

# Biomedical (Electrical) 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	EE 338 or 354L	BME 403L	BME 405L
ENGR 102	CHEM 105bL	ITP 165	EE 109L	EE 202L	TECHNICAL ELECTIVE	BME 413	BME 415 or 416L
MATH 125	GEN ED	MATH 226	MATH 245	EE 250L	BISC 220L	TECHNICAL ELECTIVE	EE 438L or 454L
CHEM 105aL	GEN ED	PHYS 151L	PHYS 152L	TECHNICAL ELECTIVE	GEN ED	BISC 320L	TECHNICAL ELECTIVE
WRIT 150	OPTIONAL ELECTIVE	GEN ED	OPTIONAL ELECTIVE	WRIT 340	OPTIONAL ELECTIVE	GEN ED	CHEM 322aL

## 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 and Regulation of Medical Products  
**BME 423:** Statistical Methods in Biomedical Engineering  
**EE 109L:** Introduction to Embedded Systems  
**EE 202L:** Linear Circuits  
**EE 250L:** Distributed Systems for the Internet of Things  
**EE 338:** Physical Electronics  
**EE 354L:** Introduction to Digital Circuits  
**EE 438L:** Electronic Circuits  
**EE 454L:** Introduction to System-on-Chip  
**ENGR 102:** Engineering Freshman Academy  
**ITP 165:** Introduction to C++ Programming  
**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  
**CHEM 105abL:** 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.*