

# Agriculture Machine Technology

ASSOC OF APPLIED SCIENCE

**Major code:** 2014  
**Department:** Ag & Natural Resources  
**Chair:** Justin Blazzard  
**Advising:** Justin Blazzard 541-881-5974

## PROGRAM OVERVIEW

Agriculture Machine Technology provides experience and exploratory opportunities to specialize in the field of agricultural machinery. Hands on application of workplace safety, maintenance, agriculture machinery, equipment innovations, hydraulic systems, electrical systems, and irrigation systems will prepare students to service, maintain, or troubleshoot a variety of agricultural machinery. Students will complete a capstone linking theory with real world application to exemplify the depth of knowledge and skills attained throughout the program.

## PROGRAM/DISCIPLINE OUTCOMES

Student who complete this area of study will be prepared to:

- Demonstrate proper safety procedures when performing minor troubleshooting repairs
- Devise maintenance routines for mechanical, diesel, hydraulic, and pneumatic systems.
- Employ appropriate diagnostic tools to troubleshoot, repair, and/or maintain agriculture systems.
- Calculate total system amperage, voltage, and wattage.
- Apply skills to install, maintain, repair, and replace various machinery components.
- Demonstrate and perform pre-delivery and preventative maintenance inspections.
- Apply skills to fine tune or make machine adjustments.
- Recognize common problems of mechanized irrigation.

## REQUIRED COURSES (88 CREDITS)

Courses are listed in suggested sequence.

### YEAR 1

<u>COURSE #</u>	<u>COURSE TITLE</u>	<u>CREDITS</u>
- COM 111Z-PUBLIC SPEAKING or SP 219-Small Group Discussion.....		3
- AG 207 AGRICULTURE SEMINAR.....		1
- AG 215 IRRIGATION AND DRAINAGE.....		4
- AMT 111 AG MACHINE MAINTENANCE & INSPECTION.....		3
- AMT 112 OFF ROAD DIESEL TECHNOLOGY.....		3
- INED 101 INTRO TO BASIC TROUBLESHOOTING.....		3
- INED 103 MECHANICAL SYSTEMS.....		3
- INED 104 ELECT SYSTEMS TROUBLESHOOTING I....		3
- INED 107 ELECT SYSTEM TROUBLESHOOTING II....		3
- INED 108 PRINCIPLES OF TECHNOLOGY.....		3
- INED 113 BASIC HYDRAULICS.....		2
- INED 114 BASIC PNEUMATICS.....		3
- INED 212 INDUSTRIAL SAFETY & MANAGEMENT.....		3
- INED 280 INDUSTRIAL COOP WORK EXP.....		6
- MATH 063 TECHNICAL MATH I.....		4
- NATR 112 GLOBAL POSITIONING SYSTEMS (GPS)....		2

### YEAR 2

<u>COURSE #</u>	<u>COURSE TITLE</u>	<u>CREDITS</u>
- BA 204 Teamwork Dynamics Or PSY 101 Psychology of Human Relations.....		3
- AG 111 AGRICULTURE COMPUTERS.....		3
- AMT 211 MECHANIZED IRRIGATION.....		3
- AMT 212 AG MACHINE CAPSTONE.....		4
- CSS 240 INTRO TO NOXIOUS WEEDS.....		3
- GEOG 265 GEOGRAPHIC INFO SYSTEMS (GIS) I.....		4
- INED 157 EMPLOYMENT STRATEGIES.....		2
- NATR 201 ENVIRONMENT & SOCIETY.....		3
- WELD 150 BASIC WELDING I.....		5
- WELD 160 BASIC WELDING II.....		5
- WR 115 INTRO TO COLLEGE WRITING.....		4

**Total number of credits.....** 90

## ELECTIVES (2 CREDITS)

Electives