



# Precision Agriculture

at Walla Walla Community College

[www.wwcc.edu/precisionagriculture](http://www.wwcc.edu/precisionagriculture)

## The Program

Precision Agriculture is the incorporation of the latest technologies within the agricultural industry; allowing growers to understand and manage their field crops more efficiently and effectively. Methodologies include the use of GPS, Geographic Information Systems (GIS), soil sampling, variable rate application equipment, and aerial imaging with unmanned (drone) aircraft.

There is an ever increasing, high demand to find individuals entering the workforce with knowledge and training in precision technologies. These skills are considered critical to rural economic development and the health and economic needs of citizens in southeastern Washington. "Precision Ag", once a catch phrase, is quickly becoming the reality of a competitive industry.

## Career Opportunities

Talented leaders with "hands on" familiarity where real world production is valuable:

- Precision Ag Consultant
- Field Test Engineer
- Precision Ag Engineering Technician
- Precision Farming Specialist
- Agronomy Sales Manager
- GIS, Gridding, Mapping Technician
- Ag Sales Representative

## Degree Options

Associate in Applied Arts & Sciences Degree (AAAS) in Precision Agriculture is a two-year degree program that prepares students for the emerging and technical precision agriculture industry.

A Precision Agriculture Certificate is also available upon completion of 60 selected credits (see back of flyer).



*Aerial Crop Health Assessment*



## For More Information

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Walla Walla Community College... *Shape Your Future!*

# Energy Systems Technology

## Concentration: Precision Agriculture

### Required Coursework for: Electrical Systems Technology Core

### The following courses are required for the concentration in Precision Agriculture

#### Fall Quarter

| Course #        | Course Name                                  | Credits  |
|-----------------|--|----------|
| EST 145         | Industrial Safety and Rigging                | 5        |
| EST 131         | Principles of Electricity Theory             | 4        |
| <b>WTM 215*</b> | <b>Fluid Dynamics (Applied Mathematics)</b>  | <b>5</b> |
| EST 260         | Introduction to the National Electrical Code | 2        |
| AFYE 101        | Applied First Year Experience I              | 1        |
| Total Credits   |  | 17       |

#### Winter Quarter

|                 |  |          |
|-----------------|--|----------|
| EST 132         | Principles of Electricity AC Application | 4        |
| <b>AENG 100</b> | <b>Applied Writing (W + J)</b>           | <b>5</b> |
| AGRI 108        | Computers in Agriculture (or CS 110)     | 5        |
| ENT 112         | Blueprint Reading                        | 2        |
| AFYE 102        | Applied First Year Experience II         | 1        |
| Total Credits   |  | 17       |

#### Spring Quarter

|                                  |   |             |
|----------------------------------|---|-------------|
| EST 133                          | Introduction to Controls                  | 4           |
| EST 150                          | Electric Motors and Motor Maintenance     | 3           |
| IFA 022                          | AHA Heartsaver First Aid                  | 0.4         |
| <b>ACOM 102</b>                  | <b>Applied Communications (O/R/L)</b>     | <b>5</b>    |
| AGRI 103                         | Intro to Precision Ag for Farm Management | 5           |
| AFYE 103                         | Applied First Year Experience III         | 1           |
| Total Credits                    |   | 18.4        |
| <b>Total Certificate Credits</b> |   | <b>52.4</b> |

#### Fall Quarter

| Course #      | Course Name  | Credits |
|---------------|--|---------|
| AGPR 215      | Field Crop Production  | 5       |
| AGPR 201      | Basic Soil Science:<br><i>Also offered in Summer or Winter</i> | 5       |
| ENT 150       | Intro. to GIS  | 3       |
| EST 159**     | Hydraulics & Pneumatics  | 3       |
| WTM 112       | Irrigation Principles:<br><i>Also offered in Winter</i>        | 5       |
| Total Credits |  | 21      |

#### Winter Quarter

|               |   |    |
|---------------|---|----|
| AGPR 113      | Cultivated Plants                                       | 5  |
| ENT 151       | Advanced GIS  | 3  |
| AGPR 170      | Precision Equipment Installation and<br>Troubleshooting | 4  |
| CS 121        | C Programming   | 5  |
| AGPR 140      | Ag. Safety & Pesticides<br><i>Also offered in Fall</i>  | 5  |
| Total Credits |   | 22 |

#### Spring Quarter

|                                    |                                 |              |
|------------------------------------|---------------------------------|--------------|
| AGPR 254                           | Robotics and Drone Technologies | 5            |
| ENT 161                            | Elementary Surveying            | 5            |
| Total Credits                      |                                 | 10           |
| <b>Total Degree Credits (Min.)</b> |                                 | <b>105.4</b> |

**Certificate can be earned by completing first 3 quarters of program.**

\*Placement in WTM 215 requires a C or higher in AMATH 105 (or BUS 112) or placement into AMATH 106 or 107.

The following courses can be substituted for identified related instruction courses.

|                                |                     |
|--------------------------------|---------------------|
| (W) Written Communication:     | ENGL 097 or higher  |
| (M) Computation / Mathematics: | MATH& 141 or higher |
| (O) Oral Communications:       | Any O course        |
| (R) Human Relations:           | Any R course        |

CIP-47.0101 EPC 780A Energy Systems Technology Degree (with Precision Agriculture concentration)

Updated 7/2019

**The actual order and specific coursework may vary depending on student placement, start date, and quarter.  
Please check with your advisor prior to any substitutions.**

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Walla Walla Community College posts an Annual Security Report online. A paper copy of the report may also be obtained, free of charge, by visiting the Campus Security and Environmental Health and Safety office during normal business hours. The report contains policies and procedures related to campus safety and security, three years of crime statistics and other additional safety information.