Agricultural Economics—AEC

885 Leadership in Natural Resources and Environmental Management
Fall. 3(3-0) Interdepartmental with Fisheries and Wildlife; Forestry, Park, Recreation and Tourism Resources. Administered by Department of Fisheries and Wildlife. Theory and practice of leadership in natural resource and environmental management. Integration across disciplinary and jurisdictional divisions.

890 Independent Study
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in Agricultural Economics. Approval of department. Independent study of selected topics in agricultural economics.

891 Topics in Agricultural Economics
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Selected topics in analytical methods, agri-food systems economics and management, and agricultural and natural resource development and policy.

898 Master’s Research
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to master’s students in the Agricultural Economics major. Approval of department. Master’s degree Plan B research.

899 Master’s Thesis Research
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to master’s students in the Agricultural Economics major. Approval of department. Master’s thesis research.

923 Advanced Environmental and Resource Economics
Fall. 3(3-0) Interdepartmental with Economics; Forestry; Park, Recreation and Tourism Resources; Resource Development. RB: (AEC 829 and EC 812A) Advanced economic theory of environmental management and policy. Treatment of externalities and market and non-market approaches to environmental improvement. Topics in conservation and sustainable economic growth. Applications to research and policy.

925 Advanced Natural Resource Economics
Spring. 3(0-3) Interdepartmental with Forestry; Resource Development; Park, Recreation and Tourism Resources; Economics. RB: (EC 812A and AEC 829 and FOR 866) SA: AEC 991H Economic theory of managing nonrenewable and renewable resources, including optimal use, the incentives for use under decentralized markets, and public policy design. Analysis of the co-evolution of economic and ecological systems.

930 Dynamic Analysis in Agriculture and Natural Resources
Spring. 3(3-0) RB: (EC 801 and EC 812A) R: Open only to Ph.D. students in the College of Agriculture and Natural Resources or College of Business or College of Social Science or approval of department. SA: AEC 911E Methods of dynamic optimization and their application to agricultural and natural resources problems. Discrete-time dynamic programming, calculus of variations, and discrete-time maximum principle.

932 Information Economics and Institutions in Agriculture and Natural Resources
Fall. 3(3-0) RB: (AEC 800 or AEC 810 or AEC 841) and (EC 812A and EC 812B) R: Open only to Ph.D. students in the Colleges of Agriculture and Natural Resources or Business or Social Science. Applications to issues in agriculture, agribusiness, the food system, natural resources, and the environment. Asymmetric information, incomplete markets, principal/agent issues, transaction costs, and the design of contracts and other institutions.

Agricultural Technology—ATM

AGRICULTURAL TECHNOLOGY

Institute of Agricultural Technology
College of Agriculture and Natural Resources

290 Independent Study in Agricultural Technology
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to freshmen or sophomores in the Institute of Agricultural Technology. Supervised individual study on experimental, theoretical or applied topics related to agricultural science and technology.

291 Selected Topics in Agricultural Technology
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to freshmen or sophomores in the Institute of Agricultural Technology. Selected topics of current interest in agricultural science and technology.

293 Professional Internship in Agricultural Technology
Fall, Spring, Summer. 3 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to freshmen or sophomores in the Institute of Agricultural Technology. Supervised professional experience in agencies, business and industry related to a student’s major field of study.

AGRICULTURAL TECHNOLOGY AND SYSTEMS MANAGEMENT

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

150 Metal Fabrication Technology
Fall. 2(1-2) Physical principles and safety techniques for electric and gas welding. Soldering, brazing, cutting, tool use, machine shop equipment use, and hot and cold metalworking.

195 National Electrical Code Review
Fall. 3(3-0) RB: (AE 094 or BCM 230) SA: AE 095 Electrical installation problems. Principles of and compliance with the National Electrical Code.

240 Machine Systems and Management
Spring. 3(2-2) P: (CSE 101 or CSE 131 or AT 090) Principles, analysis, performance, operation, and management of agricultural machines.