

COURSE	NAME (PREREQS (";" DENOTES "AND"))	TERM	CR	COURSE	NAME (PREREQS (";" DENOTES "AND"))	TERM	CR
<b>1st Year Fall</b>				<b>1st Year Spring</b>			
BIOM 100	Overview of Biomedical Engineering	F	1	CHEM 112	General Chemistry Lab I (CHEM 111/conc or CHEM 117/conc)	F, S, SS	1
CHEM 111	General Chemistry I (MATH 118 or 127 or 141 or 155 or 160 or 161 or 229 or 261)	F, S, SS	4	<b>ECE 103</b>	DC Circuit Analysis ( <b>MATH 159 or 160</b> )	F, S	3
CO 150	College Composition (CO 130 or placement by ACT or SAT or DSP Survey or Challenge Exam)	F, S, SS	3	LIFE 102	Attributes of Living Systems	F, S, SS	4
<b>ECE 102</b>	Digital Circuit Logic	F, S	4	<b>MATH 161</b>	Calc for Physical Scientists II ((MATH 124 or 127); (MATH 159 or 160))	F, S, SS	4
<b>MATH 160</b>	Calculus for Physical Scientists I ( <b>MATH 124*</b> ; ( <b>MATH 126* or 127*</b> ))	F, S, SS	4	PH 141	Physics for Scientists and Engineers I (MATH 159/conc or MATH 160/conc or (MATH 126/conc; MATH 155/conc) or (MATH 127/conc; MATH 155/conc))	F, S, SS	5
Total 16				Total 17			
<b>2nd Year Fall</b>				<b>2nd Year Spring</b>			
BIOM 200	Fundamentals of Biomedical Engineering (BIOM 100/conc; LIFE 102; MATH 160)	F	2	<b>ECE 202</b>	Circuit Theory Applications ( <b>ECE 103; MATH 161</b> )	S, SS	4
<b>MATH 261</b>	Calculus for Physical Scientists III (MATH 161)	F, S, SS	4	<b>ECE 232</b>	Introduction to Project Practices (ECE 202/conc or ECE 395B/conc or ECE 495B/conc)	F, S	1
<b>PH 142</b>	Physics for Scientists and Engineers II (PH 141; (MATH 161/conc or 255/conc or 271/conc))	F, S	5	<b>ECE/STAT 303</b>	Introduction to Communications Principles ( <b>MATH 261; MATH 340/conc</b> )	S	3
(CS 163 or 164) or (CS 152 and (MATH 151 or STAT 158))	CS 163- CS1 (Java) No Prior Programming Experience ( <b>CS 150A or 150B or 152 or CIS 240 or MATH 124 or 127</b> ) CS 164- CS1 Computational Thinking with Java ( <b>CIS 240* or CS 150A* or 150B* or 152* or 163</b> ) CS 152- Python for STEM (CS 163 or <b>MATH 124* or 125* or 126* or 127* or 141 or 155 or 156 or 157 or 159 or 160</b> ) MATH 151- Mathematical Algorithms in Matlab I (MATH 141 or 155 or 160) STAT 158- Intro to "R" Programming (none)	F, S, SS	3-4	<b>MATH 340</b>	Intro to ordinary Differential Equations (MATH 255 or 261)	F, S, SS	4
Total 14-15				Total 16			
<b>3rd Year Fall</b>				<b>3rd Year Spring</b>			
<b>ECE 311</b>	Linear Systems Analysis I ( <b>MATH 340; ECE 202</b> ; ((ECE 331/conc; ECE 341/conc) or CS 256/conc or ECE 451/conc or ECE 528/conc))	F	3	BIOM 300	Problem-Based Learning BME Lab (BIOM 101 or BIOM 200 or (BIOM 100; CBE 205; MECH 262); (MATH 340 or 345))	S	4
<b>ECE 331</b>	Electronics Principles I (( <b>ECE 202</b> ; ECE 311/conc; ECE 341/conc; <b>MATH 340; PH 142</b> ) or ( <b>ECE 202</b> ; ECE 311/conc; ECE 451/conc; <b>MATH 340; PH 142</b> ); or CS 356/conc or ECE 528/conc))	F	4	BMS 300	Principles of Human Physiology ((BZ 101 or 110 or LIFE 102); (CHEM 103 or 107 or 111))	F, S, SS	4
<b>ECE 341</b>	Electromagnetics Fields and Devices I ( <b>ECE 202; MATH 340; PH 142</b> ; ECE 311/conc; ECE 331/conc)	F	3	<b>ECE 332</b>	Electronics Principles II ( <b>ECE 331</b> )	S	4
BME BE	BME Broad Elective	F, S, SS	3	<b>ECE 342</b>	Electromagnetic Fields and Devices II ( <b>ECE 341</b> )	S	3
AUCC		F, S, SS	3	Total 15			
Total 16				Total 15			
<b>4th Year Fall</b>				<b>4th Year Spring</b>			
CHEM 113	General Chemistry II ((CHEM 107 or 111 or 117); (MATH 124 or 127 or 141/conc or 155/conc or 160/conc or 161/conc or 229/conc or 261/conc))	F, S, SS	3	BIOM 431	Biomedical Signal and Image Processing ( <b>ECE/STAT 303; ECE 311; PH 142</b> )	S	3
<b>ECE 404</b>	Experiments in Optical Electronics (ECE 441/conc)	F	2	CHEM 245	Fundamentals of organic Chemistry (CHEM 107 or 113)	F, S, SS	4
<b>ECE 441</b>	Optical Electronics ( <b>ECE 340 or 342</b> )	F	3	<b>ECE 457</b>	Fourier Optics ( <b>ECE 311; ECE 342</b> )	S	3
MECH 337	Thermodynamics (MATH 261; PH 141)	F, S	4	ECON 202	Principles of Microeconomics (MATH 117 or 118 or 127 or 141 or 155 or 160)	F, S, SS	3
PH 353	Optics and Waves (MATH 261; PH 142)	F	4	MECH 262	Engineering Mechanics (MATH 161; PH 141)	S	4
Total 16				Total 17			
<b>5th Year Fall</b>				<b>5th Year Spring</b>			
BIOM 486A	Biomedical Design Practicum: Capstone Design I (BIOM 300; ((BIOM 421; CBE 320; CBE 442) or (BIOM 431; ECE 311; ECE 332; ECE 342) or (BIOM 441; MECH 301A; MECH 301B/conc; MECH 307))	F	4	BIOM 486B	Biomedical Design Practicum: Capstone Design II (BIOM 486A; (PH 353 or (CBE 451 or ECE 312) or (MECH 325; MECH 344))	S	4
<b>ECE-TE</b>	ECE Technical Elective ( <b>DARS Change pending - 9 cr of EE TE or 8 cr TE + ECE 232</b> )		3	<b>ECE-TE</b>	ECE Technical Elective ( <b>DARS Change pending - 9 cr of EE TE or 8 cr TE + ECE 232</b> )		3
PH 451	Intro Quantum Mechanics I ( <b>PH 314</b> ; (MATH 272 or 340 or 345))	F	3	<b>ECE-TE</b>	ECE Technical Elective ( <b>DARS Change pending - 9 cr of EE TE or 8 cr TE + ECE 232</b> )		2
CO 301B or JTC 300	CO 301B: Writing in Disciplines: Science JTC 300: Strategic Writing & Communication (CO 150 or HONR 193 for both)	F, S, SS	3	AUCC		F, S, SS	3
AUCC		F, S, SS	3	AUCC		F, S, SS	3
Total 16				Total 15			

\* - All course prerequisites for required undergraduate ECE courses must be completed with a C or better

Please note that curricula can change; be sure to check DARS/Degree Audit and with your advisors regularly to ensure you are on track.

AUCCs- Additional All University Core Courses (click here for list)	
3 credits - 1C Diversity, Equity, and Inclusion:	
6 credits - 3B Arts and Humanities:	_____
3 credits - 3C Social/Behavioral Science:	ECON 202
3 credits - 3D Historical Perspective:	

Key:
"conc." = concurrent enrollment Term: F = Fall, S = Spring, SS = Summer Session
Grey indicates Biomedical Engineering courses
Light green indicates labs
Red indicates time-consuming/difficult courses
<b>Must have at least a "C" in BOLDDED courses</b>
<b>BOLDDED and * = Must have at least a "B" in courses</b>