# **AGRICULTURAL ENGINEERING TECH (AGET)**

## AGET 1750 Equipment, Structure and Power Systems 3 Credits

Trends and opportunities in mechanized agriculture; problems to illustrate the work of four major divisions of agricultural engineering; power and machinery, electrical power and processing, structures and environment, and soil and water conservation engineering practices.

Components: Laboratory, Class

# AGET 3750 Agricultural Engineering Technology Internship 3-6 Credits

Supervised experiential learning opportunities in cooperation with businesses and pubic agencies related to Agricultural and Industrial Engineering

**Components:** Field Studies

Prereqs/Coreqs: P. 45 credits completed or IP and 12 credits of AGBUS completed or IP and good standing, and approval of internship coordinator

#### AGET 3830 Engines and Tractor Systems 3 Credits

Operating principles, maintenance, adjustment, and testing of gas and diesel engines used in agriculture. Analysis of tractor and power transmission systems.

Components: Laboratory, Class

Prereqs/Coreqs: P. AGET 1750 or consent of instructor

#### AGET 3850 Electrical Applications in Agriculture 3 Credits

Elementary electricity; planning of farmstead electrical systems; selection, operation, and maintenance of electrical equipment; application of electricity to heat, light, and power; emergency power generation.

Components: Laboratory, Class

Preregs/Coregs: P. AGET 1750 or consent of instructor

#### AGET 3950 Soil and Water Conservation Engineering 3 Credits

Land description and characteristics of watersheds. Design, layout, and construction of waterways, diversions, terraces, and earthen structures.

Components: Laboratory, Class

Prereqs/Coreqs: P. AGET 1750 or SCSCI 2230 or ECORES 1010 or consent of instructor

### AGET 4690 Machinery Engineering and Management 3 Credits

Design, maintenance, operation, adjustment and management of agricultural machinery.

Components: Laboratory, Class

Prereqs/Coreqs: P. AGET 1750 or consent of instructor

# AGET 4790 Materials Handling and Energy Seminar 3 Credits

Principles and applications of handling agricultural products. Sales, service, employment opportunities, and special problems relating to agricultural, environmental, and energy systems.

Components: Laboratory, Seminar

#### AGET 4890 Structures and Environmental Control 3 Credits

Planning and construction of agricultural buildings with respect to functions, aesthetic and environmental aspects; construction components; material utilization; moisture and heat transmission; ventilation system design; and physiological effects of environment on animals and crops.

Components: Laboratory, Class

Preregs/Coregs: P. AGET 1750 or consent of instructor

# AGET 4990 Independent Study in Equipment, Structure and Power Systems 1-3 Credits

Advanced study in an area of specialization.

Components: Independent Study Preregs/Coregs: P. junior standing