

SEMESTER <b>1</b>	CH 1213 Chemistry I	CH 1211 Invst in Chem I	BIO 1134 <sup>L</sup> Biology I	MA 1713 Calculus I	*Soc / Beh Sci Elective (3h)	EN 1103 English Comp I	<sup>F</sup> ABE 1911 Engr in Life Sci	<b>18</b>
	<sup>F</sup>							
SEMESTER <b>2</b>	CH 1223 Chemistry II	CH 1221 Invst in Chem II	*Humanities Elective (3h)	MA 1723 Calculus II	PH 2213 Physics I	EN 1113 English Comp II	<sup>S</sup> ABE 1921 Intro to Engr Des	<b>17</b>
	<sup>S</sup>							
SEMESTER <b>3</b>		†Biological Sci Elective (3h)	EM 2413 Engr Mech I	MA 2733 Calculus III	PH 2223 <sup>L</sup> Physics II	MA 3123 Intro to Infer Stats		<b>15</b>
	<sup>F</sup>							
SEMESTER <b>4</b>	CH 2503 Elem Organic	CH 2501 Elem Organic Lab	EM 2433 Engr Mech II	MA 2743 Calculus IV	**Engineering Elective (3h)	<sup>S</sup> ABE 4803 Biosy Simulation		<b>16</b>
	<sup>S</sup>							
SEMESTER <b>5</b>	BCH 4013 Princ Biochem	*Soc / Beh Sci Elective (3h)	EM 3213 Mech of Materials	MA 3253 Diff Equations	<sup>F</sup> ABE 3413 <sup>L</sup> Bio Instrum I			<b>15</b>
	<sup>F</sup>							
SEMESTER <b>6</b>	BIO 3304 <sup>L</sup> Gen Microbio			<sup>S</sup> ABE 3303 Trans in Biol Env	<sup>S</sup> ABE 4423 <sup>L</sup> Bio Instrum II	<sup>S</sup> ABE 3813 <sup>L</sup> Biophy Prop of Mat	GE 3513 Tech Writing	<b>16</b>
	<sup>S</sup>							
SEMESTER <b>7</b>		<sup>F</sup> ABE 4911 Engr Seminar	<sup>F</sup> **ABE Elective (3h)	<sup>F</sup> **ABE Elective (3h)	**Engineering Elective (3h)	<sup>F</sup> ABE 4323 Phys Systems in Biomed Engr	<sup>F</sup> ABE 4813 Princ Engr Design	<b>16</b>
	<sup>F</sup>							
SEMESTER <b>8</b>		**Engineering OR †Math/Physics Elective (3h)	EM 3313 Fluid Mechanics	*Fine Arts Elective (3h)	*Humanities Elective (3h)		<sup>S</sup> ABE 4833 Pract Engr Design	<b>15</b>
	<sup>S</sup>							

L - Lab Included  
 F - Fall  
 S - Spring

\* Must be on University core curriculum  
 † Biological Science Electives listed on back  
 \*\* Engineering Electives listed on back  
 ‡ Math/Physics Electives listed on back

TOTAL **128**

### Biological Science Electives:

BIO 2103 Cell Biology  
BIO 3103 Genetics I  
BIO 3504 Comparative Anatomy  
BIO 4114 Cellular Physiology  
BIO 4405 Pathogenic Microbiology  
BIO 4413 Immunology  
BIO 4433 Principles of Virology  
BIO 4503 Vertebrate Histology  
BIO 4504 Comparative Vertebrate Embryology  
BIO 4514 Animal Physiology  
ADS 4613 Physiology of Reproduction  
BCH 4113 Essentials of Molecular Genetics

### Engineering Electives:

ABE 4523 Biomedical Materials  
ABE 4613 Biomechanics  
ABE 4723 Tissue Engineering and Regeneration  
ABE 4624 Experimental Methods in Materials Research  
EM 4123 An Introduction to the Finite Element Method  
EM 4133 Mechanics of Composite Materials  
EM 4213 Advanced Mechanics of Materials  
ME 3113 Engineering Analysis  
ME 3533 Thermodynamics  
ME 4123 Failure of Engineering Materials  
ME 4743 Labview  
ME 4833 Intermediate Fluid Mechanics  
EG 1143 Graphic Communication  
CSE 4613 Bio-computing  
CSE 4623 Computational Biology  
IE 3913 Engineering Economy I  
IE 4113 Human Factors Engineering  
IE 4173 Occupational Safety Engineering  
IE 4553 Engineering Law and Ethics  
IE 4733 Linear Programming  
IE 4743 Engineering Design Optimization  
ECE 3714 Digital Devices and Logic Design

### Math/Physics Electives:

MA 3113 Introduction to Linear Algebra  
MA 3353 Differential Equations II  
MA 4143 Graph Theory  
MA 4373 Introduction to Partial Differential Equations  
PH 2233 Physics III