

# Agribusiness & Applied Economics (AGEC)

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**AGEC 194. Individual Study. 1-3 Credits.**

**AGEC 196. Field Experience. 1-15 Credits.**

**AGEC 199. Special Topics. 1-5 Credits.**

**AGEC 242. Introduction to Agricultural Management. 3 Credits.**

Economic and managerial concepts related to farm or agribusiness production process, development of cost data, enterprise analysis, organization and management of production inputs. 3 lectures.

**AGEC 244. Agricultural Marketing. 3 Credits.**

Study of the agricultural marketing system to include cash marketing, commodity futures trading, branded products merchandising and the interrelationship of the government and international trade. 3 lectures.

**AGEC 246. Introduction to Agricultural Finance. 3 Credits.**

Introduction to agricultural finance; provides background in farm and agribusiness credit use and evaluation. Discussion of specific financial conditions on farms and in agribusiness. A financial calculator will be required for this course. 3 lectures.

**AGEC 292. Global Practicum: Study Abroad. 1-15 Credits.**

Pre-Arranged study at accredited foreign institutions (study abroad), domestic institutions (National Student Exchange) or on approved study abroad programs. Pre-requisite: Sophomore standing and prior approval by International Student and Study Abroad Services and major department. Graded 'P' or 'F' (Undergraduate), or 'S' or 'U' (Graduate).

**AGEC 294. Individual Study. 1-5 Credits.**

**AGEC 299. Special Topics. 1-5 Credits.**

**AGEC 339. Quantitative Methods & Decision Making. 3 Credits.**

Application of basic probability concepts to decision analysis, introduction to linear programming models, forecasting, and project management. 3 lectures. Prereq: ECON 201 and MATH 144 or higher and CSCI 116 or MIS 116.

**AGEC 342. Farm and Agribusiness Management II. 3 Credits.**

Application of production economics principles to farm and agribusiness operations. Economic input-output principles and profit maximization. 3 lectures. Prereq: AGECE 242.

**AGEC 343. Introduction to Commodity Trading. 3 Credits.**

To learn mechanics of commodity information and technology in the commodity trading room (CTR). Emphasis will be on information, extracting information and analysis, as well as trading and risk management. Co-req: TL 116.

**AGEC 344. Agricultural Price Analysis. 3 Credits.**

Introduction to price analysis in agricultural markets. 3 lectures. Prereq: AGECE 244.

**AGEC 346. Applied Risk Analysis. 3 Credits.**

Development of tools to analyze business and financial risk problems unique to farms and agribusinesses. Prereq: AGECE 339, ECON 341, and STAT 331.

**AGEC 347. Principles of Real Estate. 3 Credits.**

Principles and techniques of real estate appraisals, practical application of appraisal principles, and techniques to real property evaluation. Cross-listed with BUSN 347.

**AGEC 350. Agrisales. 3 Credits.**

The principles of salesmanship applied to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, and closing sales. 3 lectures.

**AGEC 356. Advanced Agricultural Lending. 3 Credits.**

Application of credit analysis principles including loan structure, financial analysis, borrower-lender relationship, legal aspect of lending, collateral valuation, and role of financial intermediaries in agriculture. Prereq: ECON 201 and AGECE 246 or FIN 320.

**AGEC 375. Applied Agricultural Law. 3 Credits.**

Study of laws affecting agriculture and agribusiness including property ownership, financial relations, and environmental regulation.

**AGEC 378. Introduction to Transportation & Logistics. 3 Credits.**

Presents the role and importance of transportation, with detailed discussion of the various modes and their specific characteristics. Covers basic logistics concepts in addition to transportation, including inventory, warehousing, and location decisions. Prereq: ECON 201.

**AGEC 379. Global Seminar. 1-6 Credits.**

NDSU instructed experience or field study in a foreign country. Conducted in English for residence credit. Pre-requisite: Prior approval by International Student and Study Abroad Services and major department. May be repeated. Standard Grading.

**AGEC 393. Undergraduate Research. 1-5 Credits.**

**AGEC 394. Individual Study. 1-5 Credits.**

**AGEC 396. Field Experience. 1-15 Credits.**

**AGEC 397. Fe/Coop Ed/Internship. 1-4 Credits.**

**AGEC 399. Special Topics. 1-5 Credits.**

**AGEC 420. Integrated Farm and Ranch Management. 3 Credits.**

Intended for persons who will advise or manage farm and ranch operations. Application of all phases of management (including marketing, finance) to crop and livestock production practice. 2 lectures, 1 laboratory. Prereq: AGEC 242, AGEC 244, or AGEC 246.

**AGEC 444. Advanced Commodity Trading. 3 Credits.**

Capstone course for commodity marketing option. Advanced work on topics related to marketing of crops. 2 lectures. Prereq: STAT 331 or ECON 410. Coreq: AGEC 339. {Also offered for graduate credit - see AGEC 644.}.

**AGEC 445. Agribusiness Industrial Strategy. 3 Credits.**

The course integrates industrial organization topics with specific applications to agribusiness strategy problems. Focus is on industry analysis and issues in competition, strategy, and rivalry from an agribusiness perspective. Prereq: AGEC 344. Coreq: AGEC 339.

**AGEC 446. Agribusiness Finance. 3 Credits.**

Application of financial theory to investment and liability management problems of agribusiness and farm firms. Characteristics, operations, and management of agricultural financial institutions. 3 lectures. Prereq: AGEC 339. Co-req: AGEC 346. {Also offered for graduate credit - see AGEC 646.}.

**AGEC 450. National AgriMarketing Association (NAMA) I. 1 Credit.**

Learn the components of an agribusiness marketing plan and apply this knowledge in the development of a marketing plan for a selected product. 1 lecture. May be repeated for credit.

**AGEC 451. National AgriMarketing Association (NAMA) II. 1 Credit.**

Review the components of an agribusiness marketing plan. Work in teams to prepare written and oral marketing plans for the National NAMA student chapter competition. 1 lecture. May be repeated for credit. Recommended prereq: AGEC 450.

**AGEC 452. Food Laws and Regulations. 3 Credits.**

Overview of U.S. federal and state laws and international food standards with emphasis on U.S. federal regulatory agencies. Cross-listed with CFS 452 and SAFE 452. Dual-listing: CFS 652 AGEC 652 SAFE 652.

**AGEC 472. Advanced Logistical Analysis. 3 Credits.**

Presents major analytical tools and methods used in analyzing logistical strategies. Course emphasis is on application of analytical tools used in quantifying logistical problems by manufacturing, trading, and shipping firms. Prereq: AGEC 378 and AGEC 339 or MGMT 360.

**AGEC 474. Cooperatives. 3 Credits.**

Theory, practice, and evaluation of cooperatives including principles, management, marketing, finance, taxes, legal issues, and adjusting to change. Prereq: ECON 201. Cross-listed with BUSN 474. {Also offered for graduate credit - see AGEC 674.}.

**AGEC 484. Agricultural Policy. 3 Credits.**

Analysis of the evolution and development of federal food, natural resource, and trade policies and their consequences on the agricultural sector. Exploration of how microeconomic forces influence formulation of macroeconomic agricultural policy. Prereq: ECON 201, Junior standing.

**AGEC 491. Seminar. 1-5 Credits.**

**AGEC 492. Global Practicum: Study Abroad. 1-15 Credits.**

Pre-Arranged study at accredited foreign institutions (study abroad), domestic institutions (National Student Exchange) or on approved study abroad programs. Pre-requisite: Sophomore standing and prior approval by International Student and Study Abroad Services and major department. Graded 'P' or 'F' (Undergraduate), or 'S' or 'U' (Graduate).

**AGEC 494. Individual Study. 1-5 Credits.**

**AGEC 496. Field Experience. 1-15 Credits.**

**AGEC 499. Special Topics. 1-5 Credits.**

**AGEC 644. Advanced Commodity Trading. 3 Credits.**

Capstone course for commodity marketing option. Advanced work on topics related to marketing of crops. 2 lectures. {Also offered for undergraduate credit - see AGEC 444.}.

**AGEC 646. Agribusiness Finance. 3 Credits.**

Application of financial theory to investment and liability management problems of agribusiness and farm firms. Characteristics, operations, and management of agricultural financial institutions. 3 lectures. {Also offered for undergraduate credit - see AGEC 446.}.

**AGEC 652. Food Laws and Regulations. 3 Credits.**

Overview of U.S. federal and state laws and international food standards with emphasis on U.S. federal regulatory agencies. Cross-listed with CFS 652 SAFE 652. Dual-listing: CFS 452 AGEC 452 SAFE 452.

**AGEC 674. Cooperatives. 3 Credits.**

Theory, practice, and evaluation of cooperatives including principles, management, marketing, finance, taxes, legal issues, and adjusting to change. Cross-listed with BUSN 674. F, S, Su. {Also offered for undergraduate credit - see AGEC 474.}.

**AGEC 690. Graduate Seminar. 1-3 Credits.****AGEC 692. Global Practicum: Study Abroad. 1-15 Credits.**

Pre-Arranged study at accredited foreign institutions (study abroad), domestic institutions (National Student Exchange) or on approved study abroad programs. Pre-requisite: Sophomore standing and prior approval by International Student and Study Abroad Services and major department. Graded 'P' or 'F' (Undergraduate), or 'S' or 'U' (Graduate).

**AGEC 695. Field Experience. 1-15 Credits.****AGEC 696. Special Topics. 1-5 Credits.****AGEC 701. Research Methods. 3 Credits.**

Developing the skills necessary to formulate and conduct economics research. Topics include: conducting literature review and identifying gaps in the literature, formulating research questions and hypotheses, testing hypotheses, addressing causal identification issues, gathering and managing economic data, analyzing economic data, and effectively communicating research findings in both written and oral formats. 3 lectures. Cross-listed with ECON 701.

**AGEC 711. Applied Risk Analysis I. 3 Credits.**

Conceptual foundations of risk, stochastic simulation using @Risk and Model Risk, finance, trading, and strategy are presented. Emphasis is placed on financial instruments, planning for agribusiness firms, trading and risk management in agricultural commodities.

**AGEC 712. Applied Risk Analysis II. 3 Credits.**

Conceptual foundations of risk are presented and applied to production, financial and institutional risk problems. Emphasis is placed on the development and understanding of risk theory; risk assessment and measures, response to risk and risk management tools - with emphasis on portfolio diversification principles/theory of insurance. Prereq: AGECE 711.

**AGEC 720. Food Safety Costs and Benefits Analysis. 3 Credits.**

Theoretical and empirical impacts of food safety costs and benefits. Three lectures. Prereq: SAFE 670, AGECE 741. Cross-listed with SAFE 720.

**AGEC 725. Food Policy. 3 Credits.**

Provides quantitative tools and models used to analyze general food safety policies. Three lectures. Prereq: SAFE 670. Cross-listed with SAFE 725 and CFS 725.

**AGEC 739. Analytical Methods for Applied Economics. 3 Credits.**

Study and application of operations research techniques and other decision methods to problems in agriculture, transportation, and resource management. 3 lectures.

**AGEC 741. Advanced Microeconomics. 3 Credits.**

Advanced analysis of demand, production, and costs; pricing output and resource allocation under various market structures.

**AGEC 743. Advanced Macroeconomics. 3 Credits.**

Advanced analysis of macroeconomic theories; economic growth, business fluctuations, and inflation.

**AGEC 744. Agribusiness I: Agricultural Product Marketing and Agribusiness Strategy. 3 Credits.**

Conceptual foundations of agribusiness strategy, food product marketing, and strategic planning are presented. Emphasis is placed on quantitative strategic decision making for the agribusiness firm.

**AGEC 771. Economics of Transportation Systems. 3 Credits.**

The course will provide an understanding of transportation economics and policy issues facing society. Topics include transportation demand, model costs, transportation competition and market power, transportation regulation, transportation investment, and the economics of transportation safety. Cross-listed with CE 771.

**AGEC 784. Empirical International Trade and Policy. 3 Credits.**

Empirical aspects of international trade, foreign investment, and the environment. Issues related to testing various trade models. Selected topics include testing trade models, gravity models, linkages between openness and growth, trade orientation and firm performance, trade patterns, trade and the environment, and labor markets and trade. Emerging topics in international economics with a focus on empirical applications. Use of advanced statistical modeling and data visualization techniques. Prereq: ECON 610 and AGECE 741 or equivalents. Cross-listed with ECON 784.

**AGEC 790. Graduate Seminar. 1-3 Credits.**

**AGEC 791. Temporary/Trial Topics. 1-5 Credits.**

**AGEC 793. Individual Study/Tutorial. 1-5 Credits.**

**AGEC 794. Practicum/Internship. 1-15 Credits.**

**AGEC 795. Field Experience. 1-15 Credits.**

**AGEC 796. Special Topics. 1-5 Credits.**

**AGEC 797S. Comprehensive Project. 1-6 Credits.**

**AGEC 797. Master's Paper. 1-3 Credits.**

**AGEC 798. Master's Thesis. 1-10 Credits.**

**AGEC 892. Graduate Teaching Experience. 1-6 Credits.**

**AGEC 893. Individual Study/Tutorial. 1-5 Credits.**

**AGEC 898. Continuing Enrollment. 1-9 Credits.**

For graduate students who have completed all necessary credits of course work including thesis (798) and dissertation (899) on their approved Plan of Study, but who have not yet completed and submitted their thesis or dissertation. This course does not count towards the credit requirements for the degree and is not financial aid eligible. Department consent required to enroll.

**AGEC 899. Doctoral Dissertation. 1-15 Credits.**