

AGRICULTURAL PROGRAM DESCRIPTIONS

Information on Degree, Diploma and Certificate Programs

DEGREE PROGRAMS

Program: **Agribusiness**

Length: 4 years

Combination of agricultural economics and business courses. Provides and understanding of the structure and organization of the agri-food as well as business skills with particular application to processing, transportation, credit and marketing. Available as a degree or as a major of another business or science program, depending on university.

Program: **Agricultural Biology**

Length: 4 years

Provides a comprehensive background in the life sciences and allows students to focus on particular areas relevant to agriculture, such as biotechnology, genetics and evolution, plant pathology, plant molecular biology and wildlife ecology, through selection of appropriate restricted and open electives.

Program: **Agricultural Biotechnology**

Length: 4 years

Bachelor of Science in Agricultural Biotechnology provides an excellent foundation for work in Environmental Law, Management or the Veterinary Sciences. Graduates go on to work in fields such as: plant pathology, immunology, medicine, agricultural engineering, cellular biology, farm consulting, animal science, rangeland evaluation & management, agrology, sales & business, resource economy, entomology, horticulture, forestry and animal health inspection.

Program: **Agricultural Economics**

Length: 4 years

Provides an understanding of current agricultural business, applied economic, social and environmental issues nationally and globally. Allows student to focus on a number of themes such as resource and environmental management, food institutions and policy, the rural economy and agricultural business management, finance and marketing.

Program: **Agriculture**

Length: 4 years

Provides opportunity to major in agriculture and resource economics, animal science, crop science, sustainable agricultural systems and pre-vet medicine studies. Many programs provide hands on skills and allow the student to apply knowledge to real world projects.

Program: **Agriculture and Food Business Management**

Length: 4 years

Teaches the application of business skills and provides tools needed to manage organizations in the agriculture and food industries while providing a background for a career in the agricultural or food business setting. Option to major in either Food Business Management or Agricultural Business management. Graduates go on to work as scientists, technical specialists, or to have careers in management, sales and finance.

Program: **Agroecology**

Length: 4 years

Specializes in the management and conservation of our natural and agricultural resources and development of environmentally friendly weed, insect and disease controls. Available as a major in the Bachelor of Science in Agriculture.

Program: **Agronomy**

Length: 4 years

Provides a diverse knowledge of agriculture, agri-food systems, and the role of agriculture national and globally. Covers current agricultural challenges and issues, such as resource management, sustainability, food production, processing and marketing, in addition to many other wide ranging topics. Provides graduates with an understanding of the biological, economical and economic principles of crop production, as well as the environmental effects of agriculture. Graduates go on to work as: agronomists, livestock animal specialists, farm managers, agricultural merchandise specialists, researchers, etc.

Program: **Agro-Environmental Sciences**

Length: 4 years

Available as a major in the Bachelor of Agricultural Environmental Sciences program. Courses focus on the basic and applied biology of cultivated plants, domestic animals, arable soils, and the economics of agriculture. Students then choose one or two specializations in these or connected disciplines that reflect their interests and career goals. The program has a strong field component which includes hands-on laboratories, visits to agricultural enterprises, and opportunities for internships. Graduates go on to work in: livestock management, veterinary science, farm management, sustainable development, agrology, soil and water management and pest and disease management.

Program: **Animal Bioscience**

Length: 4 years

Provides students with a background in domestic animal biology (animal metabolism, genetics, physiology, nutrition, behavior, care, social and environmental impact) and prepares them to work in biomedical sciences, companion, equine and research animal care, animal health and environmental sciences. Available as a major or a separate degree, depending on university.

Program: **Animal Health**

Length: 4 years

Provides student with a strong background in life sciences with application in animal immunology and infection, animal physiology, nutrition, behavior and welfare, animal production and food processing. Opportunity to major in companion and performance animals, food animals, food safety and quality and pre-veterinary medicine studies.

Program: **Animal Science**

Length: 4 years

Study of the feeding, breeding, and management of domestic animals (agricultural animals in particular). Subjects range from herd genetics and high-performance diets to animal vaccines and environmentally-sound animal management. Areas of emphasis in the program include biotechnology, genetics, computer modeling, nutrition, animal behaviour and welfare, sustainable production systems and management, pasture management, and forage production.

Program: **Applied Science**

Length: 4 years (Olds includes a diploma after 2 years)

Practical skills: strategic business management and career planning to contribute to the global agribusiness industry. Includes an industry placement for 4th year (Olds). Combination of management, marketing and research courses. Possibility of combining a diploma program from another college for a degree.

Program: **Biomedical Science**

Length: 4 years

Courses cover anatomy, physiology, biochemistry, histology, pharmacology, nutrition and epidemiology. This program provides graduates with the foundation necessary to pursue graduate or professional studies including medicine, dentistry, chiropractics, or veterinary medicine. This degree can lead to advanced graduate degrees in biomedical science or professional degrees in human and animal health-related disciplines. Graduates commonly work in teaching and research, as well as doing technical work with government and private sector agencies.

Program: **Bio-Resource Engineering**

Length: 4 years

Focuses on responsible use of living resources – plants, animals and the natural environment – for both traditional and innovative applications. In addition to providing hands-on experience, students can also take an experiential education credit in your third year that allows them to receive credit for relevant summer job experience. Course is split between separate University of Guelph campuses between year 2 and 3.

Program: **Bio-Resource Management**

Length: 4 years

Bio-resource management involves the responsible use of our living resources – plants, animals and the natural environment – for both traditional and innovative applications. Classes are split between two University of Guelph Campuses. Option to major in Environmental Management and Equine Management.

Program: **Crop Science**

Length: 4 years

Explores the theory and practice of plant breeding, genetics, crop physiology and quality, and pest management leading to environmentally and economically sustainable production systems for the world's major field crops. Provides students with the basic science of crop improvement. Available as a major in the Bachelor of Science in Agriculture program.

Program: **Environmental Economics**

Length: 4 years

Available as a major in the Bachelor of Science in Environmental Science Program. Prepare students to answer questions about what makes good environmental policy. Provides students with skills to solve environmental problems that depend on the integration of scientific and economic realities. Graduates go on to work as environmental policy analysts, environmental economics consultants, natural resources policy analysts, and environmental impact assessment officers.

Program: **Environmental Science**

Length: 4 years

Allows student to develop solutions for environmental issues such as climate change, land and water use as well as biodiversity. Opportunity to major in conservation biology, environmental economics and policy, wildlife resource management and land reclamation.

Program: **Food, Agriculture and Resource Economics**

Length: 4 Years

Program prepares students for careers as economic analysts in the agri-food sector and in public agencies. This major also provides background for students planning to pursue graduate work in agricultural and resource economics and other areas of applied economics. For students planning to farm, the department provides training in farm management, including an emphasis in agricultural science.

Program: **Horticulture Science**

Length: 4 years

Horticulture program integrates biology, production, genetics, and plant breeding within a context of sound economic and environmental principles. Provides practical skills in Horticulture Science along with an integrated understanding of biological, ecological, and economic principles. Available as a major in the Bachelor of Science in Agriculture program.

Program: **Integrated Environmental Management**

Length: 4 years

Focus on bio-resources, precision agriculture, renewable energy and waste management and provides the skills and experience to create immediate sustainable solutions and address our national and global resource management and food production needs. Available as a major in the Bachelor of Science in Agriculture program.

Program: **International Agriculture and Food Systems**

Length: 4 years

Provides students with a combination of coursework and hands-on experience in a developing country. The field experience (short course, internship or full semester) includes project development in local communities, observing subsistence agriculture in situations and participating in various activities which aim at sensitizing students to the challenges that face developing countries. Graduates go on to work in: international development, international research and project management, sustainable development, international agri-business management, public service in government, non-government and international institutions and farm management in developing countries.

Program: **International Food Business**

Length: 4 years

Provides students with 2 degrees: a Bachelor of Business Administration from CAH Vientum University of Applied Science and a Bachelor of Agriculture International Food Business from Dalhousie. Offers a year of international study and two work terms: one in North America and one in Europe. This four-year "dual degree" program emphasizes its international focus by beginning with a one-week orientation in Iceland, where European and North American students get to know one another while exploring the Icelandic food industry

Program: **Nutrition and Food Science**

Length: 4 years

Provides a background in physiology and biochemistry and an understanding of how various foods, toxins and pollutants affect the body. Prepares students to tackle nutrition-related problems in the food, pharmaceutical and animal feed industries. This degree provides a good background for further studies in medicine, veterinary medicine and education. Students go on to work in government regulatory and advisory agencies, pharmaceutical sales, product development, quality control, research and education.

Program: **Organic Agriculture**

Length: 4 years

Available as a major in the Bachelor of Science in Agriculture Program. Offers students an integrated approach to learning in the world of organic agriculture. Courses cover food production, food security, processing and marketing, environmental health, and rural community sustainability. Graduates go on to pursue careers as organic marketing coordinators, government advisors, organic agriculture consultants, food inspectors and organic certification officers.

Program: **Plant Biotechnology**

Length: 4 years

Provides students with a background in genetics, pathology, the physiology of plant growth, and the development of crop plants for food, feed and industrial uses. It also introduces students to the fundamentals and applications of the advanced biotechnologies currently being used in crop development industries and research. Available as a major in the Bachelor of Science in Agriculture. Graduates go on to work as research lab technical assistants, crop disease diagnosticians and crop extension communicators.

Program: **Plant Science**

Length: 4 years

Available as a major in the Bachelor of Science in Agriculture program. Designed to provide you with a solid understanding of the ideas, achievements and methods in biological, physical and behavioural sciences. Demonstrates aspects of plant production and use, including plants grown in laboratories, greenhouses, nurseries and on farms. Major focus is on food production, an area of plant science with environmental, economic, and ethical challenges for the future of humanity. Contemporary issues related to the environment and food quality, biotechnology, plant breeding, and responding to changing consumer demands are also addressed.

Program: **Soil Science**

Length: 4 years

Provides students with an understanding of the physical, biological and chemical processes that occur in the soil, its role in plant production, and the importance of environmental management for its conservation. Available as a major in the Bachelor of Science in Agriculture program.

DIPLOMA PROGRAMS

Program: **Agribusiness**

Length: 2 years

Combination of management, entrepreneurial and economic courses. Provides students with an understanding of the structure and organization of the agri-food sector. Students are eligible to combine this with further courses at University of Saskatchewan to obtain a degree.

Program: **Agricultural and Heavy Equipment**

Length: 2 years

First year is the Agricultural and Heavy Equipment certificate program and second year is completion of the diploma program. Focuses on the analysis of systems, diagnosis of failures, and repair of equipment. Includes opportunity to write apprenticeship exams and register as an apprentice.

Program: **Agricultural Management**

Length: 2 years

Allows student to work in production agriculture, agribusinesses, or businesses that process, market and distribute products from agriculture. As well as to gain skills in crops & livestock, finance, agri-business management, marketing and technology. Allows students to take a production, finance or marketing major in second year.

Program: **Agricultural Technology**

Length: 2 years

Course work in this program is approximately 40% hands-on experience working with plants, soils, animals and actual business examples, including field practicum and laboratory work. Program focus is on modern business, entrepreneurial and marketing skills. Students work with real business models while receiving the opportunity to tour feedlots, dairies and hog barns.

Program: **Agriculture**

Length: 2 years

Students learn technical skills and knowledge base in crop management, business, international development, animal production, fruit and vegetable crops management, engineering and machinery, and the environment. Graduates pursue careers in produce merchandising, international trade marketing, farm operation and management and grain elevator operations. Option to specialize in the equine field in certain universities.

Program: **Agronomy**

Length: 2 years

Combination of plant science, soil science and biological engineering courses. Practical skills: field agronomy, diagnostics, field equipment, and the agricultural sector in general. Students are eligible to combine this with further courses at University of Saskatchewan to obtain the B.S.A. degree. Graduates go on to work as: land care co-ordinators/managers, advisory and technical consultants, marketing specialists, parks and recreation officers, farm managers, etc.

Program: **Animal Health Technology**

Length: 2 years

Available as an online program as well as in class. Prepares graduates to be employed in the animal health industry by providing education in technical procedures, animal nursing care, and client relations. Widely accredited and allows students to perform many veterinary procedures.

Program: **Biotechnology Technician/ Technologist**

Length: 2 years (Technician)

3 years (Technologist)

Graduates can go on to work in a variety of settings and industries including health, agriculture and natural resources through hands on learning. Courses cover genetics, micro/molecular biology, biochemistry, inorganic and organic chemistry, immunology and virology, botany, biostatistics and bioinformatics and pharmacology/toxicology.

Program: **Business Management**

Length: 2 years

Provides business skills like accounting, writing and decision-making, while exploring topics relevant to one of the following five specialties: dairy farming, equine, pet, agriculture and greenhouse and nursery.

Program: **Engineering**

Length: 2 years

Programs focus on a particular engineering discipline, choosing from specialties such as environmental engineering and bio systems engineering (the integration of environmental and agricultural engineering). Covers courses such as computer science, engineering design, electric circuits, physics, organic chemistry, digital circuits and dynamics. Option to continue on to a degree after diploma.

Program: **Environmental Assessment and Restoration**

Length: 2 years

Program provides students with the knowledge necessary to improve water quality and restore environmental impacts such as abandoned industrial sites using the latest techniques and applications. Students have access to the Hubbard Collection, one of the largest of its kind in Western Canada, on campus and online.

Program: **Environmental Engineering Technology**

Length: 2 years

Provides you students with the necessary skills, education, and training to assume responsibilities as an engineering technologist in the management, protection, development, and use of earth's essential resources. Program focuses on groundwater exploration and evaluation, supervision of water well drilling programs, water resources management, water chemistry, remedial operations in response to ground and surface water contamination, sampling and data collection and analysis, water well and well field design, facilities maintenance and engineering inspection, civil engineering, and water and waste water testing and treatment.

Program: **Environmental Management**

Length: 2 years

Provides technical and practical skills training for students interested in environmental issues and solutions. Allows students to focus on either municipal/industrial or rural/agricultural concerns as they develop an understanding of environmental protection and management. Program is designed to

address the critical shortage of trained and qualified sewage and/or water plant operators, and to train and certify personnel to assist growers in addressing nutrient management regulations that will affect farms.

Program: **Environmental Technology**

Length: 1 or 2 years (option to fast track at some colleges)

Provides practical training in the three foundation disciplines of biology, chemistry and civil engineering. Teaches students to use the tools and equipment needed in microbiology, ecological field sampling, analytical chemistry and surveying. Students gain laboratory skills in water quality testing and groundwater movement.

Program: **Equine Science**

Length: 2 years

Prepares its graduates to meet the needs of the equine industry at a specialized level. Graduates apply skills to the areas of horse management and husbandry as well as equine enterprise management. Provides opportunity to major in specialize in: Production and Breeding, Western or English Horsemanship and Training, Business and Event Management, or Equestrian Coaching.

Program: **Farm Management and Technology**

Length: 3 years

Program prepares its students to manage and operate a modern agricultural enterprise or for a career in the agricultural and horticultural sectors. Covers courses in soil and plant sciences, animal science, engineering, economics and management. The first summer of the program includes a 13-week internship on an agricultural enterprise other than the home farm or an agricultural business where the student learns the many skills and encounters the many problems related to modern commercial agriculture.

Program: **Ferrier Science**

Length: 1 year

In-depth instruction is given in farriery, blacksmithing, anatomy, physiology, horsemanship, welding, recordkeeping and business management. Students learn to recognize and deal with hoof and gait problems by practicing traditional and modern approaches to forging custom shoes. Includes extensive hands on experience in farrier labs.

Program: **Food and Nutrition Management**

Length: 2 years

Provides students with a foundation in food nutrition, processing and safety, as well as risk management issues. Includes a field placement experience. Career opportunities include: food service management in health care, long term care and commercial facilities, food and equipment sales, nutrition education, nutrition counseling for wellness, quality assurance, product development, food inspection, food production.

Program: **Food Technology**

Length: 2 years

Provides students with practical, hands-on skills in the area of food processing, quality control, food microbiology, and food analysis. Students participate in an industry-sponsored project (practicum or directed studies) in the final term of the program. The industry project is an integral program

component required for completion and certification. Students may be required to participate in work experience activities at the industry sponsor's regular place of business.

Program: **Geographic Information System**

Length: 1 year

Combines theory and practice and covers GIS principles, training in GIS software, technical issues, remote sensing, digital mapping and management issues. Students must also successfully complete a supervised work experience before graduation. This may be either an industry project or an industry practicum.

Program: **Greenhouse Technician**

Length: 2 years

Covers greenhouse operations, plant environment, pest management technology, and labour management. Opportunities for graduates include: greenhouse management, greenhouse crop production, nursery management, IPM specialist, technical sales, garden centres, horticultural research, and horticultural journalism.

Program: **Horticulture**

Length: 2 years

Provides a broad exposure to greenhouse and field production sectors of the horticulture industry. Combines practical training in the classroom with hands-on experience with labs in the field and greenhouses using the latest technology. Graduates typically go on to become fruit and vegetable producers, nursery specialists, greenhouse technicians, Integrated Pest Management (IPM) Technicians, plant propagators, and garden centre supervisors.

Program: **Land and Water Resource**

Length: 2 years

Provides training in environmentally sustainable management of rural land. It involves the study of soil, water, plants, ecosystems and environmental sciences with applications to the workplace. Graduates move on to a variety of careers related to oilfield, agriculture, mining and environmental regulation. Offers choice of two majors.

Program: **Plant Science**

Length: 2 years

Courses focus on building knowledge in the bio-sciences, plant production techniques, and business applications. Covers subjects like edible horticulture, ornamental horticulture, agronomy, plant science, business, or even engineering. Graduates work as: plant technologists, plant biology technicians, greenhouse managers, crop production managers, plant tissue culturists, plant propagators, etc.

Program: **Renewable Resource Management**

Length: 4 years

Program provides key applied-science skills such as the use of computer-based decision support systems, identification of key landscape components and evaluation of economics, and an understanding of how to apply these tools to specific resource issues. Graduates go on to work in: bioremediation of contaminated land, vegetation management, environmental advocacy, environmental consulting and regulating, environmental research, forestry and agroforestry and greenhouse gas mitigation.

Program: **Veterinary Technology**

Length: 2 years

Program is designed for students interested in a career working with and caring for animals. Students enrolled in the program will receive the technical training and knowledge required to become veterinary technicians working in association with practising veterinarians. The program features a comprehensive range of courses and training related to the care of food and laboratory animals, as well as companion and sport animals. All students will complete a four-week externship (industry placement) during the final semester. This program is fully accredited by the Canadian Veterinary Medical Association (CVMA) (Guelph and Dal).

Program: **Winery and Viticulture**

Length: 2 years

Focus on winery operations, viticulture and sales and marketing. Opportunities for graduates include: winemakers, vineyard managers, laboratory or viticulture technicians, lead hands, sales managers, sommeliers, wine sales and marketing representatives and winery or cellar technicians.

Program: **Winery and Viticulture Technician**

Length: 2 years

Covers topics such as winery operations, viticulture, sales and marketing. Graduates go on to work as Winemakers, Vineyard managers, Laboratory or viticulture technicians, Lead hands, viticulture, Sales managers, Sommeliers, Wine sales and marketing representatives and Winery or cellar technicians.

***Neither Degree nor Diploma: Pre-Veterinary Medicine**

Length: 2 years

Course schedule allows completion of requirements for application to vet college. While successful completion of the pre-vet program does not ensure acceptance to vet college, in some cases courses may be transferred to cover first and second year courses of a Bachelor of Science in Agriculture.

CERTIFICATE PROGRAMS

Program: **Agribusiness**

Length: 2 years

Combines agriculture, technology and business using hands-on learning through labs, field trips and projects. Student develops your skills in agronomy, GIS/GPS and computer applications, livestock production, communications, customer service, sales and marketing, and business management.

Program: **Agricultural Equipment Repair Technician**

Length: 40 Week Program

Designed to provide students with the skills and knowledge necessary to become employed in Agricultural Maintenance. Training is aimed at an exposure to a variety of skills, enabling the graduate to successfully carry out the basic functions of a technician. Graduates of this program may be employed with agricultural truck and heavy duty equipment dealers and manufacturers, after-market suppliers, farming enterprises and forestry operations.

Program: **Agricultural and Heavy Equipment Technician**

Length: 1 year

Provides versatility to work in agricultural and/or heavy-duty diesel equipment repair. Students learn about suspensions, power trains, steering, brakes, diesel engines, fuel systems, electrical systems and mobile hydraulics. Includes a 2 week practicum and the opportunity to write exams for the first two years of Agricultural Equipment Technician or the first two years of Heavy Equipment Technician.

Program: **Agriculture Studies**

Program length varies depending on specialization

Distance program. Equips students with the practical knowledge and skills necessary for a career in agriculture. The courses provide an education in the varied aspects of agriculture.

The program is designed to help individuals working in agricultural-related areas to achieve economic security and to thrive in a global environment.

Program: **Animal Groomer**

Length: 1 year

Through a combination of lectures and practical experience, this one-year program will prepare students to work as an animal groomer. Students can use the skills they receive to work for other animal service providers or to start their own business. Graduates may find employment in a number of settings such as veterinary clinics, veterinary hospitals, pet grooming centres, pet stores. Graduates may also start their own business.

Program: **Bulk Milk Tank Grading**

Length: 3 days

The Bulk Milk Grader's course provides the training necessary to be licensed by the NS Department of Agriculture. This course is offered over a three-day period with a combination of theoretical and hands-on learning. Covers: milk composition, milk quality testing, compositional testing, milk grading, bulk milk pickup procedures, fat sampling and microbiological testing and NS transportation of milk regulations.

Program: **Environmental Science**

Length: 1 year

Program provides the theory and techniques of environmental science. It is aimed at individuals with on-the-job experience of an environmental nature and/or a diploma/degree in a related field. Graduates go on to work as environmental specialists, environmental managers, environmental technologists, pollution control specialists and water quality specialists.

Program: **Equine Science**

Length: 12 weeks

Available online. Designed to improve the management and welfare of horses in the industry. The courses are based on scientific research and are presented in a practical format. They provide the essential knowledge needed to better care for a horse. Covers courses such as disease prevention, nutrition, anatomy, behaviour and physiology.

Program: **Growing Plants for Profit**

Length: 12 weeks

Focuses on running a profitable business in the garden and landscape industries through knowledge of how to effectively grow healthy plants while at the same time implementing sound business practices. Plant propagation techniques are thoroughly discussed as are the specifics of both greenhouse and nursery production. Business skills are offered to guide students through the complexities of running a profitable business operation. Plant identification techniques ensure that learners have a good understanding of the most exciting product choices. Available online.

Program: **Heavy Equipment Operator**

Length: 12-15 weeks (followed by practicum)

Prepares students to seek employment in the industry by providing them with a good foundation in a wide variety of industry related worksite skills associated with heavy equipment operation, as well as the technical and hands-on training of heavy construction equipment. Graduates of this program are provided with the theory equivalent to existing Heavy equipment Operators with two years experience.

Program: **Horticulture**

Length: 12 weeks

This certificate is designed especially for gardeners wishing to enhance their knowledge and skills relating to the residential garden environment. The impact of soil conditions are a critical aspect of this study program. Basic horticulture and botany is discussed as are principles of plant care for ensuring optimum health, as well as common plant pests and diseases and their effective treatments. Available online.

Program: **Horticulture**

Length: 9 months

The curriculum of this program has been designed to provide students with a thorough understanding of horticultural principles and practices. The program covers a broad spectrum of horticultural practices including plant propagation techniques, greenhouse production, nursery crop production, landscape design, landscape construction, and plant identification. As well, pest and disease management, pruning techniques, and maintenance practices are investigated. Throughout the program, special emphasis will be placed on many aspects of sustainable horticultural practices.

Program: **John Deere Technician**

Length: 4 years

Combination of on the job and technical training. Potential to lead to a journeyman certification.

Program: **Landscape**

Length: 1 year

Students learn skills in plan interpretation, business management and carpentry, landscape construction, landscape maintenance, turf management and integrated pest management. Graduates work with landscape construction or maintenance companies, nursery and garden retail centres, municipal and provincial parks or recreational services and golf courses.

Program: **Livestock Production**

Length: 1 year

Graduates go on to work as dairy farm managers or owners/operators, dairy herdspeople, artificial insemination specialists, ranch hands, sale representatives for livestock-related supplies, government livestock and forage technicians, swine production assistants, poultry producers, and soils technicians. Graduates are also eligible to transfer to Olds College in Alberta and receive transfer credit towards a Bachelor of Science degree in applied technology.

Program: **Meat Processing**

Length: 4 months

Provides intensive hands-on training where students can gain proficiency in skills and techniques to reach professional levels in meat cutting, trimming, boning, breaking, wrapping, sausage-making and curing. Students obtain firsthand knowledge on the role of sanitation and valuable insight into food safety applications in the meat processing environment, including an introduction to HACCP. Graduates of the Meat Processing certificate have the option to become a butcher or meat cutter in a small meat processing businesses, work in a meat processing plant, or be employed in a supermarket or retail meat outlet.

Program: **Milker Technician**

Length: 4 months

Prepares students for a career as a Milker Technician. Credits earned in the Milker Technician certificate program are also transferable to UFV's Livestock Production certificate and Agriculture Technology diploma (Livestock Production) programs. Covers feeding, care of young stock, barn cleaning and maintenance, record keeping, and machine operation.

Program: **Organic Agriculture**

Consists of 4 organic agriculture credit courses. All courses are available online.

Program: **Professional Horse Care**

Length: 12 weeks

Provides students with the knowledge and practical training to provide the daily care of horses at show facilities, riding schools and equestrian training centres. Students develop basic horse-handling skills such as: learning to check the general health of a horse, treating minor injuries, maintaining and repairing facilities, and applying safe and ethical practices with respect to overall horse health and welfare. Graduates go on to work in equine retail and sales, as well as in horse grooming in race tracks and riding establishments.

Program: **Professional Meat Cutting and Merchandising**

Length: 15 Week Program

Students are provided with the skills to prepare and market a wide variety of meat, poultry and fish items. Classroom theory includes business procedures, food sanitation and trade calculations and is complemented by hands-on training in a fully equipped meat-training lab. Graduates go on to work in grocery and specialty stores, processing plants and meat inspection services. Graduates have a 95.7% employment rate and graduate median starting salary is \$31,148.

Program: **Rural Finance and Entrepreneurship**

Length: 15 weeks

Designed to advance a rural enterprise while upgrading management and financial assessment entrepreneurial skills. Also promotes better business practices. Can be split up into individual courses to accommodate a busy schedule, and is entirely online.

Program: **Sustainable Urban Agriculture**

Length: 12 weeks

Provides theory and practical skills supporting agricultural sustainability, while comparing and selecting agricultural practices that are environmentally sound, productive and provide a positive social impact on individuals and community. Designed for: urban residential food growers, community gardeners, co-operative associations, municipal planners, public gardens staff, environmental advocates and those interested in growing food in their community.

Program: **Veterinary Medical Receptionist**

Length: 8 months

Provides a variety of office and veterinary related courses including medical terminology, software, office procedures, animal care, and communications. Includes 4 week hands-on work placement. Provides opportunity to work for vet clinics, humane societies, pharmaceutical companies, pet food companies and pet insurance agencies.

Program: **Veterinary Technical/Medical Assistant**

Provides education and training to people interested in providing support in an animal health setting. Covers basic veterinary terminology, medical and surgical procedures, how to maintain veterinary equipment, as well as basic animal care and husbandry. 100% grad employment rate and a starting median salary of \$33,280.

