## **Graduate Certificate in Applied Economic Analysis**

The Department of Ag. Econ and Econ's Graduate Certificate in Applied Economic Analysis provides advanced training in econometrics and data analysis tools to increase professional training beyond their baccalaureate degree. Advanced statistical analysis is an increasing component of positions for Economists and market analysts. Students who obtain the graduate certificate may enter the MS in Applied Economics program, thus providing flexibility and the possibility of enhanced credentials. The accelerated option will permit advanced undergraduate students to fast-track into graduate program. Students will:

- Demonstrate proficiency in advanced econometric theory, including commonly used models for economic data.
- Develop competency in core causal inference techniques used in economics (e.g., regression discontinuity, instrumental variables, panel data, synthetic controls).
- Learn to verbally communicate advanced econometric and modeling techniques to a non-technical audience.
- Become fluent in programming software commonly used by economists (e.g., Stata, SAS, R).

This graduate certificate may be completed by advanced undergraduate students by setting aside graduate course credit.

ECNS 560	Advanced Data Analytics in Economics	3
ECNS 561	Econometrics I	3
ECNS 562	Econometrics II	3
Directed Major Elective <sup>1</sup>		3

- Directed Major Electives: ECNS 501 Microeconomics Theory I, and ECNS 502 Macroeconomic Theory.
- Junior status.
- Required coursework:
  - ECNS 301 Intermediate Microeconomics or ECNS 303 -Macroeconomics Theory
  - ECNS 401 Econometrics or equivalent.
  - M171 Calculus I and M172 Calculus II

## Graduation Requirements

Minimums of 12 course credits. Cannot double count courses for undergraduate and graduate programs. Must have a grade of B or better in all courses. There is no paper or thesis requirement.