## Department of Agricultural Economics and Economics (DAEE)
## Graduate Program: Master of Science in Applied Economics

### Courses

Master's students take a rigorous set of courses in microeconomic theory, macroeconomic theory, and econometrics. Students may also take courses in supporting areas such as mathematics and statistics. The small size of the program necessitates a limited course offering. In general, students take courses for two semesters. Required courses include:

*Fall Semester - year 1:*

- *AGEC 467*, Quantitative Methods in Economics
  3 cr. LEC 3 PREREQUISITE: ECNS 301, MATH 221
  Static and dynamic optimization models in economics. Linear programming and its extensions analyzed as economic models. Nonlinear and dynamic programming models are introduced. Emphasis on formulating economic and management problems in terms of quantitative models.

- *ECNS 401*, Microeconomic Theory
  3 cr. LEC 3 PREREQUISITE: ECNS 301
  Advanced economic theory of price determination with analysis of consumer demand and production economics.

- *ECNS 561*, Econometrics I
  3 cr. LEC 3 PREREQUISITE: ECNS 301, STAT 216, MATH 221
  The use of regression analysis in the estimation of economic relationships, with emphasis on development of the least squares technique, the properties of estimators, and hypothesis testing in the context of the regression model.

- *ECNS 594 -01 & 02*, Seminars
  1 credit seminars, both seminars are taken in the first semester of graduate program.

*Spring Semester - year 1:*

- *ECNS 501*, Microeconomic Theory
  3 cr. LEC 3 PREREQUISITE: ECNS 401
  Economic models of optimization as they apply to consumer and firm decision making. Topics covered include comparative statics, theory of the firm and consumer, and consumer and producer surplus.

- *ECNS 502*, Macroeconomic Theory
  3 cr. LEC 3 PREREQUISITE: ECNS 302
  Systematic review of accepted macroeconomic theory and critical study of the functional relationships contained therein.

- *ECNS 562*, Econometrics II
  3 cr. LEC 3 PREREQUISITE: ECNS 561
  Course consists of theoretical and applied econometrics of static and dynamic structural models, primarily using time-series data. Single equations and system of equations are evaluated. Estimation properties specific to statistical problems, dynamic adjustments to economic behavior, and model forecasting are emphasized.

*Fall Semester - year 2:*

- *ECNS 569*, Research Methodology
  1 cr. LEC 1 PREREQUISITE: Graduate standing, ECNS 301, ECNS 302
  The research process as a means of acquiring knowledge which is reliable and relevant to problems.

*Spring Semester - year 2:*

- *AGEC 590,* Master's Thesis or *ECNS 590*, Master's Thesis

Supplementary coursework and research may focus on agricultural economics, natural resource economics, or general applied economics. Through continued discussions with the advisor and other faculty, students will select additional courses and either a thesis topic (Plan A) or research paper topic (Plan B) to complete a program of study consistent with their interests.