

Honors Track 1 Curriculum Check Sheet - Effective FA18 and after

Program Total Credits = 159

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	LIFE 102	Attributes of Living Systems	F, S, SS	4
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	MATH 161	Calc for Physical Scientists II ((MATH 124 or 127); (MATH 159 or 160))	F, S, SS	4
CHEM 112	General Chemistry Lab I (CHEM 111/conc or CHEM 117/conc)	F, S, SS	1	MECH 105	Mechanical Engineering Problem Solving (MECH 103; PH 141/conc; (MATH 159/conc or 160/conc))	F, S	3
MATH 160	Calculus for Physical Scientists I (All require a B or better: MATH 124; (MATH 126 or 127))	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
HONR 192	Honors First Year Seminar	F, S	4				
MECH 103	Introduction to Mechanical Engineering	F, S	3				
	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	MATH 340	Intro to ordinary Differential Equations (MATH 255 or 261)	F, S, SS	4
CIVE 260	Engineering Mechanics: Statics (PH 141; (MATH 159 or 160))	F, S, SS	3	MECH 200A	Intro to Manufacturing Processes: Lecture (MECH 105)	F, S, SS	2
MATH 261	Calculus for Physical Scientists III (MATH 161)	F, S, SS	4	MECH 200B	Intro to Manufacturing Processes: Lab (MECH 200A/conc)	F, S, SS	1
MECH 201	Engineering Design I (MECH 105)	F, S	2	CIVE 261	Engineering Mechanics: Dynamics (CIVE 260)	F, S, SS	3
PH 142	Physics for Scientists and Engineers II (PH 141; (MATH 161/conc or 255/conc or 271/conc))	F, S, SS	5	HONR 193	Honors Seminar (HONR 192)	F, S	3
	Total		16	MECH 231	Engineering Experimentation (PH 142; MECH 105)	F, S	3
							Total 16

3rd Year Fall				3rd Year Spring			
STAT 315	Statistics for Engineers and Scientists (MATH 155 or 159 or 160)	F, S, SS	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
MECH 202	Engineering Design II (MECH 201; MECH 200A/conc; MECH 200B/conc)	F, S	3	BMS 300	Principles of Human Physiology ((BZ 101 or 110 or LIFE 102); (CHEM 103 or 107 or 111))	F, S, SS	4
MECH 337	Thermodynamics (MATH 261; PH 141)	F, S	4	MECH 324	Dynamics of Machines (CIVE 261; MATH 340/conc)	F, S	4
MECH 342	Mechanics & Thermodynamics of Flow Processes (MATH 340/conc; PH 141; MECH 337/conc); HONR Section also requires reg MECH 495)	F, S	3	HONR 292	Honors Seminar (HONR 192; 193) *HONR 292B is recommended to fulfill AUCC 3B	F, S	3
CIVE 360	Mechanics of Solids (CIVE 260)	F, S, SS	3				
	Total		16				Total 15

4th Year Fall				4th Year Spring			
MECH 325	Machine Design (CIVE 360)	F, S	3	HONR 392	Honors Seminar (HONR 193)	F, S	3
MECH 331A	Intro to Engineering Materials: Lecture (CHEM 111; CHEM 112; MECH 231)	F, S	3	MECH 301A	Engineering Design III: Finite Element Analysis (CIVE 360; MECH 202/conc; MECH 342)	F, S	1
MECH 331B	Intro to Engineering Materials: Lab (CHEM 111; CHEM 112; MECH 231; MECH 331A/conc)	F, S	1	MECH 301B	Engineering Design III: Computational Fluid Dynamics (CIVE 360; MECH 202/conc; MECH 301A/conc; MECH 342)	F, S	1
BIOM 441	Biomechanics and Biomaterials (MECH 342; (BMS 300/conc; CIVE 360; MECH 324/conc); (MECH 331/conc or MECH 331B/conc; MECH 331A/conc))	F	3	MECH 307	Mechatronics and Measurement Systems (CIVE 261; ECE 204; MATH 340; MECH 231)	F, S	4
ECE 204	Intro to Electrical Engineering (MATH 161; PH 142)	F, S	3	MECH 344	Heat and Mass Transfer (MECH 342)	F, S	3
BME BE	BME Broad Elective _____	F, S, SS	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
	Total		16				Total 15

5th Year Fall				5th Year Spring			
BIOM 486A	Biomedical Design Practicum: Capstone Design I (BIOM 300; (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
CHEM 245	Fundamentals of Organic Chemistry (CHEM 107 or 113)	F, S, SS	4	HONR 492	Honors Senior Seminar (HONR 392)	F, S	3
HONR 399	Pre-Thesis - Honors	F, S	1	HONR 499	Senior Honors Thesis (HONR 399)	F, S, SS	3
MECH 338	Thermal/Fluid Sciences Lab (MECH 337; MECH 342; MECH 344/conc)	F, S	1	BME-TE	BME Technical Elective _____	F, S, SS	3
Advanced Writing	CHEM 301 or CO300 or CO301B or JTC 300 or LB 300 (CO150 or HONR193, check course catalog for all prereqs)	F, S, SS	3	ME-TE	MECH Technical Elective _____	F, S	3
BME-TE	BME Technical Elective _____	F, S, SS	3				
	Total		16				Total 16

Please note that curricula can change; be sure to check DARS/Degree Audit and with your advisors 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