

UNIVERSITY OF CALIFORNIA, DAVIS
Bachelor of Science in Biomedical Engineering
 2019-2020 Undergraduate Curriculum

Lower Division Program

Subject Areas	Courses	Minimum Units
BIS 2A	Introduction to Biology	5
CHE 2A or 2AH; 2B or 2BH; 2C or 2CH	General Chemistry	15
CHE 8A or 118A; CHE 8B or 118B	Organic Chemistry	6
MAT 21A; 21B; 21C OR 21CH; 21D	Calculus	16
MAT 22A	Linear Algebra	3
MAT 22B	Differential Equations	3
PHY 9A or 9HA; 9B, 9C	Classical Physics	15
ENG 6	Engineering Problem Solving	4
ENG 17	Circuits I	4
BIM 1	Introduction to Biomedical Engineering	2
BIM 20	Fundamentals of Bioengineering	4
One course from the following: UWP 1, 1Y, ENL 3, Comp Lit 1, 2, 3, 4, NAS 5 (grade of C- or better required)	Lower Division Composition	4

Upper Division Program

Subject Areas	Courses	Minimum Units
NPB 101 or BIM 116	Physiology	5
ENG 100 or EEC 100	Circuits II	3
ENG 105	Thermodynamics	4
ENG 190	Professional Responsibilities of Engineers	3
BIM 105	Probability and Statistics for Biomedical Engineers	4
BIM 106	Biotransport Phenomena	4
BIM 108	Biomedical Signals and Control	4
BIM 109	Biomaterials	4
BIM 110ABL	Senior Design Experience	8
BIM 111	Biomedical Instrumentation Laboratory	6
Science Electives	According to Specialization	7
Engineering Electives	According to Specialization	24
One course from the following: UWP 101, 102B, 102E, 104A, 104E, 104F, 104I, 104T (grade of C- or better required); or passing the Upper Division Composition Exam offered by the College of Letters and Science	Upper Division Composition or exam	4/0

Minimum Total Units for Major: 157

General Education Electives: 29

MINIMUM TOTAL UNITS FOR B.S. IN BIOMEDICAL ENGINEERING: 186

Additional upper division elective policies:

2 units from CHE118A may be applied towards Science electives if CHE 118A is also used to satisfy lower division subject credit.
 2 units from EEC 100 may be applied towards Engineering electives if EEC 100 is taken to satisfy upper division subject credit.
 Science and Engineering electives are to be selected in consultation with a staff or faculty advisor.