

CURRICULUM CLASS OF 2010

The undergraduate program in Biomedical Engineering is built upon a rigorous engineering science foundation that is, in turn, based upon a broad curriculum of natural sciences, mathematics, electives in humanities and social sciences, and design. Although students are encouraged to concentrate their professional electives in a sub-field of interest in biomedical engineering (e.g., biomechanics, bioelectronics, bioelectricity, biomaterials, or tissue engineering) or medical sciences (for pre-med students), there are no formal "tracks" within the sequence. ***The undergraduate curriculum is designed primarily to prepare our undergraduates for advanced study. More than two-thirds of our BSE graduates continue on to graduate or professional training after graduation from Tulane.*** Our philosophy of 'rigorous breadth' in biomedical engineering can best be characterized by the undergraduate curriculum described below.

Tulane University BMEN Undergraduate Curriculum Class of 2010

Year 1

Semester One 18 Hours

	Course Title (Credit Hours)
MATH 121	Calculus I (4)
CHEM 107/117	General Chemistry I & Lab (4)
ENGL 101	Writing (4)
PHYS 131	General Physics I & Lab (4)
TIDES	Tulane Interdisciplinary Experience Seminar (1)
*****	*Service Learn (1) (1 st or 2 nd year)

Semester Two 19 Hours

	Course Title (Credit Hours)
MATH 122	Calculus II (4)
CHEM 108/118	General Chemistry II & Lab (4)
CPSC 101	Software Design and Programming (4)
PHYS 132	General Physics II & Lab (4)
ENGR 241	Statics (3)

Year 2

Semester One 17 Hours

MATH 221	Calculus III (4)
CELL 101/211	General Biology I & Lab (4)
BMEN 201	Experiments & Experimental Design (3)
ENGP 201	Electric Circuits (3)
BMEN 243	Mechanics of Materials (3)

Semester Two 17 Hours

MATH 224	Applied Math (Diff Eqns.) (4)
BMEN 260	Intro Organic & Bio-Chemistries (3)
BMEN 273	Biomedical Electronics & Lab (4)
BMEN 312	Materials Science & Engr (3)
CULTURAL	Cultural Knowledge Elective (3)

Year 3

Semester One 16 Hours

BMEN 303/313	Anatomy & Physiology I & Lab (4)
BMEN 344	Biofluids & Biotransport (3)
BMEN 371	BMEN Seminar (0)
BMEN 398	Junior Testing Period (0)
BMEN 3xx	"Domain" class (3)
*PELECT/BMEN	6xx Professional Elective or Graduate Class (3)
CULTURAL	Cultural Knowledge Elective (3)

Semester Two 15 Hours

BMEN 306/316	Quantitative Physiology & Lab (4)
BMEN 382	Math Modeling (3)
BMEN 398	Junior Testing Period (0)
CULTURAL	Cultural Knowledge Elective (3)
BMEN 490	Research & Prof. Practice I (2)
BMEN 3xx	"Domain" class (3)

Year 4

Semester One 13 Hours

BMEN 403	Team Design I (2)
BMEN 491	Research & Prof. Practice II (2)
BMEN 671	BMEN Seminar (0)
CULTURAL	Cultural Knowledge Elective (3)
CULTURAL	Cultural Knowledge Elective (3)
*PELECT/BMEN	6xx Professional Elective or Graduate Class (3)

Semester Two 12 Hours

BMEN 404	Team Design II (3)
BMEN 672	BMEN Seminar (0)
CULTURAL	Cultural Knowledge Elective (3))
*PELECT/BMEN	6xx Professional Elective or Graduate Class (3)
*PELECT/BMEN	6xx Professional Elective or Graduate Class (3)

127 credit hours

***Students must take 1 one-credit Service Learning class during their first two years (noted in credits for 1st semester of Year 1), 3 Professional Electives and 1 BMEN 6xx graduate course as a follow-up to a BMEN 3xx domain course.**