

# PRECISION AGRICULTURE (PAG)

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## **PAG 105. Precision Agriculture Operations**

Credits: 2

Typically Offered: SPRING

Provides a background in precision agriculture. Emphasis is on working with control consoles, equipment, precision digital platforms, zone management and variable rate application.

## **PAG 115. Introduction to Precision Agriculture**

Credits: 3

Typically Offered: FALL

This course is designed to introduce the student to principles of precision agriculture. Students will receive instruction in GPS, GIS, remote sensing and data management.

## **PAG 197. Cooperative Education/Internship**

Credits: 1-3

Repeat Status: Repeatable up to 6.00 credits.

Typically Offered: ONDEMAND

Cooperative education and internships provide students with real-world experience in business and industry as they explore careers or gain experience in chosen fields of study. The work experiences must be directly related to the discipline under which the credits are to be awarded.

## **PAG 215. Mapping of Precision Ag Data**

Credits: 2

Prerequisite: PAG 115.

Typically Offered: SPRING

This course is designed to introduce students to mapping data in precision agriculture. Emphasis is placed on zone management, variable rate prescriptions and basic GIS functions.

## **PAG 276. Data Collection and Management**

Credits: 2

Prerequisite: PAG 115.

Typically Offered: FALL

This course will experiment with types and methods of data collection of spatial data. The majority of the course will concentrate on datalogging using GPS receivers (various monitors, rugged handheld units, and iPads), utilizing mobile software and geospatial apps. The course also will include downloading data from the Internet and evaluation and purchase of data from commercial sources. Students will learn data collection processes based on a real world project. They will be responsible for identifying a study area, a question or management issue, and the data needed to answer the question. .

## **PAG 286. Advanced Mapping**

Credits: 2

Prerequisites: PAG 215 and PAG 276.

Typically Offered: SPRING

This course covers the use of spatial data for recordkeeping, analytical decision making and modeling prescription maps for variable rate applications. Student will use various data sets and apply GIS functions to answer management questions. A major component of this course will be determining relationships and establishing patterns in yield and other cropping factors and interpretation of these patterns and relationships.

## **PAG 297. Cooperative Education/Internship**

Credits: 1-3

Repeat Status: Repeatable up to 6.00 credits.

Typically Offered: ONDEMAND

Cooperative education and internships provide students with real-world experience in business and industry as they explore careers or gain experience in chosen fields of study. The work experiences must be directly related to the discipline under which the credits are to be awarded.