

Curriculum Check Sheet

Biomedical Engineering AND Mechanical Engineering 157 Credits

First Year - 28 Credits – Courses (prereqs) Cr FA SP

BIOM101	Intro to Biomedical Engineering	F	3	
MECH100	Intro to Mechanical Engineering (Mech Freshman Only)	F	1	
MATH160	Calculus for Physical Scientists I (MATH 124 or 126)	F,S,SS	4	
CHEM111	General Chemistry I (MATH 118 or 124 or 155 or 160 or 161 or 229 or 261)	F,S,SS	4	
CHEM112	General Chemistry Lab I (CHEM 111 (conc.) or 117 (conc.))	F,S,SS	1	
MECH102	Mechanical Engineering Problem Solving (MATH 160 (conc.) or PH 141 (conc.))	S	3	
MATH161	Calculus for Physical Scientists II (MATH 124; 126)	F,S,SS	4	
PH141	Physics for Scientists and Engineers I (MATH 126; 155 or 160)	F,S,SS	5	
CHEM113	General Chemistry II (CHEM 107 or 111 or 117; MATH 124 or 141 or 155 (or conc.) or 160 (or conc.) or 161 (or conc.) or 229 (or conc.) or 261 (or conc.))	F,S,SS	3	

Second Year - 34 Credits

Cr FA SP

MATH261	Calculus for Physical Scientists III (MATH 161)	F,S,SS	4	
CO150	College Composition (CO 130 or SAT vrb/critcl reading score 600, or ACT English score 26)	F,S,SS	3	
MECH200	Intro to Manufact. Proc	F, S	3	
MECH201	Engineering Design I (MECH 102)	F	2	
PH142	Physics for Sci. and Engineers II (PH 141; MATH 161 or 255)	F,S	5	
MECH202	Engineering Design II (MECH 200; 201)	S	3	
MATH340	Intro to Ordinary Differential Equations (MATH 255 or 261)	F,S,SS	4	
CIVE260	Engr. Mechanics: Statics (MATH 160; PH 141 (or conc.))	F,S, SS	3	
LIFE102	Attributes of Living Systems	F,S,SS	4	
ECE204	Intro to Electrical Engineering (MATH 161; PH 142)	S, SS	3	

Additional AUCC

- 3B Arts and Humanities 6 _____
- 3C Social/Behavioral Science 3 _____
- 3D Historical Perspective 3 _____
- 3E Global/Cultural Awareness 3 _____
- 2B Additional Communication 3 _____

Students: Please note that curricula can change; be sure to check with your adviser regularly to be sure you are on track.

Third Year – 34 Credits

Cr FA SP

MECH337	Thermodynamics (MATH 261; PH 141)	F,S	4	
CIVE 261	Engr. Mechanics: Dynamics (CIVE 260)	F,S, SS	3	
CIVE360	Mechanics of Solids (CIVE 260 or 262)	F,S, SS	3	
CHEM245	Fund. of Org. Chemistry (CHEM 107 or 113)	F,S,SS	4	
LIFE210	Introduction to Eukaryotic Cell Biology (CHEM 111; 112 (or conc.); LIFE 102)	F	3	
BMS300	Principles of Human Physiology (BZ 101 or 110 or LIFE 102; CHEM 103 or 107 or 111)	F,S,SS	4	
MECH307	Mechatronics and Measurement Systems (CIVE 261; ECE 204; MATH 3400)	F,S	4	
MECH325	Machine Design (CIVE 360)	S	3	
AUCC			6	

Fourth Year - 32 Credits

Cr FA SP

BIOM 441	Biomechanics and Biomaterials (BMS 300; MECH 324 (or conc.); MECH 331 (or conc.))	F	3	
MECH331	Intro to Engineering Materials (CHEM 111; 112; PH 142)	F,S	4	
MECH324	Dyn. of Machines (MATH 340 (or conc.); CIVE 260)	F	4	
MECH342	Mech. & Therm. of Flow Processes (MATH 340; MECH 337 (or conc.); PH 141)	F, S	3	
CIVE363	Material Prop. (CIVE 360)	F,S	1	
BIOM 300	Problem-Based Learning BME Lab (BIOM 101; MATH 340)	S	4	
MECH302	Engineering Design III (CIVE 360; MECH 202; 342; 337)	S	3	
MECH338	Thermosciences Lab (MECH 337; 342)	F,S	1	
MECH344	Heat and Mass Transfer (MECH 342)	F,S	3	
STAT315	Stats for Engin. and Scientists (MATH 161 or 255)	F,S,SS	3	
AUCC			3	

Fifth Year – 29 Credits

Cr FA SP

MECH/BIOM 486A	Capstone Design Practicum I (MECH 302; 307; 325)	F	4	
BIOM/MECH	Biom/Mech Tech. Elective		6	
Advanced Writing	BUS 300 or CHEM 301 or CO300 or CO301B or JTC 300	F,S,SS	3	
MECH/BIOM 486B	Capstone Design Practicum II (CIVE 363; MECH 338; MECH/BIOM 486A)	S	4	
BIOM/MECH	Biom/Mech Tech. Elective		6	
AUCC			6	