AGRICULTURAL AND RESOURCE ECONOMICS, DOCTOR OF PHILOSOPHY (PH.D.)

Requirements for the Ph.D. degree include a minimum of 42 credits of coursework, completion of a four course field, 12 credits of Ph.D. dissertation research (AREC899), development of a research paper worthy of submission to a well-regarded journal, development and defense of a dissertation prospectus, and successful defense of a Ph.D. dissertation.

Course Title Credits
Required courses:
ECON603 Microeconomic Analysis I 3
AREC623 Applied Econometrics I 4
AREC624 Applied Econometrics II 4
AREC620 Optimization in Agricultural and Resource Economics 3
AREC610 Microeconomic Applications in Agricultural and Resource Markets 3
ECON604 Microeconomic Analysis II 3
Select six elective courses, at least four of which must be chosen from the following: 18
AREC783 Environmental Taxation and Regulation
AREC785 Advanced Economics of Natural Resources
AREC815 Experimental and Behavioral Economics
AREC825 Advanced Economic Welfare Analysis
AREC832 Advanced Agricultural Policy Analysis
AREC845 Environment and Development Economics
AREC846 Development Microeconomics
ECON781 Valuing Environmental Benefits
AREC891 Introduction to Prospectus Development 1
AREC892 Dissertation Prospectus Development 2

Dissertation Research Requirements
AREC899 Doctoral Dissertation Research (minimum of 12 research credits) 12

Total Credits 54

1 During the spring semester of their second-year, students are also required to take a 1-credit course intended to help students develop a dissertation topic.
2 This requirement is waived for any student who has completed a dissertation prospectus and passed a prospectus examination before the fall semester of the third year.

The Ph.D. program trains students to design, perform, lead, and implement economic research projects in the fields of environmental and resource economics, agricultural economics, and development economics. It also trains students in how to disseminate research results in the major professional media including journals, reports, conferences, and seminars. It provides rigorous training in microeconomic theory and econometrics and in the application of microeconomics and econometrics to policy issues. Students completing their Ph.D. degrees find employment in academia, U.S. government agencies, international organizations, and consulting firms.

The first year of the program consists of basic coursework in microeconomic theory, econometrics, and mathematical methods. It consists of the following courses: A two-semester sequence in microeconomic theory (ECON603 and ECON604); A two-semester sequence in applied econometrics (AREC623 and AREC624); A one-semester course on mathematical optimization (AREC620); A one-semester course on applications of microeconomic theory to agricultural and resource economics (AREC610).

Students must earn a ‘B’ or better in each of these courses and a B (3.0) average or better in graduate coursework. If necessary, students can re-take these courses one time to achieve this standard. The first-year course requirements account for 20 credits (3 credits each for ECON603, ECON604, AREC620, and AREC610, plus 4 credits each for AREC623 and AREC624). First-year students are also expected to complete self-directed instruction regarding econometric software during August and January, attend additional instruction and develop qualifying paper topics during January, and participate in a paper-writing workshop in June at the end of the first year. The June workshop helps students develop their research for publication in academic journals as well as oral presentation. This workshop is useful for fostering the completion of the required research paper.

The second year of the program consists mainly of six elective courses. All students are required to take four courses from among the following courses offered in AREC: AREC783, AREC785, AREC815, AREC825, AREC832, AREC845, AREC846, and ECON781 with the remainder from that list, from graduate courses offered by the Economics Department or (with approval by the Director of Graduate Studies) from another supporting department on campus.