

# BIOENGINEERING Curriculum

## Fall 2009

STUDENT NAME: \_\_\_\_\_

STUDENT ID #: \_\_\_\_\_

FIRST YEAR			
FALL			
ENGR 100	*Intro to Engr ( <i>Fall only</i> )	2	
ENGR 101	*Engr Analysis I ( <i>Fall &amp; Spring Only</i> )	4	
ENGL 101	*College Writing I	3	
CHEM 201	*Gen Chem I	3	
CHEM 207	*Intro Chem Anal I	1	
CHEM 208	*Intro Chem Anal II	1	
Gen Ed Elective		3	
Total 17 Hours			

SPRING			
ENGR 102	*Engr Analysis II	4	
ENGL 102	*College Writing II	3	
CHEM 202	*Gen Chem II	3	
ENGR 150	*Engr Graphics Fund	2	
PHYS 298	*Physics I	4	
BE 101	Intro BioE ( <i>Spring only</i> )	1	
		0	
Total 17 Hours			

SUMMER			
ENGR 201	Engr Analysis III	4	
CHEM 209	*Intro Chem Anal II	1	
CEE 205	Statics	3	
PHYS 295	Phys I Lab	1	
Gen Ed Elective		3	
Total 12 Hours			

SECOND YEAR			
FALL			
ENGR 205	Diff Equations	2	
ME 206	Dynamics	3	
ME 251	Thermodynamics	3	
PHYS 299	Physics II	4	
BIOL 240	Unity of Life	3	
CHEM 341	Organic Chem I	3	
Total 18 Hours			

SPRING			
ENGR 330	Linear Algebra	2	
BE 354	Human Anat & Phys	3	
CHEM 343	Organic Chem I Lab	2	
BIOL 329	Cell & Mol Biol	3	
BE 288	Co-op Seminar ( <i>Spring only</i> )	0	
BE 310	Biotrans Phen ( <i>Spring only</i> )	3	
BE 360	Biomech Princ ( <i>Spring only</i> )	3	
Gen Ed Elective		3	
Total 19 ***Hours			

SUMMER			
COMM 111	Speech Comm	3	
or 112	Bus & Professional Speaking		
or 115	Interperson Communication		
BE 340	Comp Meth in BioE ( <i>Sum only</i> )	3	
BE 450	Biomat & Biocomp ( <i>Sum only</i> )	3	
ECE 252	Intro to Elect Engineering	3	
Total 12 Hours			

\* 31 hr core with 2.00 GPA must be completed for admission into department

\*\* Course must be from approved list

\*\*\* Permission from Advisor and Associate Dean to take 19 hours during spring semester

## BIOENGINEERING Curriculum

THIRD YEAR			
FALL			
BE 289	Co-op I ( <i>Fall only</i> )	2	
		Total	2 Hours

SPRING			
ENGR 307	Numerical Methods	2	
IE 360	Prob & Statistics	3	
BE 420	Biosystems & Signals ( <i>Spring only</i> )	3	
BE 423	Bioengr Meas Lab ( <i>Spring only</i> )	3	
BE **	BE Elective I ( <i>Spring only</i> )	3	
Gen Ed Elective		3	
		Total	17 Hours

SUMMER			
BE 389	Co-op II ( <i>Summer only</i> )	2	
		2	

FOURTH YEAR			
FALL			
BE 430	Biosys Contr ( <i>Fall only</i> )	3	
BE 491	Econ, Ethics & FDA Reg ( <i>Fall only</i> )	3	
BE 497	Bioeng Des Proj ( <i>Fall only</i> )	3	
BE**	BE Elective II ( <i>Fall only</i> )	3	
BE**	BE Elective III ( <i>Fall only</i> )	3	
Gen Ed Elective		3	
		Total	18 Hours

SPRING			
BE 489	Co-op III ( <i>Spring only</i> )	2	
		Total	2 Hours

BE Concentration Electives			
BE 452	Intro Tissue Eng ( <i>Spring only</i> )	3	
BE 453	Intro to Molec Bioengr ( <i>Fall only</i> )	3	
BE 460	Bomech of Tissues & Organs ( <i>Fall only</i> )	3	
BE 480	Biomedical Device Des ( <i>Spring only</i> )	3	
CECS 335	Design of File Structures	3	
CECS 440	Object Oriented Design	3	

ADDITIONAL COURSES

REPEAT OPTIONS USED
(No more than four courses)

Contact Information
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Minimum requirements for BS in Bioengineering:

136 Semester Credit Hours