

**Biosystems Engineering Catalog 2023
Pre- Professional Concentration**

Fall 16 hours	Math 132 or 141 or 147 (3-4) (QR) FA,SP,SU Math 132 Prereq- Math 131 Math 141 Prereq- ACT Math 28 or SAT Math 660	EF 142 or 151 or 157 (4) (EI) FA, SP EF 142 Prereq- EF 141 with C- or better and Math 131 EF 142 Coreq- Math 132 EF 151 Coreq- 141/147 or higher and EF 105 or COSC 101 or CS 102	EF 105 (1) FA, SP Coreq- EF 151 or 157	Chem 122(3) and 123(1) or 128 (4) (NS) FA, SP, SU Prereq-Math 119, recommended background in Math 131	English 101 or 131 (3) FA, SP, SU 101 Standard; 131 English as Second Language	
Spring 17 hours	Math 142 or 148 (4) (QR) FA, SP, SU Prereq- Math 132 or 141 or 147	EF 152 or 158 (4) (NS and EI) FA, SP, SU Prereq- EF 142/151/157 with C or higher Coreq- Math 142 or 148	ME 202 (2) FA, SP, SU Coreq- EF 152 or 158 and Math 142 or 148	Chem 132(3) and 133(1) or 138 (4) FA, SP, SU Prereq- Chem 122 & 123 or 128	English 102 or 112 or 298 or 132 132 (3) FA, SP, SU see catalog for prereqs	BSE 104 (1) SP Coreq- EF 142 or 151 or 157
Fall 17 hours	Math 241 or 247 (4) FA, SP, SU Prereq- Math 142 or 148	ME 231 (3) FA, SP, SU Prereq- EF 152 or 158 and ME 202 with grades of C or better	ME 331 (3) FA, SP, SU Coreq- Math 241 or 247	BSE 201 (1) FA	BSE 221 (3) FA Prereq- Chem 122 and 123 or 128 Coreq- EF 152 or 158	BSE 231 (3) FA Prereq- Chem 122 and 123 or 128 and Math 141 or 147
Spring 16 hours	Math 231 or 237 (3) FA, SP, SU Prereq- Math 142 or 148	Biology 160 or 168 (3) FA, SP, SU Coreq- Chemistry 122 and 123 or 128	Chem 260 or 268 (3) FA, SP, SU formerly Chem 350/358 Prereq- Chem 132 and 133 or 138	Chem 269 (1) FA, SP, SU Prereq- Chem 132 and 133 or 138 Coreq- Chem 260 or 268	ME 321 (3) FA, SP, SU Prereq- ME 202 with C or better and Math 142/148 with C better	BSE 321 (3) SP Prereq- BSE 221 or ENVE 200
Fall 15 hours	Philosophy 244 (3) FA, SP Arts & Humanities	BSE 326 (3) FA, SP Prereq- EF 152 or 158 and Math 241 or 247	BSE 351 (3) FA, SP Prereq- EF 152 or 158 and Math 231 or 237	Stats 251 (3) FA, SP, SU or IE 200 (3) FA, SP Prereq- Math 142 or 148	English 360 (3) (WC) FA, SP Prereq- English 102 or 112 or 132 or 298 Minimum level- junior	
Spring 15 hours	BSE 411 or 417 (3) SP Prereq- ME 231 and 321 with grades of C or better	BSE 431 or 437 (3) SP Prereq- BSE 321 with grade of C or better	BSE 451 or 457 (3) SP Prereq- ECE 301 with grade of C or better	Chem 360 or 368 (3) FA, SP, SU Prereq- Chem 260 or 268 formerly Chem 350/358	Chem 359 (1) FA, SP, SU Prereq- Chem 269 Coreq- Chem 360 or 368	Math 200 (2) FA, SP
Fall 14 hours	Vol Core (3) FA, SP, SU Social Science (SS)	Vol Core (3) FA, SP, SU Global Citizenship International (GCI)	BSE 400 (2) FA Prereq- Three of BSE 411/417, 431/437, 451/457 Coreq- BSE 404 and 444	BSE 444 (3) FA Prereq- Three of BSE 411/417, 416/418 or CE 495,498,431,451 Coreq- BSE 400 and 404	BSE 404 (3) (OC) FA Prereq- Three of BSE 411/417, 416/418, or CE 495,498, 431/437, 451/457 Coreq- BSE 400 and 444	
Spring 15 hours	Vol Core (3) FA, SP, SU Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS	Vol Core (3) FA, SP, SU Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS	Vol Core (3) FA, SP, SU Global Citizenship United States (GCUS)	BSE 402 (5) (EI) SP Prereq- BSE 400 and 404 and 444 Co-reg- BSE 403	BSE 403 (1) (AOC) SP Prereq- BSE 400 and 404 and 444 Co-reg BSE 402	

BSE Graduation requirements: a) achieve at least a 2.0 GPA in all BSE courses; b) only one BSE course with a grade of D+, or D may be used toward graduation; c) no BSE course with a grade of D- may be used for graduation; d) achieve at least a 2.0 GPA in the required math courses.

Students also have opportunities for an Honors Concentration. See the Undergraduate Catalog for details and requirements.

Volunteer Core courses highlighted in light orange.