101-Introduction to Physics .....	1
	<u>14</u>

<i>Second Semester</i>	<i>Credit</i>
Chem 1320-General Chemistry .....	3
Hist (1200, 1300, 1310) or Pol Sc 1200 .....	3
Math 1215-Calculus w/Analytic Geometry II .....	4
Elective <sup>2</sup> .....	2
Physics 1135-General Physics I .....	4
	<u>16</u>

## SOPHOMORE YEAR

<i>First Semester</i>	<i>Credit</i>
English 1160-Writing & Research .....	3
Math 2222-Calculus w/Analytic Geometry III .....	4
Physics 2135-General Physics II .....	4
Comp Sci 1500 (or 1970 & 1980 or 1971 & 1981) .....	3
Literature Elective .....	3
	<u>17</u>

<i>Second Semester</i>	<i>Credit</i>
Math 3304-Elementary Differential Equations .....	3
Physics 2311-Modern Physics I .....	3
Physics 2129-Intermediate Physics Lab .....	3
Physics 2401-Introduction to Theoretical Physics .....	3
Social Science Elective .....	3
	<u>15</u>

## JUNIOR YEAR

<i>First Semester</i>	<i>Credit</i>
Physics 3201-Physical Mechanics .....	3
Physics 3119-Advanced Physics Lab I .....	3
Physics 3311-Modern Physics II .....	3
Math/Stat Elective <sup>1</sup> .....	3
Social Science Elective .....	3
Humanities .....	3
	<u>18</u>

<i>Second Semester</i>	<i>Credit</i>
Physics 3211-Electricity & Magnetism I .....	3
Physics 3129-Advanced Physics Lab II .....	3
Math/Stat Elective <sup>1</sup> .....	3
Electives <sup>2</sup> .....	7
	<u>16</u>

## SENIOR YEAR

<i>First Semester</i>	<i>Credit</i>
Physics 4211-Electricity & Magnetism II .....	3
Physics 4301-Introduction to Quantum Mechanics .....	3
Physics Elective <sup>3</sup> (3000 Level) .....	3
Electives <sup>2</sup> .....	7
	<u>16</u>

<i>Second Semester</i>	<i>Credit</i>
Physics 4311-Thermal Physics .....	3
Elective-Hum (3000 level) .....	3
Physics Elective <sup>3</sup> (3000 Level) .....	3
Electives <sup>2</sup> .....	7
	<u>16</u>

NOTE: A minimum of 128 hours credit hours is required for the Bachelor of Science degree in physics. A student may count no more than two of their required physics and mathematics courses in which a grade of "D" has been earned to meet their degree requirements.

<sup>1</sup> Six hours of mathematics or statistics beyond Math 3304 are required. Math 3108, 5222, 5325, or 5351 are recommended.

<sup>2</sup> Free electives may be used to develop an emphasis area.

<sup>3</sup> In addition to the specific physics courses listed (Physics 3311, 3201, 4311, 4211, 3119, 3129, and 4301), two other physics 2374 level courses are required. Physics 4553, 4203, 4503, 5333, 4513, or 4323 are recommended.

### Minor Curriculum

The minor in physics is a flexible program whose goal is to increase the breadth and competency of science and engineering students in modern or classical physics. Science students pursuing the physics minor will be interested in a deeper understanding of fundamental physical processes. Engineering students who intend to work in research or advanced development may use a physics minor to acquire a thorough knowledge of classical and quantum optics or laser processes.

The physics minor consists of one course in Introductory Physics (Physics 1111/2111 or Physics 1135/2135), Modern Physics (Physics 2305 or 2311) and 12 additional credit hours of physics courses at the 2000 level or above. The program will be designed to conform to the individual's interests and needs.