

**AGRICULTURAL AE
ENGINEERING**

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

150 Metal Fabrication Technology

Fall. 2(1-2) SA: ATM 150

Physical principles and safety techniques for electric and gas welding. Soldering, brazing, cutting, tool use, machine shop equipment use, and hot and cold metalworking.

240 Machine Systems and Management

Fall. 3(2-2) P: CSE 101 or CSE 131 SA:
ATM 240

Principles, analysis, performance, operation, and management of agricultural machines.

252 Gasoline and Diesel Engine Technology

Fall. 3(2-2) SA: ATM 252

Operating principles of gasoline and diesel engines and their systems. Operation and maintenance requirements.

254 Fluid Power Technology

Spring. 2(2-2) SA: AE 054, ATM 254

Fluid power in mobile equipment. Operation and characteristics of system components and circuits. Component disassembly. System testing and diagnosis. Offered first ten weeks of semester.

261 Principles of Animal Environments

Spring. 2(1-2) Interdepartmental with Animal Science. Administered by Agricultural Engineering. SA: AE 061, ATM 261

Animal environment requirements. Heat and moisture production rates. Psychrometrics of air and building materials. Heat loss and ventilation systems. Offered first ten weeks of semester.

290 Independent Study

Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Approval of department; application required.

Supervised individual student study in electrical technology or agricultural technology.

490 Independent Study

Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 5 credits in all enrollments for this course. R: Open only to students in the College of Agriculture and Natural Resources. Approval of department; application required.

Supervised individual student research and study in agricultural engineering.

491 Special Topics in Agricultural Engineering

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to students in the College of Agriculture and Natural Resources. Approval of department.

Special topics in agricultural engineering.