

# Agribusiness and Applied Economics

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## Department Information

- **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:**  
M.S.
- **Test Requirement:**  
GRE or GMAT
- **English Proficiency Requirements:**  
TOEFL ibt 79; IELTS 6.5; Duolingo 105

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## Program Description

The Agribusiness and Applied Economics Master of Science degree includes areas of specialization in applied economics, agribusiness, and transportation and logistics.

The Applied Economics area emphasizes course work in economic theory, research methods, and quantitative techniques. The option is designed to prepare students for careers in agricultural economics research in private and public sectors and for Ph.D. programs at other institutions.

The Agribusiness specialization is a broad-based program which combines training in agribusiness management, economic analysis, and agricultural sciences. Training may include biotechnology, processing, and food and environmental safety. Students are prepared for a variety of successful careers in agribusiness by fulfilling the requirements for expertise in quantitative methods and developing a rigorous background in economic theory and research.

The Departments of Agribusiness and Applied Economics and Civil Engineering, in conjunction with the Upper Great Plains Transportation Institute, offer an interdisciplinary graduate program in multimodal transportation. The program includes rural and non-metropolitan planning, highway and railroad engineering, freight transportation operations and economics, and agribusiness logistics and distribution. Both thesis and comprehensive study options are available.

Students of all options have complete access to well-equipped research facilities and to faculty supervision time. The department has an excellent placement record with national and international agricultural and business firms, as well as government agencies.

In addition to the Graduate School admission requirements (<https://bulletin.ndsu.edu/graduate/admission-information/>), applicants to the program must have earned a grade of B or higher in intermediate microeconomics and statistics including linear regression, and a grade of C or better in calculus.

Students who do not meet all requirements for admission or have deficiencies in prerequisite course work, but show potential for successful graduate study, may be admitted under a conditional status. Evidence must be provided showing that the applicant's potential is not adequately reflected by his/her record. After meeting the specified standards of performance set by the department, the student, in consultation with the major adviser, may request a change to full graduate standing.

## Financial Assistance

The department offers assistantships on a competitive basis. Graduate Research Assistantships (GRAs) provide monthly stipends plus tuition waivers. Students must pay a minimal activity fee each semester. Assistantships do not begin until the first semester of full graduate standing when courses that apply for the Master of Science degree are taken.

Most assistantships are half-time (20 hours per week) or one-quarter-time (10 hours per week). Students on assistantship perform research or teaching duties in the Department in return for their stipend. Assistantships are typically limited to 16 months.

Granting assistantships depends on academic performance, departmental needs, and availability of assistantships.

All students pursuing a M.S. in Agribusiness and Applied Economics must complete all core courses. Students select elective courses (with approval of the adviser and supervisory committee) to fulfill the remaining Graduate College credit requirements. It is required that students have competence in calculus, multiple regression analysis, and intermediate microeconomics.

Code	Title	Credits
<b>Required Courses (both options)</b>		
AGEC 701	Research Philosophy	1
ECON 710	Advanced Econometrics	3
AGEC 739	Analytical Methods for Applied Economics	3
AGEC 741	Advanced Microeconomics	3
<b>Plan A: Thesis Option</b>		
Courses numbered 601-689, 691; 700-789, 791; 800-889 and 891		6
AGEC 798	Master's Thesis	
<b>Plan B: Comprehensive Study Option</b>		
ECON 610	Econometrics	3
Courses numbered: 601-689, 691; 700-789, 791; 800-889 and 891		8
AGEC 797	Master's Paper (2-4 credits)	
Minimum Total Credits:		30

**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

**Kerianne Lawson, Ph.D.**

West Virginia University, 2021

Research Interests: Economic Development, Economic Freedom, Law and Economics, Energy Economics

**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

**Xudong Rao, Ph.D.**

University of Minnesota, 2015

Research Interests: Farm and Agribusiness Management, Risk Analysis, Efficiency and Productivity, Technology Adoption, Food and Agricultural Policy, International Agricultural Development

**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

**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

An accelerated Master of Science program is available for students currently enrolled in the undergraduate economics, agricultural economics, and agribusiness programs at North Dakota State University. Students will be required to complete 30 credits consisting of 16 graduate-level didactic credits (600/700 level), maintain a graduate GPA of 3.0, and complete a thesis or paper.

Nine (9) of the didactic credits can be used to meet the requirement for the B.S. degree. Graduate stipend or assistantship will not be provided until B.S. degree is granted. However, students are eligible for hourly funding (i.e., time slip) if available at any time after being accepted into the accelerated MS program. Upon completion of the B.S. degree requirement, students are eligible for assistantships pending availability. Differential tuition applies. Graduate tuition rates will apply to graduate level courses while undergraduate tuition applies to undergraduate courses.

## Eligibility and Admission

A Combined/Accelerated Degree Program Declaration form (<https://dmsforms.ndus.edu/iFiller/iFiller.jsp?ref=6876b8bb-fe59-437c-852c-310fb76e8475>) is required and should be submitted before a student's senior year.

At the time of application, the student:

- Must have completed at least 60 credits towards their B.S. degree before conditional admission.
- Must have completed at least 30 credits at NDSU before conditional admission.
- Must have a cumulative GPA of 3.5 at NDSU to be eligible for conditional admission.

- Must have completed intermediate microeconomics (ECON 341) with a grade of B or higher, calculus (Math 144 or higher) with a grade of C or higher, and linear regression (STAT 331 or 461) with a grade of B or higher.

## Rules for Accepted Students

All admissions are conditional. The minimum condition is completion of the B.S. degree prior to full standing in M.S. program.

- No undergraduate courses (100-400) may be counted toward a M.S. degree.
- Courses completed at the 600 level prior to being accepted to the program may be counted toward a M.S. degree.
- A maximum of 9 credits in the M.S. program can be used to meet the requirements for the B.S. degree.
- Students entering the M.S. degree with a B.S. degree in hand may not use courses earned as part of the bachelors program for the M.S. requirements.
- The student must meet all of the requirements that would normally be expected of a student in the M.S. program.
- Graduate stipend or assistantship will not be provided until B.S. degree is granted. However, students are eligible for hourly funding (i.e., time slip) if available. Upon completion of the B.S. degree requirement, students are eligible for assistantships pending availability.

## Degree Requirements for Accelerated Masters of Science Program

Student must meet all requirements of the Economics, Agribusiness, or Agricultural Economics B.S.; and Agribusiness and Applied Economics M.S. programs to be awarded these degrees. The Graduate School has the following minimum requirements:

- Minimum of 30 credits total.
- Minimum of 16 course credits in 601-689 and/or 700-789 level.

Student Focused. Land Grant. Research University.