

Agricultural and Biosystems Engineering

Department Information

- **Department Location:**
Agricultural and Biosystems Engineering
- **Department Phone:**
701-231-7261
- **Department Email:**
ndsu.asm@ndsu.edu
- **Department Web Site:**
www.ndsu.edu/aben/ (<http://www.ndsu.edu/aben/>)
- **Credential Offered:**
B.S.A.B.En.
- **Plan Of Study Sample:**
bulletin.ndsu.edu/programs-study/undergraduate/agricultural-biosystems-engineering/ (<http://bulletin.ndsu.edu/programs-study/undergraduate/agricultural-biosystems-engineering/>)

Code	Title	Credits
Engineering Electives: Select 9 credits from the following:		9
CE 310	Fluid Mechanics Laboratory	
CE 370	Introduction to Environmental Engineering	
CE 371	Environmental Engineering Laboratory	
ECE 301	Electrical Engineering I	
ME 223	Mechanics of Materials	
ME 331	Materials Science and Engineering	
Chemistry/Biological Science Electives: Select 6 credits from the following:		6
ANSC 357	Animal Genetics	
ANSC 463	Physiology of Reproduction	
BIOC 260	Elements of Biochemistry	
BIOC 461	Foundations of Biochemistry and Molecular Biology II	
BIOC 473	Methods of Biochemical Research	
BIOC 474	Methods of Recombinant DNA Technology	
BIOL 150L	General Biology I Laboratory	
BIOL 151	General Biology II	
BIOL 151L	General Biology II Laboratory	
BIOL 220	Human Anatomy and Physiology I	
BIOL 315	Genetics	
BIOL 315L	Genetics Laboratory	
BIOL 364	General Ecology	
CFS 210	Introduction to Food Science and Technology	
CFS 370	Food Processing I	
CFS 450	Cereal Technology	
CHEM 341	Organic Chemistry I	
CHEM 341L	Organic Chemistry I Laboratory	
CHEM 342	Organic Chemistry II	
CHEM 342L	Organic Chemistry II Laboratory	
MICR 202	Introductory Microbiology	
MICR 202L	Introductory Microbiology Lab	
MICR 350	General Microbiology	
MICR 350L	General Microbiology Lab	
MICR 352	General Microbiology II	
MICR 352L	General Microbiology Lab II	

MICR 452 Microbial Ecology

Technical Electives: Select 6 credits from ABEN Electives, Engineering Electives, Chem/Bio Electives, or Computer Electives. 6

ABEN 496 - Ag Tech Expo (1 add'l cr.) may be used as a Technical Elective. ABEN 496 - Field Exp./Internship, 1 cr., may be used as an ABEN Elective or as a Technical Elective. A maximum of two credits of ABEN 496 FE/Internship may be counted towards degree requirements.

Computer Elective: Select 3 credits from the following: 3

CE 212 Civil Engineering Graphic Communications

CSCI 122 Visual BASIC

CSCI 160 Computer Science I

ECE 173 Introduction to Computing

GEOG 455 Introduction to Geographic Information Systems

IME 380 CAD/CAM for Manufacturing

ME 212 Fundamentals of Visual Communication for Engineers

ME 213 Modeling of Engineering Systems

Total Credits**24**