

AGTE - Agricultural Technology

AGTE 252 Concepts in Precision Agriculture: 3 Credits (3 Lec)

(F) The course provides an overview of the concepts of precision agricultural technology, including topics such as yield calculation and yield map generation, soil property measurements (spectrophotometer and other devices), comparison of yield and soil test results, sensors for site-specific application, VRT system calibration and map generation based on recommended equations, economics and profitability of precision agriculture, precision farming advantages disadvantages, development of site-specific management plans, etc.

AGTE 291 Special Topics: 1-4 Credits ()**AGTE 330 Alternative Power & Energy Technology: 3 Credits (2 Lec, 1 Lab)**

PREREQUISITE: Sophomore standing. (Sp) Through a variety of research and applied learning activities, students will develop an understanding of various power/energy sources while at the same time gaining new perspectives on the feasibility and appropriateness of adopting and implementing a variety of power/energy systems to meet current societal needs

AGTE 411 Internet of Things in Precision Agriculture: 4 Credits (2 Lec, 2 Lab)

PREREQUISITE: AGTE 252. (Sp) Students will explore the application of internet of things platforms for agriculture and livestock management. Students will also implement their own IoT system in the laboratory activities of the class

AGTE 417 Manufacturing Technology: 3 Credits (1 Lec, 2 Lab)

PREREQUISITE: Sophomore standing. (Sp) Capstone course. Study and application of manufacturing concepts common to industry, including the stages of initial planning, prototype construction through the use of modern manufacturing techniques, market research, and analysis

AGTE 422 Data Analysis and Management for Digital Agriculture: 3 Credits (2 Lec, 1 Lab)

PREREQUISITE: AGTE 252 and AGTE 444. (Sp) AGSC 406, Data Analysis and Management for Digital Agriculture

AGTE 444 Sensing in Agriculture: 3 Credits (3 Lec)

(Sp) The course will examine precision agricultural technologies and their application in agricultural production systems.

AGTE 491 Special Topics: 1-4 Credits ()

Offered as needed based on student demand. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

Repeatable up to 12 credits.

AGTE 523 Creative Problem Solving: 3 Credits (3 Lec)

A review and analysis of basic and applied research in the development of creative behavior with emphasis on its application to technical teaching and industrial problem solving.

AGTE 591 Critical and Creative Problem Solving: 4 Credits ()

Repeatable up to 9 credits.