

# BIOMEDICAL ENGINEERING (starting the Freshman program Fall 2006 or later)

## Freshman Year

Fall Semester		Spring Semester	
Math 1271 or 1371 Calc I (1371 Fall only)	4	Math 1272 or 1372 Calc II (Math 1271 or Math 1371)	4
Chem 1021 Chem Prin I	4	UD Phys 1302w Intro Phys II (1301w, &Math 1272 or &1372)	4
Phys 1301w Intro to Phys I (&Math 1271or &1371)	4	Chem 1022 Chem Prin II (Chem 1021)	4
EngC 1011 Composition	4	Lib Ed	3
BME n 1601 UG Seminar I	1	BME n 1602 UG Seminar II	1
<b>17</b>		<b>16</b>	

## Sophomore Year

Fall Semester		Spring Semester	
UD BME n 2401 Programming for BMEs (Math 1272, Phys 1302)	2	Stat 3021 Applied Statistics (Math 1272)	3
UD Chem 2301 Org Chem I (Chem 1022)	3	UD Math 2374 or 2263 Multivariable Calc (Math 1272 or 1372)	4
UD BME 2501 Molec/Cell Biol w/ lab (Math 1372, Chem 1022, Phys 1302)	4	Lib Ed	6
UD Math 2373 or 2243 Lin Alg/Diff Eqs (Math 1272 or 1372)	4	UD BME n 2101 Biomedical Thermodynamics (BME n 2501, Chem 1022, &Math 2373, &Math 2374)	3
Lib Ed	3		16
<b>16</b>			

Shaded courses are offered only once each year. Prerequisites are indicated under the course number.

UD You must have at least a 2.80 technical GPA for admission to upper division Biomedical Engineering. This GPA includes all calculus, physics, chemistry, computer science, and engineering courses. In addition, courses designated UD need to be completed before you apply, unless you have at least a 3.10 tech GPA and the courses required for UD in progress.

## Junior Year

Fall Semester		Spring Semester	
Phsl 3063 Principles of Human Physiology BME Upper Division	6	BME n 3301 Biomaterials BME Upper Division	4
BME n 3001 Biomechanics BME Upper Division	4	BME n 3101 Biomedical Transport Proc. BME Upper Division	4
BME n 3201 Bioelectricity and Bioinstrumentation BME Upper Division	4	BME n 3401: Biomedical Systems Analysis/Control. BME Upper Division	4
	14	Eng Electives	3
		<b>15</b>	

## Senior Year

Fall Semester		Spring Semester	
BME n 4001w Design I (BME n 2101, 2401, 2501, 3001, 3101, 3201, 3301, 3401, Phsl 3063 Completed or in Progress)	3	BME n 4002w Design II (BME n 4001)	3
Eng Electives	12	Eng Electives	12
Lib Ed	3		18
Courses with a double-lined border are Writing Intensive (WI) courses and count toward your writing intensive requirement. You are required to complete four writing intensive courses, one of which must be at the 3xxx-level and one of which must be in your major department.			

**Math 2373 and 2243 are Linear Algebra and Differential Equations.**  
**Math 2374 and 2263 are Multivariable Calculus and Vector Analysis.**

You need 127 Semester credits to earn your degree