

Biomedical Engineering and Electrical Engineering with Lasers and Optics Name: _____

Honors Track 2 Curriculum Check Sheet		158 or 159 credits					
COURSE	NAME (PREREQS)	TERM*	CR	COURSE	NAME (PREREQS)	TERM*	CR
1st Year Fall				1st Year Spring			
HONR 192	Honors First Year Seminar	F	4	CO 150	College Composition (CO 130 or placement by ACT/SAT or DSP Survey or Challenge Exam)	F, S, SS	3
CHEM 111	General Chemistry I (MATH 118 or 141 or 155 or 160 or 161 or 229 or 261)	F, S, SS	4	MATH 161	Calculus for Physical Scientists II (MATH 124; MATH 159 or 160)	F, S, SS	4
CHEM 112	General Chem Lab I (CHEM 111 or 117 or conc.)	F, S, SS	1	ECE 103	DC Circuit Analysis (MATH 160)	F, S	3
MATH 160	Calculus for Physical Scientists I (MATH 124 (B or better); MATH 126 (B or better))	F, S, SS	4	PH 141	Physics for Scientists and Engineers I (MATH 126 or conc.; MATH 155 or 159 or 160 or conc.)	F, S, SS	5
ECE 102	Digital Circuit Logic	F, S	4				
	Total		17				Total 15
2nd Year Fall				2nd Year Spring			
BIOM 101	Introduction to Biomedical Engineering	F	3	ECE 202	Circuit Theory Apps (ECE 103, MATH 160)	S,SS	4
CS 163 OR CS 164 OR CS155, CS156, CS157	Java (CS1) No Prior Programming (MATH 124) OR Java (CS1) Prior Programming (MATH 124) OR Unix and C Programming I (CS 155 or conc.; MATH 118) & II (CS 156 or conc.; MATH 118)	F, S	4	MATH 340 ^A	Introduction to Ordinary Differential Equations (MATH 255 or 261) -- OR -- Differential Equations (MATH 229 or MATH 369; MATH 255 or MATH 261)	F, S, SS	4
MATH 261 ^A	Calculus for Physical Scientists III (MATH 161)	F, S, SS	4	PH 314	Intro to Modern Physics (PH 142; MATH 261 or conc.)	S	4
PH 142	Physics for Scientists and Engineers II (PH 141; MATH 161 or 255 or 271 or conc.)	F, S	5	ECE / STAT 303	Introduction to Communication Principles (MATH 340 or 345 or conc.)	S	3
	Total		15 or 16	AUCC		F, S, SS	Total 18
3rd Year Fall				3rd Year Spring			
HONR 292 OR 293	Honors Seminar -- Knowing in Arts & Humanities OR -- Knowing Across Cultures (HONR 193)	F, S	3	BIOM 300	Problem-Based Learning BME Lab (BIOM 101; MATH 340 or 345)	S	4
ECE 311	Linear Systems Analysis I (ECE 202; MATH 340 or MATH 345)	F	3	ECE 332	Electronics Principles II (ECE 331)	S	4
ECE 331 ^A	Electronics Principles I (ECE 202; MATH 340 or 345; PH142)	F	4	ECE 342 ^A	Electromagnetic Fields and Devices II (ECE 341)	S	3
ECE 341 ^A	Electromagnetics Fields and Devices I (ECE 202; MATH 340 or 345; PH 142)	F	3	BMS 300	Principles of Human Physiology (BZ 101 or 110 or LIFE 102; CHEM 103 or 107 or 111)	F, S, SS	4
LIFE 102 ^A	Attributes of Living Systems	F, S, SS	4	AUCC		F, S, SS	Total 18
	Total		14				Total 18
4th Year Fall				4th Year Spring			
CHEM 113	Gen Chem II (CHEM 107 or 111 or 117; MATH 124 or MATH 141, 155, 160, 161, 229, 261 or conc.)	F, S, SS	3	BIOM/ECE-TE	BIOM/ECE Crosslisted Technical Elective (BIOM 431 - ECE 303; ECE 311; PH 142)	S	3
ECE 404	Experimental Optical Electronics (conc. w/ ECE 441)	F	2	ECE 457	Fourier Optics (ECE 311; ECE 342)	S	3
ECE 441	Optical Electronics (ECE 342)	F	3	MECH 262	Engineering Mechanics (MATH 161; PH 141)	S	4
PH 353	Optics and Waves (PH 142; MATH 261)	F	4	CHEM 245	Fundamentals of Organic Chem. (CHEM 107 or 113)	F, S, SS	4
LIFE 210 ^A & LIFE 211 ^A	Introductory Eukaryotic Cell Biology (LIFE 102; CHEM 111; CHEM 112) NOTE: LIFE 211 (1 cr recitation) is required and only needed if LIFE 210 is taken as an Honors course	F	4	ECON 202	Principles of Microeconomics (MATH 117 or 118 or AUCC 3C)	F, S, SS	3
	Total		16				Total 17
5th Year Fall				5th Year Spring			
BIOM 486A	Biomedical Design Practicum: Capstone Design I (BIOM 300; BIOM 330 or BIOM 441 or BIOM/ECE-TE Crosslisted TE)	F	4	BIOM 486B	Biomedical Design Practicum: Capstone Design II (BIOM 486A)	S	4
ECE-TE	ECE Technical Elective _____		3	ECE-TE	ECE Technical Elective _____		3
ECE-TE	ECE Technical Elective _____		3	HONR 499	Senior Honors Thesis (HONR 399)	F, S, SS	3
PH 451	Introductory Quantum Mechanics I (PH 314; MATH 340 or 345)	F	3	MECH 337	Thermodynamics (MATH 261; PH 141)	F, S	4
HONR 399	Pre-Thesis - Honors	F, S	1	AUCC		F, S, SS	Total 17
CO 301B OR JTC 300	Writing in the Disciplines: Sciences OR Professional & Technical Communication (CO 150 or HONR 193)	F, S, SS	3				Total 17
	Total		17				Total 17

Please note that curricula can change; be sure to check with your advisers regularly to ensure you are on track.

Track 2 Honors Program Required Courses in BLUE:
* HONR 192, 292 or 293, 399, 499
* 15 credits of honors courses in major
^A Honors Sections offered in these regular classes.

PLI- 11 seminar credits must be completed prior to graduation:
www.engr.colostate.edu/pli

Additional All University Core Courses (AUCCs)
**HONR 292 counts as 3 cr - 3B Arts and Humanities (A&H):
3B A&H; HONR 293 counts as 3 cr - 3C Social/Behavioral Science: ECON 202
3E G/C; HONR 293 counts as 3 cr - 3D Historical Perspective:
**3 cr - EITHER 3B A&H OR 3E Global/Cultural Awareness:

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