

Biosystems Engineering Catalog 2024 Integrated Systems Concentration

Fall 16 hours	Math 132 or 141 or 147 (3-4) (QR) FA,SP,SU	EF 142 or 151 or 157 (4) (EI) FA, SP	EF 105 (1) FA, SP	Chem 122(3) and 123(1) or 128 (4)(NS) FA, SP, SU	English 101 or 131 (3) FA, SP, SU
	Math 132 Prereq- Math 131 Math 141 Prereq- ACT Math 28 or SAT Math 660	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	Coreq- EF 151 or 157	Prereq-Math 119; recommended background in Math 131	101 Standard; 131 English Second Language
Spring 17 hours	Math 142 or 148 (4) (QR) FA, SP, SU	EF 152 or 158 (4) (NS and EI) FA, SP, SU	ME 202 (2) FA, SP, SU	Vol Core (3) FA, SP, SU	English 102 or 112 or 298 or 132 (3) FA, SP, SU
	Prereq- Math 132 or 141 or 147	Prereq-EF 142/151/157 with C or higher Coreq- Math 142 or 148	Coreq- EF 152 or 158 and Math 142 or 148	Global Citizenship United States (GCUS)	see catalog for prereqs
Fall 17 hours	Math 241 or 247 (4) FA, SP, SU	ME 231 (3) FA, SP, SU	ME 331 (3) FA, SP, SU	BSE 201 (1) FA	BSE 221 (3) FA
	Prereq- Math 142 or 148	Prereq- EF 152 or 158 and ME202 with grades of C or better	Coreq- Math 241 or 247		Prereq- Chem 122 and 123 or 128 Coreq- EF 152 or 158
Spring 16 hours	Math 231 or 237 (3) FA, SP, SU	Biology 160 or 168 (3) (NS) FA, SP, SU	ESS 231 (3) and 232 (1)	ME 321 (3) FA, SP, SU	BSE 321 (3) SP
	Prereq- Math 142 or 148	Coreq- Chemistry 122 and 123 or 128		Prereq- ME 202 with C or better and Math 142/148 with C better	Prereq- BSE 221 or ENVE 200
Fall 17 hours	Philosophy 244 (3) FA, SP	BSE 326 (3) FA, SP	BSE 351 (3) FA, SP	Stats 251 (3) FA, SP, SU	English 360 (3) (WC) FA, SP
	Vol Core- Arts & Humanities	Prereq- EF 152 or 158 and Math 241 or 247	Prereq- EF 152 or 158	or IE 200 (3) FA, SP Prereq- Math 142 or 148	Prereq- English 102, 112, 132, or 298 Minimum level- junior
Spring 15 hours	BSE 411 or 417 (3) SP	BSE 426 or 427 (3) SP	BSE 431 or 437 (3) SP	BSE 451 or 457 (3) SP	*Technical Elective (3) FA, SP, SU
	Prereq- ME 231 and 321 with grades of C or better	Prereq-BSE 326 with grade of C or better	Prereq- BSE 321 with grade of C or better	Prereq- BSE 351 grade of C or better and Math 231 or 237	
Fall 14 hours	Vol Core (3) FA, SP, SU	*Technical Elective (3) FA, SP, SU	BSE 400 (2) FA	BSE 444 (3) FA	BSE 404 (3) (OC) FA
	Social Science (SS)		Prereq- Three of BSE 411/417, BSE 426/427, 431/437, or 451/457 Coreq- BSE 404 and 444	Prereq- Three of BSE 411/417, BSE 426/427, 431/437, or 451/457 Coreq- BSE 400 and 404	Prereq- Three of BSE 411/417, 426/427, BSE 431-437, or 451/457 Coreq- BSE 400 and 444
Spring 15 hours	Vol Core (3) FA, SP, SU	Vol Core (3) FA, SP, SU	Vol Core (3) FA, SP, SU	BSE 402 (5) (EI) SP	BSE 403 (1) (AOC) SP
	Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS	Global Citizenship International (GCI)	Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS	Prereq- BSE 400 and 404 and 444 Co-req- BSE 403	Prereq- BSE 400 and 404 and 444 Co-req BSE 402

***Technical Electives-** Note that some electives have required prerequisites. See individual course descriptions for specific information. BSE 464, 475, 525, 543; CBE 475, 481; CSAS 345, 355, 414, 424, 432, 434, 452, 462, 474; CE 381, 430, 485; CHEM 260 or 268, 360 or 368; ENVE 511, 512,513, 515, 516, 525, 526, 527, 530, 532, 533, 544, 558, 561, 574; ESS 334, 434, 442, 444, 454, 462; Geog 311, 312; Geol 485; IE 304; Math 300, 403, 411, 431; ME 363 or 367, 366, 391 or 397, 405, 451, 466, 472.

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.