

Honors Track 1 Curriculum Check Sheet - Effective FA 18 and after

Program Total Credits = **166**

COURSE	NAME (PREREQS (";" DENOTES "AND"))	TERM	CR	COURSE	NAME (PREREQS (";" DENOTES "AND"))	TERM	CR
1st Year Fall				1st Year Spring			
BIOM 100	Overview of Biomedical Engineering	F	1	ECE 103	DC Circuit Analysis (MATH 159 or 160)	F, S	3
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	LIFE 102	Attributes of Living Systems	F, S, SS	4
ECE 102	Digital Circuit Logic	F, S	4	MATH 161	Calc for Physical Scientists II ((MATH 124 or 127); (MATH 159 or 160))	F, S, SS	4
HONR 192	Honors First Year Seminar	F, S	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
MATH 160	Calculus for Physical Scientists I (MATH 124* ; (MATH 126* or 127*))	F, S, SS	4				
	Total		17			Total	16
2nd Year Fall				2nd Year Spring			
BIOM 200	Fundamentals of Biomedical Engineering (BIOM 100/conc; LIFE 102; MATH 160)	F	2	ECE 202	Circuit Theory Applications (ECE 103; MATH 161)	S, SS	4
CHEM 112	General Chemistry Lab I (CHEM 111/conc or CHEM 117/conc)	F, S, SS	1	ECE 232	Introduction to Project Practices (ECE 202/conc or ECE 395B/conc or ECE 495B/conc)	F, S	1
CS 150B [†]	Culture and Coding: Python <i>See footnote for alternative options</i>	F, S	3	HONR 193	Honors Seminar (HONR 192)	F, S	3
MATH 261	Calculus for Physical Scientists III (MATH 161)	F, S, SS	4	MATH 340	Intro to ordinary Differential Equations (MATH 255 or 261)	F, S, SS	4
PH 142	Physics for Scientists and Engineers II (PH 141; (MATH 161 or 255 or 271/conc))	F, S	5	ECE/STAT 303	Introduction to Communications Principles (MATH 261; MATH 340/conc)	S	3
	Total		15			Total	15
3rd Year Fall				3rd Year Spring			
ECE 311	Linear Systems Analysis I (MATH 340; ECE 202 ; ((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
ECE 331	Electronics Principles I ((ECE 202 ; ECE 311/conc; ECE 341/conc; MATH 340; PH 142) or (ECE 202 ; ECE 311/conc; ECE 451/conc; MATH 340; PH 142 ; or CS 356/conc or ECE 528/conc))	F	4	ECE 312	Linear Systems Analysis II (ECE 311)	S	3
ECE 341	Electromagnetics Fields and Devices I (ECE 202; MATH 340; PH 142 ; ECE 311/conc; ECE 331/conc)	F	3	ECE 332	Electronics Principles II (ECE 331)	S	4
BME BE	BME Broad Elective	F, S, SS	3	ECE 342	Electromagnetic Fields and Devices II (ECE 341)	S	3
HONR 292	Honors Seminar (HONR 192; 193)	F, S	3	ECON 202	Principles of Microeconomics (MATH 117 or 118 or 127 or 141 or 155 or 160)	F, S, SS	3
A, B, or C	*HONR 292B is recommended to fulfill AUCC 3B			(AUCC 3C)			
	Total		16			Total	17
4th Year Fall				4th Year Spring			
BMS 300	Principles of Human Physiology ((BZ 101 or 110 or LIFE 102); (CHEM 103 or 107 or 111))	F, S, SS	4	BIOM 431	Biomedical Signal and Image Processing (ECE/STAT 303; ECE 311; PH 142)	S	3
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	CHEM 245	Fundamentals of organic Chemistry (CHEM 107 or 113)	F, S, SS	4
ECE 251	Introduction to Microcontrollers and IoT (ECE 102)	F, S	4	ECE-TE	ECE Technical Elective _____	F, S, SS	4
HONR 392	Honors Seminar (HONR 193)	F, S	3	HONR 492	Honors Senior Seminar (HONR 392)	F, S	3
CS 164 [†]	CS1- Computational Thinking with Java (CS 150A* or CS 150B* or CS 152* or CS 163 or CIS 240*) <i>See footnote for alternative options</i>	F, S	4	MECH 262	Engineering Mechanics (MATH 161; PH 141)	S	4
	Total		18			Total	18
5th Year Fall				5th Year Spring			
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
BME-TE	BME Technical Elective _____		3	BME-TE	BME Technical Elective _____		3
ECE-TE	ECE Technical Elective _____	F, S, SS	3	ECE-TE	ECE Technical Elective _____	F, S, SS	3
HONR 399	Pre-Thesis - Honors	F, S	1	ECE-TE	ECE Technical Elective _____	F, S, SS	3
MECH 337	Thermodynamics (MATH 261; PH 141)	F, S	4	HONR 499	Senior Honors Thesis (HONR 399)	F, S, SS	3
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				
	Total		18			Total	16

* - 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 with your advisers regularly to ensure you are on track.

Track 1 Honors Program Required Courses in BLUE:

- * HONR 192, 193, 292 A, B, or C, 392, 399, 492, 499
 - * One 200 or 300 level honors course in major (3 credits)
 - * One 300 or 400 level honors course in major (3 credits)
- [Click here to find list of honors course offerings.](#)

Key:

- /conc = may be taken concurrently Term: F = Fall, S = Spring, SS = Summer Session
- Grey indicates Biomedical Engineering courses
- Light green indicates labs
- Red indicates exceptionally time-consuming/difficult courses
- Must have at least a "C" in BOLDED courses**
- BOLDED and * = Must have at least a "B" in courses**