






# Biomedical (Molecular-Cellular) Engr.

FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
BME 101	 MATH 126	BME 202	BME 210	BME 423	PANEL COURSE 2	BME 403L	BME 405L
ENGR 102	CHEM 105bL	MATH 226	MATH 245	PANEL COURSE 1	TECHNICAL ELECTIVE	BME 413	BME 415 or 416L
 MATH 125	GEN ED	PHYS 151L	 BISC 220L	BISC 320L	BISC 330L	EE 202L	CHE 489
 CHEM 105aL	 GEN ED	GEN ED	PHYS 152L	CHEM 322aL	CHEM 322bL	PANEL COURSE 3	WRIT 340
WRIT 150	OPTIONAL ELECTIVE	OPTIONAL ELECTIVE	OPTIONAL ELECTIVE	OPTIONAL ELECTIVE	GEN ED	OPTIONAL ELECTIVE	GEN ED

## ENGINEERING

**BME 101:** Introduction to Biomedical Engineering  
**BME 202:** Control & Comm. in the Nervous System  
**BME 210:** Biomedical Comp. Simulation Methods  
**BME 403L:** Physiological Systems  
**BME 405L:** Senior Projects: Measurements & Instrumentation  
**BME 413:** Bioengineering Signals & Systems  
**BME 415:** Regulation of Medical Products  
**BME 416L:** Development & Regulation of Medical Products  
**BME 423:** Stat. Methods in Biomedical Engineering  
**CHE 489:** Biochemical Engineering  
**EE 202L:** Linear Circuits  
**ENGR 102:** Engineering Freshman Academy  
**PANEL COURSES (CHOOSE 3):**  
**BME 406:** Intro. to Bioengineering in Medicine  
**BME 410L:** Intro. to Biomaterials & Tissue Engr.  
**BME 430:** Principles and Apps. of Systems Biology  
**BME 459L:** Intro. to Nanomedicine & Drug Delivery  
**TECHNICAL ELECTIVES:** Specialized upper division courses you choose for your major/ specialization.

## MATHEMATICS

**MATH 125:** Calculus I  
**MATH 126:** Calculus II  
**MATH 226:** Calculus III  
**MATH 245:** Mathematics of Phys. & Engr.

## SCIENCE

**BISC 220L:** Cell Biology & Physiology  
**BISC 320L:** Molecular Biology  
**BISC 330L:** Biochemistry  
**CHEM 105aL:** General Chemistry  
**CHEM 322aL:** Organic Chemistry  
**PHYS 151L:** Mechanics & Thermodynamics  
**PHYS 152L:** Electricity & Magnetism

## GENERAL EDUCATION

As a USC Viterbi student your General Education (Gen Ed) curriculum will include courses in the Arts, Humanistic Inquiry and Social Analysis.

## WRITING

**WRIT 150:** Writing & Critical Reasoning  
**WRIT 340:** Advanced Writing

## ELECTIVES

Your optional electives are one way to build engineering+ into your curriculum by choosing classes of interest to you.



Courses with this symbol may be satisfied with certain AP, IB or A-Level exams. With each requirement you replace with prior credit, you increase your optional electives, creating more flexibility for you to pursue additional electives and increase your engineering+ education.

*This is a simplified version of a complex curriculum with options and choices made between advisor and student. Course choices can vary by semester and adjust to include relevant topics and materials. Although every attempt has been made to ensure accuracy, the program requirements listed in the USC Catalogue supersede any information which may be contained in this or any other publication of any school or department. The information found in this document is not intended for advising purposes. The University reserves the right to change its policies, rules, regulations, requirements and course offerings at any time.*