999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 90 credits in all enrollments for this course.
R: Open only to Ph.D. students in Agricultural Economics. Approval of department.

AGRICULTURAL ENGINEERING AE

Department of Agricultural Engineering
College of Agriculture and Natural Resources
College of Engineering

402. Agricultural Climatology
Fall. 3(3-0) Interdepartmental with Geography. Administered by Geography.

403. Resource and Environmental Economics

802. Computational Methods in Food and Agricultural Engineering
Fall of odd-numbered years. 3(3-0) Interdepartmental with Materials Science and Mechanics, Civil Engineering, and Mechanical Engineering. Administered by Materials Science and Mechanics.
P: MSM 809. R: Open only to graduate students in College of Engineering.

803. Finite Element Method
Fall. 3(3-0) Interdepartmental with Materials Science and Mechanics, Civil Engineering, and Mechanical Engineering. Administered by Materials Science and Mechanics.
P: Approval of department.
R: Open only to graduate students in College of Engineering.
Application of the finite element method to the solution of continuum type problems in heat transfer, fluid mechanics, and stress analysis.

812. Bio-Processing Engineering
Spring of odd-numbered years. 3(3-0) R: Open only to graduate students in College of Engineering.
Thermodynamics, heat and mass transfer, fluid flow, dehydration. Handling and storage of biological products.

815. Instrumentation for Food and Agricultural Engineering
Fall. 3(3-0) R: Open only to graduate students in College of Engineering.
Theory and techniques of measuring temperature, pressure, flow, humidity, and moisture in biological materials.

Agricultural Technology and Systems Management ATM

Department of Agricultural Engineering
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315. Occupational and Personal Safety
Spring. 2(0-0) P: CSS 101 or AEE 110 or AEE 101 or HKT 201. R: Open only to College of Agriculture and Natural Resources majors. Principles of safety program solving. Accident causation and prevention. Laws and regulations. Machinery, electrical, chemical and fire safety. Safety program development.

326. Principles of Animal Environments
Spring. 2(0-0) P: MTH 116 or MTH 120; CPS 100 or CPS 130 or CPS 151. R: Open only to College of Agriculture and Natural Resources majors. Principles of soil and water conservation engineering including: land and soil surveying, basic hydraulics, hydrology, soil moisture, and soil and water conservation practices with applications to irrigation, drainage and erosion control systems.

431. Irrigation, Drainage and Erosion Control Systems
Fall. 3(2-0) P: MTH 116 or MTH 120; CSS 210. R: Not open to freshmen and sophomores. Principles of soil and water conservation engineering including: land and soil surveying, basic hydraulics, hydrology, soil moisture, and soil and water conservation practices with applications to irrigation, drainage and erosion control systems.

492. Special Problems
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
R: Approval of department; application required. Individual study in agricultural engineering.

494. Agricultural Engineering Seminar
Spring. 1(1-0) R: Open only to graduate students in College of Agriculture and Natural Resources or College of Engineering.
Current topics in agricultural engineering.

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course.
R: Open only to graduate students in Agricultural Engineering.

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