

Applied Economics

Department Information

- **Interim Department Chair:**
Cheryl Wachenheim
- **Department Location:**
500 Barry Hall
- **Department Phone:**
(701) 231-7441
- **Department Email:**
ndsu.agribusiness@ndsu.edu
- **Department Web Site:**
www.ag.ndsu.edu/agecon/ (<http://www.ag.ndsu.edu/agecon/>)
- **Application Deadline:**
March 1
- **Credential Offered:**
Ph.D.
- **Test Requirement:**
GRE
- **English Proficiency Requirements:**
TOEFL iBT 79, IELTS 6.5, Duolingo 105

****This program is not accepting applications for fall 2025 ****

The Doctor of Philosophy (Ph.D.) program in Applied Economics is designed to empower students as independent thinkers and solution-oriented researchers. Our outcome-based program equips students with the essential tools to conduct impactful research across diverse areas of applied economics. As students progress through the program, they will develop the analytical prowess and a holistic skill set needed to address empirical challenges through economic theory and rigorous research. The program offers 15 credits of core classes with the remaining 75 credits being earned through other credit-based academic activity that may or may not include didactic coursework.

Admission Requirements

The program admits new students for the Fall semester of each odd-numbered year. Applications must be submitted by March 1st prior to the Fall semester of intended enrollment. To be considered for admission, applicants must

- have earned a 150 score or above on the quantitative portion of the GRE
- have demonstrated mathematical competency in multivariate calculus, linear (matrix) algebra, and calculus based probability theory
- have completed a Bachelor of Science or Master of Science degree in Economics, Agricultural Economics, or a related discipline and have a cumulative GPA of 3.0 or above

Financial Assistance

Granting assistantships depends on academic performance, departmental needs, and availability of assistantships. To be considered for a Graduate Research Assistantship (GRA) or Graduate Teaching Assistantship (GTA) applicants must obtain a 155 or above on the quantitative portion of the GRE. Assistantships do not begin until the first semester of full graduate standing when courses that apply for the Ph.D. degree are taken.

Students with an assistantship perform research or teaching duties in the department and are paid a monthly stipend. Most assistantships are full-time (20 hours per week) or half-time (10 hours per week). In addition to the stipend, students may receive a graduate tuition waiver. Tuition waivers cover base tuition for NDSU graduate credits only. Students are responsible for differential tuition, student fees, and tuition for non-graduate level credits taken or Cooperative Education credits.

All students pursuing a Ph.D. in Applied Economics must complete all core courses in microeconomics, macroeconomics, and econometrics. Students select elective courses (with approval of the adviser and supervisory committee) to fulfill the remaining Graduate College credit requirements. To progress to the second year of the doctoral program, students must successfully complete qualifying exams in both microeconomics and econometrics.

The student and major adviser prepare a plan of study by the end of the first year in residence that contains no less than 90 credits as required by the Graduate College. Of these credits, 15 are core courses and will include:

2 Applied Economics

1. six credits in microeconomic theory: New courses ECON 841 and ECON 842
2. three credits in macroeconomic theory: existing course AGECE 743
3. six credits in econometrics. New courses ECON 810 and ECON 811

The remaining credits are tailored to the student and can be earned through any credit-based academic activity. Additionally, mastery of at least one pre-approved field of applied economics will be demonstrated by:

1. capacity to synthesize important economic literature in the field;
2. demonstrated capacity to master key methods in the field; and
3. capacity to produce original research in the field.

It is required that students have demonstrated mathematical competency in multivariate calculus, linear (matrix) algebra, and calculus based probability theory. These can be demonstrated by completion of the following courses at NDSU (or their equivalent at another university): Math 259 or Math 265, Math 129, and Stat 367. Alternatively, a student can demonstrate the required mathematical competency by completing an approved course in Mathematical Economics (or Mathematics for Economics) equivalent to ECON 439/639 at NDSU.

Kwame Addey, Ph.D.

North Dakota State University, 2023

Research Interests: International Trade, and Financial Markets (Statistical Arbitrage)

Jon Biermacher, Ph.D.

Oklahoma State University, 2005

Research Interests: Economics of Livestock Production, Crop Production and Marketing Systems, Technology and Biotechnology Adoption, and Rural and Community Economic Development

David Bullock, Ph.D.

Iowa State University, 1989

Research Interests: Futures and Options Markets, Over-The-Counter Derivatives, Trading, Risk Management, Agrifinance, Monte Carlo Simulation, and Big Data Applications in Agriculture

James Caton, Ph.D.

George Mason University, 2016

Research Interests: Entrepreneurship Agent-based Computational Economics, Market Process Theory, Monetary Economics

Erik Hanson, Ph.D.

University of Minnesota, 2016

Research Interests: Agricultural Finance, Farm Management, Marketing and Production Economics

Ron Haugen, M.S.

North Dakota State University, 1989

Research Interests: Farm Management

Robert Hearne, Ph.D.

University of Minnesota, 1995

Research Interests: Natural Resource and Environmental Economics

Jeremy Jackson, Ph.D.

Washington University in St. Louis, 2008

Research Interests: Microeconomics, Political Economy, Public Finance

Thomas Krumel, Ph.D.

University of Connecticut, 2020

Research Interests: Rural Development, Labor Demand, and Labor Market Skills Mismatch

Siew Hoon Lim, Ph.D.

University of Georgia, 2005

Research Interests: Production Economics, Transportation, Industrial Organization

Raymond March, Ph.D.

Texas Tech University, 2017

Research Interests: Public and Private Provision and Governance of Health Care in the United States

Dragan Miljkovic, Ph.D.

University of Illinois, 1996

Research Interests: Agricultural Prices, International Trade, Agricultural and Food Marketing and Policy

William Nganje, Ph.D.

University of Illinois at Urbana-Champaign, 1999

Research Interests: Agricultural Finance, Food Safety Economics

Frayne Olson, Ph.D.

University of Missouri, 2007

Research Interests: Crop Marketing Strategies, Crop Supply Chain Management, Agricultural Contracting, Agricultural Risk Management

Bryon Parman, Ph.D.

Kansas State University, 2013

Research Interests: Whole Farm and Agribusiness Financial Structure, Risk Management, Land Values and Rents, and Farm Financial Trends

Timothy Petry, M.S.

North Dakota State University, 1973

Research interests: Livestock Marketing

Veeshan Rayamajhee, Ph.D.

University of New Mexico, 2019

Research Interests: Individual and Collective Responses to Covariate Shocks

David Ripplinger, Ph.D.

North Dakota State University, 2011

Research Interests: Production Economics and Marketing

David Roberts, Ph.D.

Oklahoma State University, 2009

Research Interests: Natural Resource and Environmental Economics, Econometrics, Production Agriculture

Anupa Sharma, Ph.D.

Virginia Polytechnic Institute and State University, 2016

Research Interests: Economics, Agriculture Business and Management

Sandro Steinbach, Dr. Sc.

ETH Zurich, Swiss Federal Institute of Technology, 2018

Research Interests: International Trade and Agricultural Policy

Cheryl J. Wachenheim, Ph.D.

Michigan State University, 1994

Research Interests: Agribusiness

William W. Wilson, Ph.D.

University of Manitoba, 1980

Research Interests: Commodity Marketing, Agribusiness, Industrial Organization