

Bioengineering—Major Requirements for BS Degree

Effective Fall 2014

University of California, Merced

Anticipated Graduation Date (ex: May 2018) _____

Full Name: _____ ID #: _____ Email _____

Requirement/ Course Dept #	Course Title	Grade	Units or # Required	Term/Year Completed	Substitute Approved
UCM Requirements					
-UC Entry Level Writing			n/a		
-American History/Institutions			n/a		
-CORE 001	World at Home I		1 course		
-WRI 010	College Composition		1 course		
School Requirements					
-MATH 021	Calculus I Phys Sciences & Eng		4 units		
-MATH 022	Calculus II Phys Sciences & Eng		4 units		
-MATH 023	Vector Calculus		4 units		
-MATH 024	Linear Algebra and Differential Equations		4 units		
-MATH 032	Probability and Statistics		4 units		
-PHYS 008 or PHYS 018	Introductory Physics I		4 units		
-PHYS 009 or PHYS 019	Introductory Physics II		4 units		
-ME 021	Engineering Computing		4 units		
-BIO 001 + BIO 001L	Contemporary Biology + Lab		5 units		
-Arts/Humanities GE			3-4 units		
-Social Science GE			3-4 units		
Major/Core Requirements					
-ENGR 097/197 or SSHA GE			3 units		
-Upper-division Writing Course			4 units		
<i>Engineering Fundamentals</i>					
-ENGR 045	Introduction to Materials		4 units		
-ENGR 057	Statics and Dynamics		4 units		
-ENGR 065	Circuit Theory		3 units		
-ENGR 130	Thermodynamics		3 units		
-ENGR 166	Analog and Digital Electronics		3 units		
<i>Bioengineering Core</i>					
-BIOE 030	Introduction to Bioengineering		4 units		
-BIOE 100	Physiology for Engineers		4 units		
-BIOE 104	Biotransport		4 units		
-BIOE 113	Bioinstrumentation		4 units		
-BIO 002 + BIO 002L	Introduction to Molecular Biology + Lab		5 units		
-BIO 110	The Cell		4 units		
-BIOE 150	Bioengineering Design		3 units		
-CHEM 002	General Chemistry I		4 units		
-CHEM 010	General Chemistry II		4 units		
-CHEM 008	Principles of Organic Chemistry		4 units		
<i>Additional Degree Requirements</i>					
-CHEM 100	Organic Synth and Mechanism		3 units		
-ENGR 191	Professional Seminar		1 unit		
-Choose at least one technical elective (see page 2)			1 course		

Notes/Comments
Advisor Signature/Date:
Student Signature/Date:

This guide in an unofficial document intended to be used for advising/course planning only. This document cannot be used to supersede or waive requirements listed in the UCM Catalog unless approved by your advisor.

Bioengineering—Major Requirements for BS Degree

Effective Fall 2014

University of California, Merced

Anticipated Graduation Date (ex: May 2018) _____

Full Name: _____ ID #: _____ Email _____

Service Learning/ SSHA GE

Students may take either 3 units of ENGR 097/ENGR 197, or 1 SSHA GE course

Term / Course / Team or Title / Units

1.
2.
3.

Technical Elective Courses (Choose 1)

BIOE 103

BIOE 114

BIOE 195

BIO 102

BIO 104

BIO 140

BIO 142

BIO 150

BIO 151

BIO 175

BIO 181

BIO 182

ENGR 155

ENGR 170 + 170L

MSE 113

MSE 114

MSE 118

MATH 131

Course Dept. #	Course Title	Grade	Units	Term/Year Completed