

Biomedical Engineering
 FOR STUDENTS ENTERING OHIO STATE IN Summer 2007 or LATER

2009-2010

Name: _____ Phone: _____ New to OSU: _____ email: _____@osu.edu

YEAR	AUTUMN	WINTER	SPRING
1	Math 151.0X (Calc & Analyc Geom) 5 _____ Chem. 121 (Gen Chem.)5 _____ Engr 181.01 (Intro to Engr I).....3 _____ Engr 100.16. (Engr Survey) 1 _____	Math 152.0X (Calc & Analyc Geom) 5 _____ Chem. 122 (Gen Chem)..... 5 _____ Physics 131 (Particles & Motion) ... 5 _____ Engr 183.02† (Intro to Engr II) or 183.01 (Intro to Engr II)..... 3 _____	Math 153.0X (Calc & Analyc Geom) 5 _____ Chem. 123 (Gen Chem) 5 _____ Physics 132 (Elect and Magt.) 5 _____ GEC 1 (English 110.) 5 _____
2	Math 254.0X (Calc & Analyc Geom) 5 _____ Physics 133 (Electrodyn & Quant) ..5 _____ Biol 113/115 (General Biology/Lab) 5 _____ ME 410 (Statics).....4 _____	Math 415.0X (Ord & Part Diff Equ) . 4 _____ GEC 2 (2 nd writing) 5 _____ ME 420 (Intro Strength Mat) 4 _____ BME 202 (Intro BME) 3 _____ BME 205 (Num. Simulations in BME) 2 _____	Stat 427 (Prob and Stat I)..... 3 _____ Chem 231 (Intro Organic Chem) 3 _____ MSE 205 (Intro Mat Sci) 3 _____ ME 500 (Fluid, Thermo, Heat) 4 _____ Anat 220 (Human Anatomy Lab)..... 2 _____
3	BioChem 511 (Biochemistry)5 _____ ECE 300 (Circuits).....3 _____ ECE 309 (Circuits Lab).....1 _____ EEOB 232 (Intro Physiology)5 _____	EEOB 415 (Animal Cell & Develop). 4 _____ Chem. 245 (Organic Chem Lab).....2 _____ GEC 3.....5 _____ BME 402 (Meas & Instrum Lab).....2 _____ BME 4X1[†] (Domain 1) 4 _____	GEC 45 _____ BME 403 (Quantitative Physiology) . 4 _____ BME 4X1[†] (Domain 2) 4 _____ BME 4X1[†] (Domain 3) 4 _____
4	GEC 5.....5 _____ BME 501 (Design I)4 _____ BME 503 (Professional Development) 1 _____ BME 581.1 (Seminar)0 _____ ††BME 6/7/xx 1 or *Prof E 1 ...3 _____ ††BME 6/7/xx 2 or *Prof E 2 ...3 _____	GEC 6.....5 _____ BME 502 (Design II) 5 _____ BME 581.2 (Seminar) 0 _____ ††BME 6/7/xx 1 or *Prof E 1 ... 3 _____ ††BME 6/7/xx 2 or *Prof E 2 ... 3 _____	GEC 75 _____ BME 581.3 (Seminar) 1 _____ *Prof E 3..... 3 _____

†referred

Courses printed in **BOLD** above are taught one quarter per year, including all BME courses.
 Please check On-Line Course Offerings for availability of all courses.

GENERAL EDUCATION (35 hrs)

- English & Communication Skills (10)
- English 110..0X (5) _____
- 2nd Writing Course (5) _____
- Writing in core () _____
- Students must take 25 hours across Social Sciences, Historical Study, and Arts & Humanities with a minimum of 5 hours and maximum of 10 hours per category.
- Historical Study (5-10)
- _____ () _____
- _____ () _____
- Arts & Humanities (5-10)
- _____ () _____
- _____ () _____
- Social Sciences (5-10)
- _____ () _____
- _____ () _____
- ETHICS (5 Hours)
- (May overlap w/ a GEC category)
- _____ () _____
- SOCIAL DIVERSITY
- (May overlap w/ a GEC category)
- _____ () _____

†BME Domain Courses (choose *min* of 3)

- BME 411 (Bioimaging) _____
- BME 421 (Biotransport) _____
- BME 431 (Biomaterials) _____
- BME 441 (Biomechanics) _____
- BME 451 (Molecular, Cell and Tissue Eng) _____
- BME 461 (Biomed micro/nano tech) _____
- ††**BME Advanced Courses** (choose 2) for focus following domain courses
- BME 6/7/XX 1 _____
- BME 6/7/XX 2 _____

***PROFESSIONAL ENGINEERING ELECTIVES** (9 hrs)

- ProfE 1 (3) _____
- ProfE 2 (3) _____
- ProfE 3 (3) _____
- Professional engineering electives **MUST** be an *approved sequence of engineering courses* allowing students to achieve professional goals (e.g., independent research, honors thesis, engineering minors, domain depth or breadth, etc.)

Credit hour distribution

- General Education.....35
- Mathematics.....27
- Chemistry.....25
- Physics.....15
- Engineering Sciences.....26
- Life Sciences.....16
- BME Courses (Min).....40
- BME Core Courses22
- BME Domain Courses ...12
- Advanced BME Courses...6
- Professional Engineering Electives...9
- Total Engineering credits (min).....75
- TOTAL HOURS193

Acceptance into the Biomedical Engineering major is limited and will depend on the outcome of the application process that includes information about cumulative point-hour ratio (CPHR) upon completion of the following pre-major courses: *Chemistry 121,122,123; Math 151.0X,152.0X,& 153.0X Physics 131,132, ENGR 181.01, 183.02†* and essay.

Formal admission to BME is required to take BME 202. Students are accepted into the major in Autumn quarter with the applications due in Spring.