

AGRIBUSINESS SCIENCE & TECHNOLOGY

Program Number 10-006-2 Associate Degree in Applied Science • Four Terms

Catalog No. Class Title

ABOUT THE PROGRAM

Successful individuals employed in agribusiness occupations understand the importance of running efficient and profitable operations in the areas of records/business analysis, credit/marketing/purchasing, farm business transfers, goal setting, human relations, crop/soil management, and livestock nutrition/management. Maximize your opportunities for success by increasing your agricultural business and production management knowledge.

PROGRAM OUTCOMES

- · Develop an agri-business management plan.
- · Apply economic and marketing strategies to agribusiness industry.
- · Apply relevant technologies.
- · Create a crop management plan.
- · Create a livestock management plan.
- · Investigate opportunities in agribusiness.
- Interact as a professional in agribusiness.

CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES

LTC credits transfer to over 30 universities. For more information visit gotoltc.edu/future-students/transfer.

PROGRAM ADMISSIONS STEPS

- · Work with Career Coach to:
- Submit application and \$30 fee.
- Submit official transcripts (high school and other colleges).

ENROLLMENT PROCESS

- · Work with program Academic Advisor to:
- Complete an assessment for placement (Accuplacer or ACT).
- Complete Functional Abilities Statement of Understanding form.
- Meet to plan your first semester schedule, review your entire plan of study, discuss placement assessment results and complete any additional enrollment requirements.

APPROXIMATE COSTS

- \$142 per credit (resident)
- Other fees vary by program (books, supplies, materials, tools, uniforms, health related exams, etc.) Visit gotoltc.edu/financial-aid/tuition-and-fees for details.

FINANCIAL AID

This program is eligible for financial aid. Visit gotoltc.edu/Financial-Aid or talk with your Career Coach about how to apply for aid.

SPECIAL NOTES

Students may alternately choose to earn the Agriculture Technician Technical Diploma after completing Term 1 and Term 2 coursework. In addition, for students who are not seeking a diploma, select courses in this program will provide focused certificates of learning in agribusiness agronomy, agribusiness financial, and agribusiness livestock. Graduates of the Dairy Herd Management program can earn the Advanced Dairy Herd Management Certificate by taking six additional courses in Terms 3 and 4.

MPTC CLASSES

This program is shared with Moraine Park Technical College. MPTC district students follow LTC's admissions process; however, they are able to attend classes at a MPTC campus classroom by receiving both in-person and video conference instruction. MPTC Agribusiness Science & Technology program students will be issued a laptop from LTC while learning and applying the program's software applications.

ONLINE STUDENTS

Out-of-district students and working adults are able to take Term 1 & 2 courses in the online format of both reviewing lectures and one-on-one activities with your instructor and employer. Instructor led field trips and off campus activities are not an included requirement or opportunity.

CONTACT

LTC Career Coach 920.693.1162 • CareerCoach@gotoltc.edu

10-006-114 10-006-116 10-801-195	Term 1 Farm Business Management Intro to Animal Science Intro to Soil Science Written Communications Math with Business Applications	3 3 3 3 15
10-006-122 10-006-124	Term 2 Agricultural Finance Principles of Crop Production Principles of Animal Breeding Agribusiness Economics Economics	3 3 3 3 15
10-006-135 10-006-136 10-806-112 10-801-196	Term 3 Agricultural Marketing & Sales Agriculture Business Accounting Principles of Agronomy Principles of Sustainability Oral/Interpersonal Communication Introduction to Psychology	3 3 3 3 3 3
10-006-142 10-006-144 10-006-146 10-006-134	Term 4 Legal Aspects of Agribusiness Advanced Dairy Management Nutrition Principles Precision Ag Technologies Animal Records Introduction to Sociology	3 3 3 1 3 16

Credit(s)

Curriculum and Program Acceptance requirements are subject to change. Program start dates vary; check with your advisor for details.



TOTAL 64



ADVANCED DAIRY MANAGEMENT...advances the study of dairy herd management systems including milking and feeding arrangements, herd health, herd replacements, use of computer systems, personnel issues, and financial impact of management decisions. PREREQUISITE: 10006134 or 10006134OL Animal Records OR CONDITION: 190066 Advanced Dairy Herd Management

AGRIBUSINESS ECONOMICS...introduces agricultural economic dimensions and impacts, economic principles, calculation of economic returns, and evaluation of economic alternatives. Other topics include capital use, cost appraisal, risk considerations under a variety of economic conditions, farm credit sources, and creditor relationships. COREQUISITE: 10006110 or 10006110OL Agricultural Finance

AGRICULTURAL FINANCE...introduces learner to major aspects of agribusiness financial management through extensive problem solving, financial analysis and planning. Students will describe and calculate sweet 16 ratios, business cash flows, inventory controls, budgeting and borrowing considerations of various types of agribusinesses. Software tools, such as QuickBooks and WebEquity, will be introduced. PREREQUISITE: 10006112 Farm Business Management or 10006112OL Farm Business Management — Online

AGRICULTURAL MARKETING AND SALES...provides the fundamental principles and methods of marketing agricultural products, marketing processes and agencies, pricing and merchandising of various products, and obtaining bargaining power. Other topics include futures market structure and function; futures commodity contract specifications; futures trading procedures; commodity futures trading strategies; and an introduction to commodity options. PREREQUISITE: 10006126 or 10006126OL Agribusiness Economics OR CONDITION: 190066 Advanced Dairy Herd Management

AGRICULTURE BUSINESS ACCOUNTING...provides the learner with a study of accounting systems and methods appropriate for farms and agricultural businesses including the application of basic information-recording skills to allow for the construction of financial statements and filing of income tax forms. Students will produce and analyze financial statements and apply managerial accounting concepts by utilizing the software QuickBooks and WebEquity. PREREQUISITES: 10006110 Agricultural Finance- Online

ANIMAL RECORDS...introduces learner to records management through handson applications including the setup and use of computerized record-keeping software,
completion of a sample farm record problem utilizing computerized records, a review of
various recordkeeping systems, as well as the selection and implementation of various
computerized record programs. Software tools, such as PCDART, CowManager,
and DairyCOMP 305, will be utilized. PREREQUISITES: 10006124 or 10006124OL
Principles of Animal Breeding OR CONDITION: 190066 Adv Dairy Herd Management

ECONOMICS...provides the participant with an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems. growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

FARM BUSINESS MANAGEMENT...provides learner with basic business management practices including the development of a business plan, establishment of short and long range goals, identification and implementation alternatives for reaching goals, and development of strategies to monitor progress. The importance of designing a business mission statement based on goals is emphasized. Software tools, such as QuickBooks, FINPACK, PCDART and DairyCOMP 305, will be incorporated.

INTRO TO ANIMAL SCIENCE...provides animal science fundamentals including animal health, animal environments, anatomy and physiology, genetics and reproduction, animal feedstuffs, and animal-related safety.

INTRODUCTION TO PSYCHOLOGY...introduces students to a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings.

INTRO TO SOIL SCIENCE...provides fundamentals of soil's physical properties, chemical properties, biological properties, soil formation, classification, essential nutrients and soil survey. There will be emphasis on soil and water conservation practices that can be used to reduce soil erosion.

INTRODUCTION TO SOCIOLOGY...introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

LEGAL ASPECTS OF AGRIBUSINESS...provides students with pertinent information of the legal liabilities and regulations for both state and federal of an agribusiness. Course content includes legal descriptions, contractual agreements, employee and consumer rights, insurance, debt collection, as well as bankruptcy and employment protection issues as regulated by DOL, OSHA and DILHR. PREREQUISITE: 10006130 or 10006130OL Agricultural Marketing and Sales OR CONDITION: 190066 Advanced Dairy Herd Management

MATH WITH BUSINESS APPLICATIONS...covers real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, apply math concepts to the purchasing/buying process, apply math concepts to the selling process, and basic statistics with business/consumer applications. PREREQUISITE: 10834109 Pre-Algebra or equivalent and COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent or CONDITION: 610061 Agribusiness/ Agronomy Basic program admissions requirements met

NUTRITION PRINCIPLES...introduces learner to the principles of nutrition as presented on a comparative species basis including characteristics, physiological functions, interrelationships, and deficiency symptoms as they pertain to carbohydrates, fats, proteins, mineral elements, and vitamins. PREREQUISITE: 10006113 or 10006113OL Intro to Animal Science OR CONDITION: 190066 Advanced Dairy Herd Management

ORAL/INTERPERSONAL COMMUNICATION...provides students with the skills to develop speaking, verbal and nonverbal communication, and listening skills through individual speeches, group activities, and other projects. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

PRECISION AG TECHNOLOGIES...provides the student the opportunity to experience studies in agricultural precision technologies including bio-technologies, application industries, livestock equipment, precision farming, financial resource management, plant protection, sustainable agriculture, environmental impacts of agriculture, agricultural workforce, and agricultural production. COREQUISITES: 10006140 or 10006140OL Legal Aspects of Agribusiness and 10006142 or 10006142OL Advanced Dairy Management OR CONDITION: 190066 Advanced Dairy Herd Management

PRINCIPLES OF AGRONOMY...examines agronomy principles for Midwest crops including basic components of plant growth, seed quality, plant parts, plant growth and development, plant classification, maturity systems, and seeding rates. PREREQUISITE: 10006122 Principles of Crop Production or 10006123OL Principles of Crop Production Online

PRINCIPLES OF ANIMAL BREEDING...applies genetic principles to livestock improvement including elementary population genetics, phenotypic and genotypic effects of selection, selection methods, and systems of mating. PREREQUISITE: 10006114 or 10006114OL Intro to Animal Science

PRINCIPLES OF CROP PRODUCTION...provides knowledge of crop and soil nutrient management, including use of both commercial fertilizers and manure. Course topics include purchase or lease options for land, agronomy consulting programs, tillage and conservation plans, soil nutrient plans, cropping plans, managing nutrient waste, crop harvest and storage and production records. PREREQUISITE: 10006116 Intro to Soil Science or 10006116OL Intro to Soil Science Online

PRINCIPLES OF SUSTAINABILITY...prepares students to develop sustainable literacy, analyze interconnections among physical and biological sciences and environmental systems, summarize effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal/recycling in the U.S., and analyze approaches used by your community. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

WRITTEN COMMUNICATION...teaches the writing process, which includes prewriting, drafting, revising, and editing. Through a variety of writing assignments, the student will analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Keyboarding skills are required for this course. It also develops critical reading and thinking skills through the analysis of a variety of written documents. PREREQUISITE: 10831103 Intro to College Wrtg equivalent and COREQUISITE: 10838105 Intro Rdg & Study Skills or equivalent