Twin Cities Campus

Agricultural Education B.S.

Applied Economics

College of Food, Agricultural and Natural Resource Sciences

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2018
- Required credits to graduate with this degree: 120
- Required credits within the major: 92 to 102
- Degree: Bachelor of Science

The agricultural education major provides students with a broad understanding of agricultural, food, and natural resource sciences, and opportunity to develop professional educator skills. Professional courses in education and agricultural education prepare students to become effective and successful educators. Experiential learning is stressed as students spend time in schools applying course concepts, learning from effective educators, and completing a teaching internship as a capstone activity.

While the major is focused on teaching school-based agricultural education, graduates are prepared for a variety of careers within the food and agricultural industry. Students are equipped with communication, critical thinking, and interpersonal skills; experience in the teaching and learning process; and a breadth of knowledge of the science and business of agriculture that are in demand by a wide range of employers.

Graduates take positions as agricultural education teachers; educational and training specialists for agribusinesses, commodity organizations, governmental agencies, and nonprofits; as well as positions in sales, management, and customer relations with agribusinesses.

Students graduating in agricultural education are in demand by employers, very satisfied in their careers, and earn some of the highest average starting salaries among College of Food, Agricultural and Natural Resource Sciences (CFANS) majors. However, there are not enough graduates to meet the current demand for school-based agricultural education teachers. This demand is predicted to increase in the future, both in Minnesota and across the United States.

Students are prepared to meet teacher licensure requirements in Agricultural Education (grades 5-12) and Coordinator of Work-Based Learning (grades 9-12). The agricultural education major is a collaborative partnership between the College of Food, Agricultural and Natural Resource Sciences (CFANS) and the College of Education and Human Development (CEHD).

Program Delivery

This program is available:

via classroom (the majority of instruction is face-to-face)

Admission Requirements

A GPA above 2.0 is preferred for the following:

- 2.50 already admitted to the degree-granting college
- 2.50 transferring from another University of Minnesota college
- 2.50 transferring from outside the University

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

General Requirements

All students are required to complete general University and college requirements including writing and liberal education courses. For more information about University-wide requirements, see the <u>liberal education requirements</u>. Required courses for the major or minor in which a student receives a D grade (with or without plus or minus) do not count toward the major or minor (including transfer courses).

Program Requirements

Physical and Biological Sciences

CHEM 1015 - Introductory Chemistry: Lecture [PHYS] (3.0 cr)

CHEM 1017 - Introductory Chemistry: Laboratory [PHYS] (1.0 cr)

AGRO 1101 - Biology of Plant Food Systems [BIOL] (4.0 cr)

or BIOL 1009 - General Biology [BIOL] (4.0 cr)

Mathematics

MATH 1031 - College Algebra and Probability [MATH] (3.0 cr)

Major Courses

AECM 1001 - Introduction to Agricultural Education, Communication & Marketing (1.0 cr)

AECM 2051 - Current Technical Competencies (4.0 cr)

AECM 2096 - Career Exploration & Early Field Experience in Agricultural Education, Communication, and Marketing (2.0 cr)

AECM 5111W {Inactive}[WI] (4.0 cr)

Interdisciplinary Learning

CFAN 1501 {Inactive}[TS] (3.0 cr)

Upper Division Writing Intensive within the Major

Students are required to take one upper division writing intensive course within the major. If that requirement has not been satisfied within the core major requirements, students must choose one course from the following list. Some of these courses may also fulfill other major requirements.

Take 0 - 1 course(s) from the following:

- •AECM 5111W {Inactive}[WI] (4.0 cr)
- •WRIT 3562W Technical and Professional Writing [WI] (4.0 cr)

Social Sciences

PSY 1001 - Introduction to Psychology [SOCS] (4.0 cr)

Communication

WRIT 3562W - Technical and Professional Writing [WI] (4.0 cr)

Animal Science

ANSC 1101 - Introductory Animal Science (4.0 cr)

Take 1 or more course(s) from the following:

- •ANSC 1403 Companion Animal Nutrition and Care (3.0 cr)
- •ANSC 2012 Livestock and Carcass Evaluation (3.0 cr)
- •ANSC 2401 Animal Nutrition (3.0 cr)
- •ANSC 3221 Animal Breeding (4.0 cr)

Applied Economics and Agribusiness

APEC 1101 - Principles of Microeconomics [SOCS, GP] (4.0 cr)

Take 1 or more course(s) from the following:

- •APEC 1251 Principles of Accounting (3.0 cr)
- •APEC 3411 Commodity Marketing (3.0 cr)
- •APEC 3811 Principles of Farm Management (3.0 cr)
- •APEC 3821 {Inactive}(3.0 cr)
- •APEC 3451 Food and Agricultural Sales (3.0 cr)

Food Science

ANSC 1511 - Food Animal Products for Consumers (3.0 cr) or FSCN 1102 - Food: Safety, Risks, and Technology [CIV] (3.0 cr)

Natural Resources

Take 3 or more credit(s) from the following:

- •CFAN 3513 {Inactive}[GP, ENV] (3.0 cr)
- •EEB 3001 Ecology and Society [ENV] (3.0 cr)
- •ESPM 1011 Issues in the Environment [ENV] (3.0 cr)
- •FW 2001W Introduction to Fisheries, Wildlife, and Conservation Biology [ENV, WI] (3.0 cr)
- •FNRM 1xxx
- •FNRM 2xxx
- •FNRM 3xxx
- •FNRM 4xxx
- •FNRM 5xxx

Plant Science

CFAN 3001 {*Inactive*}(3.0 cr)

or ENT 4015 {Inactive}(3.0 cr)

Take 3 or more credit(s) from the following:

- •AGRO 1103 Crops, Environment, and Society [ENV] (4.0 cr)
- •HORT 1001 Plant Propagation [BIOL] (4.0 cr)
- •HORT 1003 Organic Gardening: From Balconies to Backyards (3.0 cr)
- •HORT 1013 {Inactive}(3.0 cr)

Soil Science

SOIL 2125 - Basic Soil Science [PHYS, ENV] (4.0 cr)

Technology

AECM 3051 - Building Construction/Woodworking Technology (4.0 cr)

Education

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CI 5452 - Reading in the Content Areas for Initial Licensure Candidates (1.0 - 2.0 cr) CI 5307 - Technology for Teaching and Learning (1.5 cr)
PUBH 3005 {Inactive}(1.0 cr)
CI 5163 - Child and Adolescent Development for Teaching and Learning I (1.0 cr)
CI 5164 - Child and Adolescent Development for Teaching and Learning II (2.0 cr)
OLPD 5005 - School and Society (2.0 cr)
OLPD 5009 - Human Relations: Applied Skills for School and Society (1.0 cr)
CI 4602 - English Learners and Academic Language (1.0 cr)
EPSY 4001 - Teaching Students with Special Needs in Inclusive Settings (1.0 cr)
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Agricultural Education

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AECM 5112 {Inactive}(3.0 cr)
AECM 5114 {Inactive}(1.0 cr)
AECM 5116 {Inactive}(2.0 cr)
AECM 5118 {Inactive}(2.0 cr)
AECM 5697 {Inactive}(2.0 cr)
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Public Speaking

AECM 2421W - Professional and Oral Communication for Agriculture, Food & the Environment [WI] (3.0 cr)

Experiential Learning

AECM 5696 - Teaching Internship (2.0 - 10.0 cr)