

PRE-AGRICULTURAL ENGINEERING

Agricultural Engineering (AGEN) involves the analysis and design of field machinery systems and machine components; testing to evaluate machine or mechanical system functional performance; and analysis and design of soil and water management-related infrastructure. Students choosing the pre-agricultural engineering program on the Scott Campus in Omaha should be aware that there are four courses in the first two years (AGEN 100, AGEN 112, AGEN 212 and AGEN 225); nine total credit hours) for which there are no equivalents on the Scott Campus. However, substitutions for AGEN 100 may be available on a case-by-case basis.

Requirements

Course	Title	Credits
First Year		
First Semester		
MATH 1950	CALCULUS I	5
CHEM 1180	GENERAL CHEMISTRY I	3
CHEM 1184	GENERAL CHEMISTRY I LABORATORY	1
ENGR 1000	INTERPERSONAL SKILLS FOR ENGINEERING LEADERS	3
ACE Elective ¹		3
	Credits	15
Second Semester		
MATH 1960	CALCULUS II	5
CHEM 1190	GENERAL CHEMISTRY II	3
CHEM 1194	GENERAL CHEMISTRY II LABORATORY	1
PHYS 2110	GENERAL PHYSICS I - CALCULUS LEVEL	4
ACE Elective ¹		3
	Credits	16
Second Year		
First Semester		
MATH 1970	CALCULUS III	4
PHYS 2120	GENERAL PHYSICS-CALCULUS LEVEL	4
MENG 2230	ENGINEERING STATICS	3
MENG 2000	ENGINEERING THERMODYNAMICS	3
ENGL 3980	TECHNICAL WRITING ACROSS THE DISCIPLINES ²	3
	Credits	17
Second Semester		
MATH 2350	DIFFERENTIAL EQUATIONS	3
ECEN 2110	ELEMENTS OF ELECTRICAL ENGINEERING	3
CONE 2060	ENGINEERING ECONOMICS	3
MENG 3730	ENGINEERING DYNAMICS	3
ACE Elective ¹		3
	Credits	15
	Total Credits	63

Other courses available:

Code	Title	Credits
BIOL 1020	PRINCIPLES OF BIOLOGY	5
CIVE 310/ MENG 3100	FLUID MECHANICS	3
STAT 3800	APPLIED ENGINEERING PROBABILITY AND STATISTICS	3

ACE Elective ¹ 3

¹ Ace elective: Selected from ACE elective (SLO 5 through 9) list.

² ENGL 3980: EPPE sophomore level placement or successful completion of ENGL 1160/ENGL 1164 required.