

Engineering with Biomedical Concentration
(Department of Engineering)

Major Requirements

<u>Major Courses</u>	<u>Credits</u>	<u>Semester Completed</u>
[ENGR 101] Engineering Graphics	2	
[ENGR 102] Introduction to Engineering	2	
[ENGR 201] Group Orientation	1	
[ENGR 231] Engineering Statics	3	
[ENGR 254] Materials Engineering	4	
[ENGR 262] Circuit Analysis	4	
[ENGR 290] Engineering Economics	2	
[ENGR 301] Seminar I	1	
[ENGR 302] Seminar II	1	
[ENGR 366] Control Systems	4	
[ENGR 488] Project III	2	
[ENGR 489] Project IV	2	
[CHEM 105] General Chemistry I	4	
[MATH 111] Calculus I	4	
[MATH 112] Calculus II	4	
[MATH 211] Calculus III	4	
[MATH 261] Linear Algebra	3	
[MATH 308] Differential Equations	3	
[PHYS 211] General Physics I	4	
[PHYS 212] General Physics II	4	
<u>Biomedical Concentration</u>		
[ENGR 232] Engineering Dynamics	3	
[ENGR 288] Project I	1	
[ENGR 333] Mechanics of Materials	3	
[ENGR 371] Thermodynamics	3	
[ENGR 372] Fluid Mechanics	4	
[ENGR 375] Bio-Instrumentation and Measurement	3	
[ENGR 388] Project II	1	
[ENGR 410] BME Design	3	
[BIOL 160] Molecular and Cellular Biology or [BIOL 161] Animal Form and Function	3 or 4	
[BIOL 385] Physiology	4	
[STAT 291] Statistics for Mathematical Sciences I	3	

General Education requirements on next page

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General Education Requirements

<u>Courses</u>	<u>Credits</u>	<u>Semester Completed</u>
First Year Seminar	3	
Oral Communications	3	
Created and Called for Community	3	
Mathematical Sciences ([MATH 111])	3 or 4	<u>met by major</u>
Laboratory Science ([CHEM 105])	3 or 4	<u>met by major</u>
Science, Technology & the World	3	<u>waived</u>
Two of the following:	6	
Social Science (3)		
European History (3)		
United States History (3)		
Literature	3	
Philosophy and Religion	3	
Arts	3	<u>waived</u>
Language/Cross Cultural		
First Semester of Language	3	
Second Semester of Language	3	
One of the following*:	2 or 3	
Third Semester of Language		
Cross Cultural		
Non-Western Studies		
Bible	3	
Christian Beliefs	3	
Health and Physical Fitness		
Introduction to Wellness	2	
Activity Course	1	
One of the following:	3	
Ethics (3)		
World Views (3)		
Pluralism in Contemporary Society (3)		
Writing Enriched Course		

*The choice of either a third semester of a language, a cross cultural, or a non-western studies course applies **only** to the Engineering major.

SUMMARY OF DEGREE REQUIREMENTS:

General Education	41-42
Major Core Requirements	58
Concentration Requirements	31-32
Total	130-132

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