

---

---

# FIELD CROP PRODUCTION TECHNICIAN

## COURSE OTH9909: FIELD CROP OPERATIONS AND CARE 33

**Prerequisite:** AGR3000: Agriculture Safety (**Note:** Students are required to complete the prerequisite course prior to enrollment in the first course of the Field Crop Production Technician specialization.)

**Description:** Students demonstrate the ability to swath, harvest, and fertilize; utilize career and time management techniques; ensure workplace safety; and communicate and interact effectively with others.

**Parameters:** Each of the three courses that constitute the Field Crop Production Technician specialization is designed to be delivered off-campus. The annual inspection and approval of the work station, and the monitoring, supervision and assessment of each student's progress and performance must be done in accordance with the procedures specified in the *Off-campus Education Handbook*.

### Prescribed

**General Outcomes:** *The student will:*

- demonstrate a positive attitude toward safety, including:
  - identify safe workplace practices for agricultural operations
  - recognize hazards in agricultural operations
  - minimize hazards in agricultural operations
  - participate in ongoing inspections and training
  - perform basic emergency response procedures
- demonstrate effective and appropriate interpersonal, communication and employability skills, including:
  - manage training and continuing education in the Green Certificate Program
  - communicate and interact effectively in the workplace
  - manage time effectively to complete workplace jobs
  - understand continuous improvement in agricultural operations
  - understand accounts payable and receivable in agricultural operations
  - understand business risks in agricultural operations
  - understand insurance and liability in agricultural operations

- identify legislation pertaining to agricultural operations
- identify governing bodies pertaining to agricultural operations
- promote the agricultural industry
- demonstrate the ability to swath, including:
  - assess field conditions
  - prepare, maintain and transport swathing equipment
  - operate a swather
  - evaluate swather performance and maintain records
- demonstrate the ability to harvest, including:
  - maintain harvest equipment
  - understand principles of different harvest systems
  - assess crop maturity
  - coordinate in-field harvest activities
  - transport harvest equipment
  - operate harvest equipment
  - adjust for field and crop conditions
  - assess fire hazard and take action
  - record grain quantity, quality and location
  - collect samples
  - clean equipment between harvesting different crop types
  - manage crop residue as per farm protocol
- demonstrate the ability to fertilize, including:
  - test soil
  - follow farm nutrient management plan
  - calibrate fertilizer equipment
  - maintain records of nutrient application

### **COURSE OTH9910: FIELD CROP PROCESSES AND PRACTICES 33**

**Prerequisite:** AGR3000: Agriculture Safety (**Note:** Students are required to complete the prerequisite course prior to enrollment in the first course of the Field Crop Production Technician specialization.)

**Description:** Students demonstrate the ability to manage crop production; handle and store grain, forages, and other farm products; and ensure general farmstead and equipment maintenance.

**Parameters:** Each of the three courses that constitute the Field Crop Production Technician specialization is designed to be delivered off-campus. The annual inspection and approval of the work station, and the monitoring, supervision and assessment of each student's progress and performance must be done in accordance with the procedures specified in the *Off-campus Education Handbook*.

## Prescribed

**General Outcomes:** *The student will:*

- manage crop production, including:
  - understand crop rotations
  - scout fields and record information
  - understand crop variety decisions
  - demonstrate awareness of environmental farm plans
  - follow a farm pest management plan
  - assess and adapt to weather conditions
  - identify crops, including growth stages and damage to crops
  - access inside and outside information resources
  - recognize pest damage
  - recognize chemical injury
- handle and store grain, forages and other farm products, including:
  - prepare storage facilities
  - manage storage space
  - operate and maintain handling equipment (e.g., augers, bin sweeps, grain vacuums, aeration)
  - test and sample product
  - record amount, grade, variety and location of harvest
  - identify preserved system information (IP)
  - dry grain as per farm protocol
  - monitor storage conditions
- demonstrate general farmstead and equipment maintenance, including:
  - minimize fire hazards
  - dispose of farm waste materials
  - store equipment in the off-season
  - follow routine maintenance schedules for equipment and machinery
  - safely store fuel and chemicals
  - maintain adequate water supply
  - repair and maintain yard and buildings
  - safely use hand and shop power tools
  - maintain farm utilities

## **COURSE OTH9911: FIELD CROP SUPPORT SYSTEMS 33**

**Prerequisite:** AGR3000: Agriculture Safety (**Note:** Students are required to complete the prerequisite course prior to enrollment in the first course of the Field Crop Production Technician specialization.)

**Description:** Students demonstrate the ability to seed, spray and safely transport farm materials.

**Parameters:**

Each of the three courses that constitute the Field Crop Production Technician specialization is designed to be delivered off-campus. The annual inspection and approval of the work station, and the monitoring, supervision and assessment of each student's progress and performance must be done in accordance with the procedures specified in the *Off-campus Education Handbook*.

**Prescribed****General Outcomes:**

*The student will:*

- demonstrate the ability to seed, including:
  - plan seed supply
  - prepare seeding equipment
  - calibrate seeding equipment for individual crops
  - assess field conditions
  - coordinate in-field seeding activities
  - transport seeding equipment safely on roads
  - operate seeding equipment
  - ensure proper seed placement
  - record seeding and results
  - identify and report further operations required
  - maintain seeding equipment (pre and post)
- demonstrate the ability to spray, including:
  - prepare spray equipment
  - identify proper chemical for application
  - calculate chemical supply
  - interpret labels
  - calibrate spray equipment
  - assess weather conditions
  - assess crop stage
  - operate sprayers and markers
  - handle and apply chemical safely
  - clean spray equipment
  - record spray activities
  - handle chemicals safely
  - maintain, repair and store spraying equipment
  - evaluate performance of chemical application
- transport farm materials, including:
  - follow road regulations
  - maintain vehicles
  - unload equipment
  - assess road and field conditions
  - organize crop trucking to point of sale
  - tow equipment safely
  - gather, store and record samples and deliver to potential buyers