



# BIOMEDICAL ENGINEERING, B.S. (B.S.B.M.E.)
























**Contacts:** Dr. David Dampier; dampierd@marshall.edu;








 - General Education Course

 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

## Major

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at <https://www.marshall.edu/gened/>.

Code	Title	Credit Hours
<b>Core Curriculum</b>		
<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
MTH 229 	Calculus/Analytic Geom I (CT)	5
	Critical Thinking Course	3
<i>Core 2</i>		
ENG 101 	Beginning Composition	3
ENG 201  	Advanced Composition	3
CMM 103 	Fund Speech-Communication	3
MTH 229  	Calculus/Analytic Geom I (CT)	5
BSC 120 	Principles of Biology	4
	Core II Humanities	3
	Core II Social Science	3
	Core II Fine Arts	3
<i>Additional University Requirements</i>		
	Writing Intensive	3
	Writing Intensive	3
	Multicultural or International	3
BME 465 	Biomedical Engr Capstone I	2
BME 466 	Biomedical Engr Capstone II	2
<b>Major-Specific</b>		
MTH 229 	Calculus/Analytic Geom I (CT)	5
MTH 230 	Calculus/Analytic Geom II	4
MTH 231 	Calculus/Analytic Geom III	4
MTH 335  	Ordinary Diff Equations	3
BSC 120 	Principles of Biology	4
BSC 121 	Principles of Biology	4
BSC 227	Human Anatomy	4
BSC 228 	Human Physiology	4
CHM 211  	Principles of Chemistry I	3
CHM 217 	Principles of Chem Lab I	2
CHM 212  	Principles Chemistry II	3

CHM 218 	Principles of Chem Lab II	2
PHY 211 	University Physics I	4
PHY 213 	University Physics II	4
ENGR 102	Introduction to CAD	2
ENGR 104	The Engineering Profession	1
ENGR 111	Engineering Computations	3
EE 202	Circuits II	3
	or BSC 322 Principles Cell Biology	
ENGR 213 	Statics	3
ENGR 214 	Dynamics	3
ENGR 216	Mech of Deformable Bodies	3
ENGR 219	Engineering Thermodynamics	3
	or CHM 355 Organic Chemistry I	
ENGR 245	Circuits and Instrumentation	3
ENGR 318	Fluid Mechanics	3
EE 202	Circuits II	3
BME 101	Intro to Biomedical Engr	1
BME 201	Biomedical Engineering Seminar	2
BME 302	Engineering Biomechanics	3
BME 305	Intro to Biophysical Measmnt	3
BME 306	Mechanics of Biological Tissue	3
BME 310	Modeling & Simulation Bio Syst	3
BME 405	Mech & Performance Bio Mtrls	3
BME 460	Mechanics of Biofuilids	3
BME 465 	Biomedical Engr Capstone I	2
BME 466 	Biomedical Engr Capstone II	2
<i>BME Technical Electives</i>		
	Select four 300- or 400-level biomedical engineering or closely related courses. The courses must be approved by the student's advisor and the department chair.	12

## Major Information

- Students are required to know and track their degree requirements for graduation or for entrance to a professional school.
- The B.S.B.M.E. degree program requires a minimum of 136 credit hours of coursework.
- Course offerings and course attributes are subject to change each semester. Please consult each semester's schedule of courses for availability and attributes.