FACULTY MEMBERS
UNDERGRADUATE STUDENTS

25+ PROGRAMS

$40 M IN ANNUAL RESEARCH FUNDING

$700 K IN SCHOLARSHIPS & AWARDS EACH YEAR

FOUNDED IN 1915

62 INTERNATIONAL AGREEMENTS FOR RESEARCH COLLABORATION & STUDENT MOBILITY

120 FACULTY MEMBERS

1600 UNDERGRADUATE STUDENTS
Find a Job You Love

A DEGREE IN ALES PREPARES YOU FOR THE REAL WORLD.

Our grads secure jobs in major employment sectors including the environment, animal care, food and agriculture, and human services — whether they are working for business, government, or the non-profit sector.

Many of our graduates qualify for professional designations including Professional Agrologist, Professional Biologist, Professional Human Ecologist, Registered Professional Forester and more. This qualification in addition to your ALES degree makes you even more competitive in the employment market.

Challenge Yourself

A DEGREE IN ALES CHALLENGES YOU TO FIND SOLUTIONS FOR REAL-LIFE PROBLEMS.

In class, you will be challenged by some of the best professors in Canada to connect social and scientific theory with real-world problems. Outside of the classroom, you will gain important technical skills, complete training in the field and connect with industry. Our hands-on components give you the opportunity to apply the knowledge you’ve gained in class and prepare you for life beyond the classroom.

In ALES, we also offer international field courses, practicums and paid internships. We challenge our students to take what they’ve learned into the community and abroad, to provide solutions for global challenges.
Get Connected

A DEGREE IN ALES WILL ENGAGE YOU IN THE UALBERTA COMMUNITY.

Founded in 1915, we are located at the heart of the University of Alberta. You can take advantage of all the resources and state-of-the-art facilities in a major research institution and enjoy the personal attention and connection that comes from being in a close-knit faculty. With only 1,600 undergraduate students, our average class size is below 30 students so you can get to know your classmates and professors.

We want every ALES student to feel engaged and challenged by their experience at UAlberta. In our Faculty, you will have the chance to be paired with an upper-year classmate in a mentorship program, join ULEAD — our leadership development program — or take part in community service-learning activities in your community or abroad.

You will also have the chance to join of one of our Faculty’s many student groups and attend their social events and professional networking events — where you can meet friends and connect with industry professionals.

Fund Your Future

YOU COULD BE ELIGIBLE FOR SCHOLARSHIPS AND AWARDS.

By joining our the Faculty of Agricultural, Life & Environmental Sciences, you will receive access to one of the largest Faculty scholarship programs at the University of Alberta, with awards available during all four years of your degree program.

Each year we give away over $700,000 in scholarships and awards. You will be automatically considered for some these awards through your application to the University of Alberta. To be considered for one of our other hundreds of scholarships or awards, submit an application available on our website!
PROGRAMS & DEGREES

- Agricultural and Resource Economics
- Agricultural Business Management
- Animal Science
- Clothing, Textiles and Material Culture
- Companion and Performance Animals
- Conservation Biology
- Crop Science
- Dietetics
- Environment and Peoples of Canada
- Environmental Economics and Policy
- Family Ecology
- Food and Society
- Food Animals
- Food Business Management
- Food Safety and Quality
- Food Science and Technology
- Forest Business Management
- Forestry
- Human Dimensions of Environmental Management
- Land Reclamation
- Nutrition and Food
- Politics, Society and the Global Environment
- Pre-Veterinary Medicine
- Sustainable Agricultural Systems
- Wildlife and Rangeland Resources Management
This degree is jointly offered with the Alberta School of Business. Students wishing to combine the study of life science and business together in one program for a competitive edge are encouraged to apply after they have completed their 1st year of university.

**Careers**

- Management Consultant
- Market Development Specialist
- Business Development Officer
- Agri-Food Sales and Marketing Manager
- Food Manufacturing/Processing Supervisor
- Policy Analyst
- Commodities/Stock Trader

**Program Majors**

**AGRICULTURAL BUSINESS MANAGEMENT**

Develop an appreciation of the importance of both scientific and economic relationships within the agri-food sector. Courses in agricultural and resource economics as well as animal, plant and soil sciences develop the business management skills and scientific understanding needed to manage organizations effectively and efficiently within this global market industry.

**FOOD BUSINESS MANAGEMENT**

Develop an understanding of the scientific and economic relationships that influence activities in the food industry. Courses in food chemistry and microbiology provide a solid scientific background that is combined with food business and economic management courses. Together, these skills can be applied to a career within the food processing and retailing sectors.
Get great hands-on experience through our extensive network of plant and animal research facilities.

**Careers**

- Plant/Animal/Soil Scientist
- Land Use Planner
- Production Specialist
- Agrologist
- Environmental Consultant
- Market Development Officer
- Policy Analyst
- Public Education Specialist
- Regulatory Affairs Advisor
- Sales and Marketing Manager

**Program Majors**

**AGRICULTURAL AND RESOURCE ECONOMICS**

Learn how to apply economic tools to production, processing, marketing and financing and consumption in the agri-food and other resource industries. Students develop analytical techniques that permit them to understand and assess a wide variety of policy and market issues.

**ANIMAL SCIENCE**

Gain an understanding of the scientific disciplines of animal science including physiology, genetics, biochemistry, nutrition and behaviour. Students learn how to integrate problem solving skills in animal production systems including dairy, swine, beef, poultry and diversified livestock.

**CROP SCIENCE**

Provides an in-depth understanding of plant growth, soils and factors affecting plant production, including responses to a range of environmental factors. Students learn about plant biotechnology, breeding and production management techniques used to develop, grow and market high quality and high yielding crops.

**SUSTAINABLE AGRICULTURAL SYSTEMS**

Maintain and enhance the performance of agricultural systems (including people, plants, animals and soil, water and other resources) so that resource use is efficient and sustainable. Key areas of study include agricultural production systems, natural resource management and the relationship of these with social and economic systems.

*Students may complete all pre-veterinary course requirements in this major.*
Understand the biology and behaviour of food animals or companion animals, as well as the human-animal bond. Discover the connection between animal health and the safety and quality of the food supply.

**Program Majors**

**COMPANION AND PERFORMANCE ANIMALS**
These animals are found in search and rescue, sport, animal assisted therapy, and service to improve the well-being of individuals. Develop an understanding of the physiology, nutrition, behaviour and evolving role of companion and performance animals, as well as the sociology/psychology of the human-animal bond.

**FOOD ANIMALS**
Learn how the animal agriculture (livestock and poultry) and food industries interface, through an understanding of animal and human disease, animal nutrition, microbiology, physiology, behaviour and production. Students work closely with agricultural animals and have many opportunities for industry interaction.

**FOOD SAFETY AND QUALITY**
Understand the link between food animal health and food production, with additional emphasis on the food processing industries. Students learn about animal production nutrition and physiology, with a large focus on animal product processing, as well as food quality and safety.

*Students may complete all pre-veterinary course requirements in this degree.*
Develop solutions for environmental issues such as climate change, land and water use as well as biodiversity. You will also have the opportunity to participate in field schools to develop hands-on skills.

**Program Majors**

**CONSERVATION BIOLOGY**
Students apply ecological science and natural resource management principles as they develop integrated approaches to wildlife and habitat conservation. Learn how to plan and manage protected areas and land managed for multiple uses, using strategies that protect the natural environment and promote healthy ecosystems.

**ENVIRONMENTAL ECONOMICS AND POLICY**
Develop skills in the economic analysis and policy process associated with environmental issues. Students learn how to consider the economic, social, political and legal background when addressing environmental concerns within an analytical framework.

**HUMAN DIMENSIONS OF ENVIRONMENTAL MANAGEMENT**
Learn how to use collective action, institutions, policy and management approaches to influence environmental and natural resource issues. Students develop a scientific understanding of environmental change with a focus on the social context through which environmental issues are addressed.

**LAND RECLAMATION**
Combine the natural and applied sciences to understand, assess, and minimize the impacts of human activities on natural resources, with an emphasis on soil, plant and water health. Students learn how to apply remediation, soil reclamation, re-vegetation and conservation measures to restore and maintain quality environments.

**BSC ENVIRONMENTAL CONSERVATION / BA NATIVE STUDIES**
Learn how Aboriginal history, politics, and cultural values influence natural resource management. Promote stewardship of Aboriginal lands within the context of government policies and industrial development.
Take an interdisciplinary approach to the study of the environment and explore how interactions between science, society, culture and the economy influence environmental management decisions.

Program Concentrations

All students select one concentration for their program from the list below.

ENVIRONMENT AND PEOPLES OF CANADA
Understand environmental challenges facing Canadians, including indigenous perspectives and issues in environmental and resource management.

POLITICS, SOCIETY AND THE GLOBAL ENVIRONMENT
Learn about political and social methodologies relevant for understanding environmental issues from a global perspective.

FOOD AND SOCIETY
Explore issues related to sustainable food and agriculture, incorporating social, political, cultural, economic, ethical, and feminist perspectives on issues of contemporary food production.

Careers

- Community Relations Advisor
- Sustainability Coordinator
- Environmental Education Specialist
- Policy Analyst
- Environmental/Aboriginal Relations Advisor
- Writer
- Communications Officer
Forestry & Forest Business Management

Become a Registered Professional Forester with diverse training in economics, ecology, engineering and conservation. You will also gain hands-on training through field schools.

Degree Programs

FORESTRY

The BSc Forestry develops graduates who appreciate the need to manage forested areas with due concern for all resources and who have the ability and knowledge to manage forest resources using an integrated approach. It focuses primarily on forest management, including the protection and use of forested areas, while ensuring that sustainability and other social and cultural needs are met.

FOREST BUSINESS MANAGEMENT

This degree is jointly offered with the Alberta School of Business. Students wishing to pursue forestry who also want to develop their business management skills are encouraged to apply after their 1st year of university.

The BSc Forest Business Management provides students with the analytical, scientific, and broad educational foundations on which to build the business and forestry components of their field. The forestry component includes courses in areas such as ecology, engineering, and conservation. The business management component consists of introductory and advanced courses in business, including accounting, finance, marketing, and human resources.

Careers

- Forest Health Scientist
- Land Use Planner
- Forest Resource Policy Analyst
- Water Resources Scientist
- Forest Ecologist
- Forest Renewal Specialist
- Wildland Recreation Manager
- Research Forester
- Aboriginal/Community Relations Specialist
- Forest Economist

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Human Ecology is the study of how people interact with their environment. Tailor your experience through a focused major and a 200-hour practicum placement.

**Careers**

- Family Liaison Specialist
- Child and Youth Programmer
- Community Services Coordinator
- Public Relations Specialist
- Policy Analyst
- Textile Quality Assurance Manager
- Design Consultant
- Specialized Clothing Designer
- Fashion Merchandiser
- Marketing Manager
- Education or Career Counsellor

**Program Majors**

**CLOTHING, TEXTILES AND MATERIAL CULTURE**

Explore the material world of everyday life, from textiles to home interiors. Through studying the production, design, evaluation, and consumption of items such as fabrics, fashionable garments, and home interiors, students gain both advanced academic knowledge and relevant practical experience.

**Minors:**

Fashion Merchandising, Interiors, Material Culture and Design Studies, Textile Science

**FAMILY ECOLOGY**

Learn about family strengths, issues, and intervention techniques across the life span. Students develop understanding and skills in areas that include parent-child relationships, family relations, community diversity, community development, sexuality, family challenges, aging, and family finances.

**Minors:**

Aging, Child and Youth Studies, Community Diversity, Community Ecology, Community Nutrition, International Development

UNIVERSITY OF ALBERTA
FACULTY OF AGRICULTURAL, LIFE & ENVIRONMENTAL SCIENCES
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Apply your knowledge and skills while completing real-world projects and case studies that examine issues faced by the food industry and nutritional health sector. You have the opportunity to focus your degree through an Honours program or Specialization.

**Careers**

- Health Promotion Officer
- Registered Dietitian
- Research Scientist
- Food Product Developer
- Sales and Marketing Manager
- Market Researcher
- Policy Analyst
- Food Safety Inspector

**Program Majors**

**GENERAL PROGRAM**

Develop a working knowledge of the fundamentals of nutritional science and basic knowledge in applied chemistry and microbiology as it pertains to food manufacturing, preservation, storage and distribution. Students apply concepts from biology, physiology and behavioural sciences to become qualified for careers in public or private enterprises ranging from nutrition-lifestyle management to the agriculture-food industry.

**DIETETIC SPECIALIZATION**

Specialize in how the body processes and uses nutrients, and how food choices can help promote human health and wellness. This health science specialization trains students in the knowledge and practical skills to become a Registered Dietitian.

**FOOD SCIENCE AND TECHNOLOGY SPECIALIZATION**

Apply chemistry, microbiology, and engineering to the technological processes used in the manufacturing, preservation, storage and distribution of safe and quality food products. Students also learn about food product development, sensory analysis, and nutritional content analysis as they focus on the science of producing quality food products.

**HONORS IN NUTRITION OR FOOD SCIENCE**

These programs are directed at highly motivated students with exceptional ability. Honors programs offer a specialized, research intensive education, while preparing students for graduate studies.

Specialization and Honors programs require one year of pre-professional studies. First year students are advised to apply to the Nutrition and Food Science General Program to complete these requirements.
Let’s Talk!

NEED MORE INFORMATION?
WE’D LOVE TO HEAR FROM YOU.

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