

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

Program Total Credits = 163

COURSE	NAME (PREREQS (";" DENOTES "AND"))	TERM	C	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	<b>ECE 103</b>	DC Circuit Analysis ( <b>MATH 160</b> )	F, S	3
CHEM 111	General Chemistry I (MATH 118 or 141 or 155 or 160 or 161 or 229 or 261; CHEM 105 or an appropriate score in the chemistry preparation module)	F, S, SS	4	LIFE 102	Attributes of Living Systems	F, S, SS	4
<b>ECE 102</b>	Digital Circuit Logic	F, S	4	MATH 161	Calculus for Physical Scientists II (MATH 124; MATH 159 or 160)	F, S, SS	4
HONR 192	Honors First Year Seminar	F	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
<b>MATH 160</b>	Calculus for Physical Scientists I ( <b>MATH 124 and 126 (B or better)</b> )	F, S, SS	4				
	<b>Total</b>		<b>17</b>			<b>Total</b>	<b>16</b>
<b>2nd Year Fall</b>				<b>2nd Year Spring</b>			
BIOM 200	Fundamentals of Biomedical Engineering (BIOM 100 or conc.; LIFE 102; MATH 160)	F	2	<b>ECE 202</b>	Circuit Theory Applications ( <b>ECE 103, MATH 160</b> )	S, SS	4
CHEM 112 <sup>^</sup>	General Chemistry Lab I (CHEM 111 or 117 or conc.)	F, S,	1	HONR 193	Honors Seminar (HONR 192)	S	3
CS 163 OR 164	Java (CS1) No Prior Programming ( <b>MATH 124</b> ) OR Java (CS1) Prior Programming ( <b>MATH 124</b> )	F, S	4	<b>MATH 340<sup>^</sup></b>	Introduction to Ordinary Differential Equations (MATH 255 or 261)	F, S, SS	4
MATH 261 <sup>^</sup>	Calculus for Physical Scientists III (MATH 161)	F, S, SS	4	<b>ECE / STAT 303</b>	Introduction to Communication Principles ( <b>MATH 261</b> ; MATH 340 or 345 or conc.)	S	3
<b>PH 142</b>	Physics for Scientists and Engineers II (PH 141; MATH 161 or 255 or 271 or conc.)	F, S	5	ECON 202 (AUCC 3C)	Principles of Microeconomics (MATH 117 or 118 or 141 or 155 or 160)	F, S, SS	3
	<b>Total</b>		<b>16</b>			<b>Total</b>	<b>17</b>
<b>3rd Year Fall</b>				<b>3rd Year Spring</b>			
<b>ECE 311<sup>^</sup></b>	Linear Systems Analysis I ( <b>ECE 202, MATH 340 or 345, ECE 331</b> or conc.; ECE 341 or ECE 451 or 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, MATH 340 or 345, PH142</b> ; ECE 311 or conc.; ECE 341 or ECE 451 or conc.)	F	4	<b>ECE 312</b>	Linear Systems Analysis II ( <b>ECE 311</b> )	S	3
<b>ECE 341<sup>^</sup></b>	Electromagnetics Fields and Devices I ( <b>ECE 202, MATH 340 or 345, PH 142</b> ; ECE 311 or conc.; ECE 331 or 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<sup>^</sup></b>	Electromagnetic Fields and Devices II ( <b>ECE 341</b> )	S	3
HONR 292 OR 293	Honors Seminar -- Knowing in Arts & Humanities OR -- Knowing Across Cultures (HONR 193)	F, S	3				
	<b>Total</b>		<b>16</b>			<b>Total</b>	<b>14</b>
<b>4th Year Fall</b>				<b>4th Year Spring</b>			
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 ( <b>ECE 303, ECE 311, PH 142</b> )	S	3
CHEM 113	General Chemistry II (CHEM 107 or 111 or 117; MATH 124 or MATH 141, 155, 160, 161, 229, 261 or conc.)	F, S, SS	3	CHEM 245	Fundamentals of Organic Chemistry (CHEM 107 or 113)	F, S, SS	4
<b>ECE 251</b>	Introduction to Microprocessors ( <b>ECE 102</b> )	F	4	ECE-TE	ECE Technical Elective _____	F, S, SS	3
HONR 392	Honors Seminar (HONR 193)	F, S	3	HONR 492	Honors Senior Seminar (HONR 392)	F, S	3
MECH 337	Thermodynamics (MATH 261; PH 141)	F, S	4	MECH 262	Engineering Mechanics (MATH 161; PH 141)	S	4
	<b>Total</b>		<b>18</b>			<b>Total</b>	<b>17</b>
<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 301; MECH 307))	F	4	BIOM 486B	Biomedical Design Practicum: Capstone Design II (BIOM 486A; (CBE 451) or (ECE 312) or (MECH 325; MECH 344; MECH 402) or (PH 353)	S	4
BME-TE	BME Technical Elective _____	F, S, SS	3	BME-TE	BME Technical Elective _____	F, S, SS	3
ECE-TE	ECE Technical Elective _____	F, S,	3	ECE-TE	ECE Technical Elective _____	F, S,	3
ECE-TE	ECE Technical Elective _____	F, S, SS	3	ECE-TE	ECE Technical Elective _____	F, S, SS	2
HONR 399	Pre-Thesis - Honors	F, S	1	HONR 499	Senior Honors Thesis (HONR 399)	F, S, SS	3
CO 301B OR JTC 300	CHEM 301 or CO300 or CO301B or JTC 300 or LB 300 (CO150, HONR193)	F, S, SS	3				
	<b>Total</b>		<b>17</b>			<b>Total</b>	<b>15</b>

\* - 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 (or 293), 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)
- <sup>^</sup> Honors Sections offered in these regular classes.

Key:

"conc." = concurrent enrollment 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**