Biological Engineering 2014-2015

BIOLOGICAL ENGINEERING PROGRAM PROGRESS FORM

Applies to students matriculating in the Fall Semester of 2014 or later.

Name:		Empl I	D:			
E-mail:		Adviso	or:			
Minor:			Anticipated Graduation Date:			
Concentration:		Double Major:				
	Course Title and Required Credits	Course (Credits)	Semester	Credits	Grade	
1.	Mathematics: 16 credits Calculus for Engineers I* Calculus for Engineers II* Engineering Math* (Differential Equations) Engineering Math* (Linear Algebra) *Must earn at least a C- or repeat course	MATH 1910 (4) MATH 1920 (4) MATH 2930 (4) MATH 2940 (4)				
2.	Physics: 8 credits Mechanics Electromagnetism	PHYS 1112 (4) PHYS 2213 (4)				
3.	Chemistry: 7 credits General Chemistry Organic Chemistry	CHEM 2070 or 2090 (4) CHEM 1570, 3530 or 3570	(3)			
4.	Biological Sciences: 15 credits Introductory Biological Science Introductory Biological Science Introductory Bio Lab Biochemistry or BIOMG 3300 (4) or 3330 (4) or 3310+3320 (5) 3 Microbiology BIOMI 2900 (3) or CEE 4510 (3) Students following the Bioenvironmental Eng Advanced Bio Sci Elective (to complete 15 credits)		uraged to include M	icrobiology		
5.	Written Expression (First Year Writing Semin	nars): 6 credits				
6.	Liberal Studies: 18 credits (Minimum of six courses at or above 2000 level.) Cultural Analysis (CA) Historical Analysis (HA) Literature and the Arts (LA) Communications in Engineering (CE)	Knowledge, Cognition, and Moral Reasoning (KCM) Social Behavior and Analysis (SBA) Foreign Language (FL, not literature)				

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	Course Title and Required Credits	Course (Credits)	Semester	Credits	Grade			
7								
7.	Computer Programming: 4 credits	DEE 1510 CC 1112 (4)						
	Intro to Computer Programming	BEE 1510 or CS 1112 (4)						
8.	Engineering Distribution and Field Courses	: 46 credits						
	(a) Required Courses							
	Mechanics of Solids	ENGRD 2020 ^a (4)						
	Engineering Statistics and Probability	ENGRD 2700 (3) or CEE 3040 (4)						
	(b) Biological Engineering Core Courses							
	The BEE Experience or ENGRI	BEE 1200 (1) ^b or ENGRI (3) ^c						
	Engineering Distribution**	BEE 2600 or BEE 2510 (3)						
	Students following the Bioenvironmental Engineering concentration should include BEE 2510 and CEE 3510							
	Biological and Bioenv. Transport Processes	BEE 3500 (3)						
	Bio-Fluid Mechanics/Fluid Mechanics	BEE 3310 or CEE 3310 (4)						
	Thermodynamics	BEE 2220 or ENGRD 2210 (3)						
	(c) Biological Engineering Concentration							
	Three courses from one concentration (minimum of 9 credits)							
	Concentration Elective I							
	Concentration Elective II							
	Concentration Elective III	• • • • • • • • • • • • • • • • • • • •						
	(d) Major-approved electives to complete 46 e							
	BEE and other Engineering courses at 2000 lev	vei or above (unless cross listed						
	with a liberal studies course)							
								
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9.	Approved Electives: 6 credits							
		Minimum Credi	ts Require	d: 126				
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	Technical Writing Course							
	Capstone Design Course							
	Laboratory Course							
	DE							
	PE							
	PE							

^aEngineering distribution requirement is satisfied by ENGRD 2020 and ENGRD/BEE 2510 or ENGRD/BEE 2600 ^bStudents matriculating in CALS ^cStudents matriculating in the College of Engineering