

Updated 12/11/2013

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Careers in Bioresource and Agricultural Engineering BRAE 128 (2)	CAD for Agricultural Engineering BRAE 151 (1) (BRAE 133 or equivalent)	3-D Solids Modeling BRAE 152 (1) (BRAE 133, BRAE 151 or equivalent courses)	Principles of Irrigation BRAE 236 (4) (MATH 141, SS 121)	BIO 213 (2) & ENGR/BRAE 213 (2) or MCRO 221 (4) * [B2]	Agricultural Structures Planning BRAE 232 (4) (BRAE 151, PHYS 132)	Hydraulics BRAE 312 (4) (PHYS 132, ME 211)	Irrigation Theory BRAE 331 (3) (BRAE 236 or BRAE 340)	Measurements and Computer Interfacing BRAE 328 (4) (EE 321, EE 361, a computer programming course)	Equipment Engineering BRAE 421 (3) (CE 204, ME 212)	Equipment Engineering BRAE 422 (4) (BRAE 421)	Agricultural Systems Engineering BRAE 403 (4) (MATH 242 or MATH 244)
Introduction to Engineering Design Graphics BRAE 133 (1)	Laboratory Skills and Safety BRAE 129 (1)	Introductory Soil Science SS 121 (4) *	Fundamentals of Electricity BRAE 216 (4) (BRAE 129, MATH 142, PHYS 131)	CSC 231 (2) or CSC 232 (3) or CSC 234 (3) *	Introduction to Mechanical Systems in Agriculture BRAE 234 (4) (PHYS 131)	Electronics EE 321 (3) (BRAE 216)	Mechanics of Materials I CE 204 (3) (ME 211) or CE 201 (6) (ME 211)	Irrigation Engineering BRAE 414 (4) *	Agricultural Structures Design BRAE 433 (4) (BRAE 232, CE 204)	GE (4) *	Upper Division GE (4) *
Engineering Surveying BRAE 239 (4) (MATH 119 or equivalent)	General Physics IA PHYS 141 (4) *	General Physics II PHYS 132 (4) (PHYS 131 or PHYS 141)	General Physics III PHYS 133 (4) (PHYS 131 or PHYS 141 and MATH 142)	General Chemistry for the Engineering Disciplines I CHEM 124 (4) * [B3/B4]	General Chemistry for the Engineering Disciplines II CHEM 125 (4) * [Add'l Area B]	Electronics Laboratory EE 361 (1) (BRAE 216, concurrent with EE321)	Survey of Economics ECON 201 (4) OR ECON 222(4) [D2]	Principles of Bioresource Engineering BRAE 320 (4) (BRAE 232, BRAE 236, PHYS 132)	Senior Project Organization BRAE 460(1) (GE A3)	Senior Project I BRAE 461 (2) (BRAE 460)	Senior Project II BRAE 462 (2) (BRAE 461)
Calculus I MATH 141 (4) * [B1]	Calculus II MATH 142 (4) (MATH 141) [B1] GE (4) *	Calculus III MATH 143 (4) (MATH 142) [Add'l Area B]	Calculus IV MATH 241 (4) (MATH 143)	Linear Analysis I MATH 244 (4) (MATH 143)	Engineering Dynamics ME 212 (3) (MATH 241; ME 211 or ARCE 211)	Statistical Methods for Engineers STAT 312 (4) (MATH 142) [B6]	GE (4) *	Mechanics of Materials II CE 207 (3) (CE 204) If CE 204 taken previously	Approved Upper Division Elective (2) *	Approved Upper Division Elective (4) *	Approved Elective (4) *
Expository Writing ENGL 133/134 (4)* [A1] Can be taken anytime during Freshman Year	Oral Communication COMS 101/102 (4)* [A2] Can be taken anytime during Freshman Year	Reasoning, Argumentation, & Writing [A3] ENGL 149 (4) (Completion of GE A1 with a C- or better) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years.		Engineering Statics ME 211 (3) (MATH 241 (or concurrently), PHYS 131 or PHYS 141)	GE (4) *	Thermodynamics I ME 302 (3) (PHYS 132, ME 212 or CHEM 128)	GE (4) *	GE (4) *	Graduation Writing Requirement GWR* (Can be taken any time after 90 earned units)		
15	18	17	16	17-18	19	19	14-17	12-15	14	14	14
										TOTAL:	192-193

Notes:

MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET

* Refer to current catalog for prerequisites.

*One course from each of the following GE areas must be completed: A1, A2,

C1, C2, C3, C4, D1, D3, and D4. C4 should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).

USCP requirement can be satisfied by some (but not all) courses within GE categories: C3, C4, D1, D3, or D4.

Legend:

Course Title	Major (75)
Course # (Units) (Pre-Requisite)	Support (81/82)
[GE Area]	General Ed. (36)