

SEMESTER 1	CH 1213 Chemistry I	CH 1211 Invst in Chem I	BIO 1134 <sup>L</sup> Biology I	**Soc / Beh Elective	MA 1713 Calculus I	EN 1103 English Comp I	<sup>F</sup> ABE 1911 Engr in Life Sci	18
SEMESTER 2	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 Design	17
SEMESTER 3		*Bio Sci Elective (3hr)	EM 2413 Engr Mech I	MA 2733 Calculus III	PH 2223 <sup>L</sup> Physics II	CSE 1233 Comp Prog-C		15
SEMESTER 4	CH 2503 Elem Organic	CH 2501 Elem Org Lab	EM 2433 Engr Mech II	MA 2743 Calculus IV	* Engr / Math Elective (3hr)	<sup>S</sup> ABE 4803 Biosy Simulation		16
SEMESTER 5	BCH 4013 <sup>L</sup> Princ of Biochem		EM 3213 Mech of Materials	MA 3253 Diff Equations	<sup>F</sup> ABE 3413 <sup>L</sup> Biinstrum I	**Soc / Beh Elective I (3h)		15
SEMESTER 6	BIO 3304 <sup>L</sup> Gen Microbio		EM 3313 Fluid Mechanics	<sup>S</sup> ABE 3303 Trans in Biol Env	<sup>S</sup> ABE 4423 <sup>L</sup> Biinstrum II	<sup>S</sup> ABE 3813 <sup>L</sup> Biophy Prop of Mat		16
SEMESTER 7	<sup>F</sup> ABE 4813 Princ Engr Design	<sup>F</sup> ABE 4911 Engr Seminar	<sup>F</sup> ABE 4613 Biomechanics		<sup>F</sup> ABE 4723 Tissue Engr	<sup>F</sup> ABE 4523 Biomed Materials	<sup>F</sup> ABE 4323 Phys Systems in Biomed Engr	16
SEMESTER 8	<sup>S</sup> ABE 4833 BE Practices Lab	*Engineering / Math Elective (3h)	GE 3513 Tech Writing	**Humanities Elective (3h)	**Fine Arts Elective (3h)			15

Updated: April 4, 2013

L - Lab Included  
F - Fall  
S - Spring

\* Restricted elective course options are listed on the back  
\*\* University core curriculum elective options are listed on a separate page

Total **128**

Biological Science Electives:

BIO 2103 - Cell Biology  
BIO 3504 - Comparative Anatomy (with Lab)  
BIO 4413 - Immunology  
BIO 4503 - Vertebrate Histology (with Lab)  
BIO 4514 - Animal Physiology (with Lab)  
BIO 4114 - Cellular Physiology (with Lab)  
BIO 4504 - Comp Vertebrate Embryology (with Lab)  
BIO 4433 - Principles of Virology  
BIO 4504 - Comparative Vertebrate Anatomy  
ADS 4613 - Physiology of Reproduction  
BCH 4113 - Essentials of Molecular Genetics  
CVM 2443 - Essentials of Biotechnology

Engineering Electives:

EM 4123 - An Intro to Finite Element Method  
EM 4133 - Mechanics of Composite Materials  
EM 4213 - Advanced Mechanics of Materials  
ME 4833 - Intermediate Fluid Mechanics  
ME 3533 - Thermodynamics  
EG 1143 - Graphic Communication  
CSE 4613 - Bio-Computing  
CSE 4623 - Computational Biology  
ME 4743 - LabVIEW  
ME 3133 - Modeling and Manufacturing  
IE 4113 - Human Factor Engineering  
IE 4173 - Occupational Safety Engineering  
IE 4533 - Project Management  
PH 2233 - Physics III

Engineering / Math Electives:

ABE 4513 - Dynamics of Aging  
ABE 4533 - Rehabilitation Engineering  
ABE 4723 - Tissue Engineering  
ABE 4624 - Exp Methods Material Research  
MA 3113 - Intro to Linear Algebra  
MA 4373 - Intro to Partial Defferential Equation  
MA 4543 - Intro to Mathematical Statistics I  
ECE 3714 - Digital Devices and Logic Design with Lab  
ECE 3443 - Signals and Systems  
IE 4733 - Linear Programming  
IE 4743 - Engineering Design Optimization