

Concurrent ME/BME (Bio-mechanics option) degree – 148 credits

with 2022 ME curriculum changes

Course	Class	Credits	Course	Class	Credits
Semester 1			Semester 2		
MATH 140	Calculus	4	MATH 141	Calculus II	4
CHEM 110	Chemical Principles I	3	PHYS 211	Mechanics	4
CHEM 111	CHEM Lab I	1	CHEM 112	Chem II	3
EDSGN 100	Engr Design	3	CHEM 113	Chem Lab II	1
ENGL 015	Composition	3	BIOL 141	Physiology	3
ECON 102/ 104	Economics (GS)	3	BIOL 162 or 164	Physiology Lab	1
			FYS	FY Seminar	1
		17			17
Semester 3			Semester 4		
MATH 251	Diff. Equations	4	MATH 230	Calculus III	4
E MCH 210	Statics & Strength	5	MATH 220	Matrices	2
CMPS 200	MATLAB	3	E MCH 212	Dynamics	3
PHYS 212	Elect & Magnetism	4	BME 201	Fund of Cells & Molecules	3
			E MCH 315	Engr Materials	2
			E MCH 316	Materials Lab	1
		16			15
Semester 5			Semester 6		
M E 300	Thermodynamics I	3	MATSE 259	Engr. Materials	3
M E 360	Mechanical Design	3	BME 409	Biofluid Mechanics	3
BME 303	Bio-continuum Mechanics	3	BME 401	Numerical Simulations in BME	3
BME 301	Analysis of Phys. Sys.	4	BME 402	Biomed Inst & Meas	3
GHW	Health & Wellness	1.5	BME 403	Biomed Inst Lab	1
Gen ed *		3	Gen ed *		3
		17.5			16
Semester 7			Semester 8		
IE 312	Manuf. Processes	3	BME Related Elect	(See BME guidelines)	3
M E 370	Vibration Mech Syst	3	BME 450W or ME 440W	Design (CAPSTONE)	3
BME 440	BME Prof Seminar	1	M E 410	Heat Transfer	3
M E 340	ME Design Method	3	ME 454	Mechatronics	3
ENGL 202C	Technical Writing	3	GHW	Health & Wellness	1.5
BME 429	Biomech & Tech Lab	2	Gen Ed *		3
		15			16.5
Semester 9					
BME 408	Solid Mechanics of Biological		<div style="border: 1px solid black; background-color: #f5f5f5; padding: 5px;"> <p>ME Substitutions (for ME/BME students):</p> <ul style="list-style-type: none"> ^ EMCH 210 and ^CHEM 111 for EMCH 211 & EMCH 213 ^ BME 303 & BME 409 for ME 320 & ETE ^BME 401 for ME 330 ^BME 402 for ME 348 BME 440 for ME 390/490 BME 429 and BME 403 for ME 435 <p style="text-align: right;">^C or higher required</p> </div>		
ETE Elective (ME)	Materials	3			
M E 450	Modeling	3			
METE	M E Technical Elective	3			
CAS 100A/B	Effective Speech	3			
Gen Ed *		3			
Gen Ed *		3			
		18			
	Total	148			

Courses listed in **boldface italic type** require a grade of C or higher for entrance to an engineering major

Courses listed in **bold face type** require a grade of C or higher for degree requirements

*Students must take 3 credits of United States Cultures (US) and 3 credits of International Cultures (IL) and 6 credits integrative studies (Interdomain or Linked) in conjunction with gen ed courses