Central Lakes College, Brainerd Campus 2024-2025

Agricultural Science

Associate of Science Degree (A231)

MnTC*** 51
Required Discipline 9
Total Credits 60

Required Courses

Required MnTC Courses (51 credits)

***An A.S. degree requires a minimum of 30 credits selected from at least six of the ten goal areas of the Minnesota Transfer Curriculum (MnTC).

BIOL 1431	General Biology (Goal 3)	5 cr
CHEM1414*	Fundamentals of Chemistry (Goal 3) **OR**	
CHEM 1407	Life Science Chemistry (Goal 3) **OR**	
PHYS 1401*	College Physics I (Goal 3)	4 cr
COMM 1430	Public Speaking (Goals 1,2)	3 cr
COMM 2420	Intercultural Communication (Goals 1,7)	3 cr
ECON 2402	Microeconomics (Goal 5)	3 cr
ENGL 1410*	Composition I (Goal 1) **OR**	
ENGL 1420*	Honors Composition I (Goal 1)	4 cr
ENGL 1411*	Composition II (Goal 1) **OR**	
ENGL 1421*	Honors Composition II (Goal 1)	4 cr
MATH 1460*	Introduction to Statistics (Goal 4)**	4 cr
MATH 1470*	College Algebra (Goal 4)	3 cr
PHIL 1421	Critical Thinking (Goals 1,2) **OR**	
PHIL 1422	Honors Critical Thinking (Goals 1,2)	3 cr

Select one course that meets both MnTC Goals 5 and 8.
Recommended:

GEOG 1459	Cultural Geography (Goals 5,8) **OR**	
GLST 1401	Intro to Global Studies (Goals 5,8)	3 cr

Select one course that meets both MnTC Goals 5 and 10.
Recommended:

ENVR 1400	Intro to Environmental Studies (Goals 5,10)	
OR		
GEOG 1400	Physical Geography (Goals 5,10) **OR**	
PSYC 1425	Environmental Psychology (Goals 5,10) **OR**	
SOCL 2422	Culture and Environment (Goals 5,10)	3 cr

Select one course that meets both MnTC Goals 6 and 9.
Recommended:

PHIL 2420	Ethics (Goals 6,9)**OR**	
PHIL 2421	Honors Ethics (Goals 6,9) **OR**	
PHIL 2430	Contemporary Moral Problems (Goals 6,9)	3 cr

Select two additional courses for a minimum of six credits from MnTC Goal 6.

Additional MnTC Goal 6 courses ..... 6 cr

***ACCT 2011 Principals of Accounting I may be substituted for MATH 1460 Intro to Statistics for degree articulations requiring this course. Students should consult an advisor for specific programs.*

Required Courses (Continued)

Required Discipline Courses (9 credits)

Students will select from any of the following technical or internship courses for a total of 9 credits. Total internship credits may not exceed 4.

Agricultural Studies

AGRI 2150	Agricultural Studies Internship	1-4 cr

Animal Science

ANSI 1100	Introduction to Animal Science	4 cr
ANSI 1110	Food Safety: From Farm to Fork	3 cr
ANSI 2100	Fundamentals of Animal Nutrition	4 cr
ANSI 2150	Animal Science Internship	1-4 cr

Horticulture

HORT 1104	Plant Science	4 cr
HORT 1106	Applied Plant Science Lab	2 cr
HORT 1345	Horticulture Internship	1-4 cr

Natural Resources

NATR 1112	Land Measurement	3 cr
NATR 1115	Plant Taxonomy	2 cr
NATR 1200	Introduction to Natural Resources	3 cr
NATR 1280	Introduction to GPS and GIS	2 cr
NATR 1310	Natural Resources Internship	1-4 cr
NATR 2155	Soil Science	3 cr
NATR 2170*	Advanced GPS and GIS	2 cr

**Denotes Prerequisites*

GRADUATION REQUIREMENT - 60 CREDITS

Description

The Agricultural Science degree is a broad-based curriculum that includes internship options allowing it to be either a stand-alone degree or to lead to a 4-year degree in agriculture and agricultural education, food science, horticulture, and natural resources. Articulation agreements with Southwest Minnesota State University and the University of Minnesota, Crookston, are available for students electing to pursue a bachelor's degree upon completion of the Agricultural Science A.S. Degree. Students pursuing articulated degrees should consult an advisor to determine which courses transfer into their chosen degree program.

Outcomes

By completing this program, students will achieve the following learning outcomes:

- Develop as writers and speakers who use the English language effectively and who read, write, think, speak, and listen critically;
- Develop capacity to identify, discuss and reflect upon social, cultural, ethical, behavioral and environmental issues;
- Demonstrate comprehension of basic principles of chemistry or physics and biological systems;
- Increase their knowledge of and ability to employ mathematical techniques and strategies to solve problems, manage accounts or analyze data;
- Demonstrate comprehension of how markets, prices, demand, profit maximization and other factors of production affect economic behavior of individual units of an economy;
- Increase their knowledge and understanding of techniques and practices utilized in the fields of agriculture, natural resources or horticulture; and
- Increase their awareness and understanding of careers available in the fields of agriculture, natural resources or horticulture.

Pre-Program Requirements

Some courses may require students to meet College Placement Levels in reading, writing, and/or math. See an advisor for more information.

For insurance purposes, internships may require that students be 18 years old.

Graduation Requirements

In addition to the program requirements, students must meet the following conditions in order to graduate:

- College Cumulative GPA Requirement: cumulative grade point average (GPA) of credits attempted and completed at CLC must be at least 2.0;
- College Technical Core GPA Requirement: cumulative GPA of credits attempted and completed towards the technical core of the diploma or degree must be at least 2.0;
- Residency Requirement: students must complete 25% of their credits at Central Lakes College.

Career & Transfer

Students pursuing articulated degrees should consult an advisor to determine which courses transfer into their chosen degree program.

- University of Minnesota, Crookston – Agricultural Education

Semester Course Requirements

Individual semester plans are determined between instructor/advisor and student to best meet the needs of the student.