

# Agricultural Crop Production & Management

Diploma (D145)

## Required Courses

### Required Discipline Courses (54 credits)

AGRO 1100 Introduction to Agronomy.....	3 cr
AGRO 1102 Soil Science .....	3 cr
AGRO 1104 Introduction to Precision Agriculture .....	3 cr
AGRO 1106 Pesticide Applications.....	2 cr
AGRO 1108 Equipment Operations .....	2 cr
AGRO 1110 Introduction to Agriculture Careers .....	2 cr
AGRO 1112 Nutrient Management.....	3 cr
AGRO 1114 Weed Identification.....	1 cr
AGRO 1116 Agriculture Water Quality .....	2 cr
AGRO 1120 Plant Physiology .....	3 cr
AGRO 1122 Irrigation Water Management .....	3 cr
AGRO 1124 Integrated Pest Management .....	3 cr
AGRO 1130 Advanced Precision Agriculture.....	3 cr
AGRO 1134 International/Global Agriculture .....	3 cr
AGRO 1136 Advanced Crop Production.....	3 cr
AGRO 1150* Internship .....	3 cr
FBMT 1112 Foundations for Farm Business Mgmt.....	4 cr
FBMT 2220 Special Topics – Crops.....	1 cr
FBMT 2230 Special Topics – Livestock .....	1 cr
HEOM 1164 Class A CDL Theory .....	3 cr
HEOM 1165 CDL.....	3 cr

### General Education (6 credits)

CCST 1530 Employment Strategies .....	3 cr
COMP 1101 Computer Fundamentals .....	3 cr

### GRADUATION REQUIREMENT - 60 CREDITS

*\*Requires permission by Instructor*

## Description

Scientific advances are changing the way America and the rest of the world raise field crops and manage soil, in turn affecting the trading and marketing of these commodities. Agronomists are agricultural scientists who study and experiment to enhance crop yields. Custom application is one of the highest demand careers in the Agribusiness Industry. If you enjoy applied agricultural science and seek an in-demand career with great job placement and bonus financial assistance, Central Lakes College’s Agricultural Crop Production and Management may be the field for you!

Agricultural students at Central Lakes College, Staples Campus take courses in areas of soils, animal and crop sciences. They also study computers and precision farming to form a strong foundation in the field. We have over 2000 acres of a working college research farm where you can develop your skills. Practical hands-on learning opportunities are infused with theory throughout the program. Jobs in this area are generally physical and require the strength to lift and carry 50 pounds. Learners interested in this career should have a valid driver’s license to operate equipment, above average computer skills and possess good oral, reading and writing skills. In addition, professionals in this area tend to spend a great deal of their time working outdoors.

## Outcomes

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

- Identify and apply appropriate safety procedures;
- Apply knowledge and skills in agricultural systems;
- Apply knowledge and skills in agronomy systems;
- Apply knowledge and skills in precision agriculture systems;
- Analyze and apply specific troubleshooting knowledge and technology in the areas of agriculture, agronomy, and precision agriculture; and
- Apply effective communication and interpersonal skills as an individual and as a team member.

## 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

Industry demand for Agricultural Crop Production and Management is much greater than the supply, and a degree from Central Lakes College carries a strong, positive reputation among potential employers in agricultural occupations.

Students will be prepared to work in occupations including:

Graduates of this program work in fields such as:

- Seasonal Pesticide Applicator Specialist
- Sales Representative
- Crop Scout
- Crop Research Assistant
- Custom Applicator
- Crop Insurance Professional
- Buyer-Crop Protectants
- Field Supervisor
- Field Crew Member

## Academic Plan

### Semester One (15 credits)

AGRO 1100	Introduction to Agronomy .....	3 cr
AGRO 1102	Soil Science .....	3 cr
AGRO 1110	Introduction to Agriculture Careers .....	2 cr
AGRO 1114	Weed Identification.....	1 cr
HEOM 1164	Class A CDL Theory .....	3 cr
HEOM 1165*	CDL .....	3 cr

### Semester Two (18 credits)

AGRO 1104	Introduction to Precision Agriculture.....	3 cr
AGRO 1106	Pesticide Applications .....	2 cr
AGRO 1108	Equipment Operations .....	2 cr
AGRO 1112	Nutrient Management .....	3 cr
AGRO 1116	Agriculture Water Quality .....	2 cr
AGRO 1150	Internship .....	3 cr
COMP 1101	Computer Fundamentals .....	3 cr

### Semester Three (15 credits)

AGRO 1120	Plant Physiology .....	3 cr
AGRO 1122	Irrigation Water Management .....	3 cr
AGRO 1124	Integrated Pest Management .....	3 cr
FBMT 1112	Foundations for Farm Business Mgmt .....	4 cr
FBMT 2220	Special Topics – Crops .....	1 cr
FBMT 2230	Special Topics – Livestock.....	1 cr

### Semester Four (12 credits)

AGRO 1130	Advanced Precision Agriculture .....	3 cr
AGRO 1134	International/Global Agriculture.....	3 cr
AGRO 1136	Advanced Crop Production .....	3 cr
CCST 1530	Employment Strategies .....	3 cr

\*This course may begin or end outside of the regular academic semester dates.