AGRICULTURAL  AE
ENGINEERING

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

101  Electrical Wiring Maintenance for Residential and Agricultural Facilities
Fall, Spring, Summer. 2(2-0) R: Not open to students in the Electrical Technology Major. Not open to students with credit in AE 072.
Introduction to electrical circuit maintenance, safety issues, and installation practices for residential and agricultural facilities.

102  Electrical Lighting for Residential and Agricultural Facilities
Fall, Spring, Summer. 2(2-0) R: Not open to students in the Electrical Technology Major. Not open to students with credit in AE 085.
Introduction to electrical lighting sources, efficacies, productivity enhancement, and basic lighting design practices for residential and agricultural facilities.

131  Agricultural Water Resource Management
Spring. 3(3-0) RB: (CSS 210) or similar basic soil science course R: Open to students in the Institute of Agricultural Technology.
A basic knowledge, skills and tools course on water resources use and protection in agricultural production. Field trip required.

143  Application of Precision Agriculture Technologies
Spring. 3(3-0) R: Open to students in the Institute of Agricultural Technology.
Practical application of the use of the tools of precision farming with a focus on widely adopted guidance, monitoring and global positioning systems. Field trip required.

151  Fabrication Technology
Fall, Spring. 2(1-2) SA: AE 150
Introduction to principles and practices for shop fabrication including assembly options, fabrication nomenclature, drawing interpretation, 3D printing, tool and equipment use, welding and safety practices.

153  Engine and Equipment Technology
Spring. 2(2-2) SA: AE 053, AE 252

172  Electrical Wiring I
Fall. 4(3-2) R: Open to students in the Institute of Agricultural Technology. SA: AE 072
National Electrical Code requirements for residential, light commercial and agricultural branch circuits and services. Safe use of hand tools.

173  Electrical Occupations
Spring. 1(1-0) R: Open to students in the Institute of Agricultural Technology. SA: AE 073
Electrical wiring trade, job openings, preparation of a resume, interviewing for a job, preparing reports. Offered first ten weeks of semester.

182  Electrical Wiring II
Spring. 2(1-3) RB: AE 172 R: Open to students in the Institute of Agricultural Technology. SA: AE 082
Installation of electrical circuits for residential, light commercial and agricultural installations. Offered first ten weeks of semester.

185  Electrical Applications
Spring. 3(3-2) RB: TSM 121 R: Open to students in the Institute of Agricultural Technology. SA: AE 085

192  Electrical Wiring III
Fall. 4(2-4) R: Open to students in the Institute of Agricultural Technology. SA: AE 092
Commercial agricultural and industrial wiring, planning and installation, including transformers, polyphase systems, conductor sizing and explosion-proof wiring.

194  Electrical Systems Planning
Fall. 4(4-0) R: Open to students in the Institute of Agricultural Technology. SA: AE 094
Basic electrical calculations and wiring layout. Circuit requirements, outlet location, branch circuits and services sizing, blueprint reading and cost estimation.

200  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.