



**UNIVERSITY
OF ALBERTA**



**FACULTY OF
AGRICULTURAL, LIFE &
ENVIRONMENTAL SCIENCES**

VIEWBOOK 2025-2026

WE ARE

Dedicated to people,
the land and the lab.

Educating the next
generation of
problem-solvers.

Addressing
global challenges.

Territorial Acknowledgement

The University of Alberta acknowledges that we are located on Treaty 6 territory, and respects the histories, languages, and cultures of First Nations, Métis, Inuit, and all First Peoples of Canada, whose presence continues to enrich our vibrant community.

U OF A'S SOUTH CAMPUS

At nearly 400 acres and less than 3 km from U of A's North Campus, South Campus in Edmonton, Alberta (pictured here) is the leading hub of agricultural research and teaching in North America. In addition to advancements in animal metabolism, crops, dairy, poultry and swine, the campus features Agri-Food Discovery Place — an innovative technology transfer facility that educates highly qualified individuals.



TOP 2 IN
FORESTRY IN
CANADA



TOP 2 IN
FOOD SCIENCE &
TECHNOLOGY IN
CANADA



TOP 4 IN
ENVIRONMENTAL
SCIENCES IN CANADA



#6 GLOBALLY
FOR IMPACT ON
UN SUSTAINABILITY
GOALS



#76 IN THE WORLD
IN AGRICULTURE &
FORESTRY



\$1.7M IN
FINANCIAL
SUPPORT
AWARDED ANNUALLY



1 IN 3
ALES STUDENTS RECEIVE
A **SCHOLARSHIP**



**AVERAGE ALES
CLASS SIZE IS
12 PEOPLE**



OUR PROGRAMS

ALES students in the Agriculture/Forestry Building lounge area.

Pursue a degree that makes a difference. Programs in ALES span from the food we eat to the clothes we wear, and the animals, people and world around us.

Explore our degrees:



Pg 06-07 Social Transformation

- BSc Fashion Business Management
- BSc Human Ecology



Pg 08-09 Health + Food

- BSc Nutrition & Food Science (General)
- BSc Dietetics Specialization
- BSc Food Science & Technology Specialization
- BSc Honors in Food Science or Nutrition



Pg 10-15 Environment

- BSc Environmental & Conservation Sciences
- BSc Environmental & Conservation Sciences/BA Native Studies
- BA Environmental Studies
- BSc Forestry
- BSc Forest Business Management



Pg 16-19 Animals + Agriculture

- BSc Animal Health
- BSc Agriculture
- BSc Agricultural / Food Business Management



ALES human ecology student, Hongning, working on costumes for her practicum with the Timms Center for the Arts clothing department.

BSc in Fashion Business Management



Do you see yourself entering the world of fashion, pursuing a career in management or even starting your own business? Achieve your goals with a competitive edge in the Fashion Business Management degree jointly offered with the Alberta School of Business.

This multidisciplinary program covers the theoretical, scientific and ethical processes of textiles and clothing, as well as the analytics, management tools and leadership skills needed to excel in the increasingly business-oriented and growing fashion industry.

COURSE EXAMPLES:

- HECOL 241: Fashion Industries
- HECOL 250: Design Studies and Practices

FASHION BUSINESS MANAGEMENT EXPERIENCES:

Co-op Program: Students can access the School of Business Co-op Program – companies welcome your skill set in a 12-month paid work experience.

CAREERS

- Data Analyst
- Digital Commerce Specialist
- Fashion Marketer/Buyer
- Global Sourcing and Supply Chain Manager
- Operations Manager
- Product Developer

DID YOU KNOW?

Our 4 year BSc in Fashion Business Management is the only one of its kind in Canada.



I loved the blend of Human Ecology and Business classes in my degree program; it was the best of both worlds! Getting to be a part of two different faculties is rare in university. I loved being a part of both the Human Ecology and Business communities at the U of A.

VANESSA

2023 Graduate, BSc Fashion Business Management, from Edmonton, AB



Bsc in Human Ecology



Human Ecology explores the relationships between people and the environments they interact with to make lives better. It's a fascinating, multidisciplinary, applied field of study that provides you with the tools necessary to understand and enhance everyday life.

Clothing, Textiles & Material Culture

Learn how textiles and clothing are designed, produced, distributed and used. You'll develop skills within garment design and construction, examine quality assurance, sustainability and fair labour practices, and study textile's latest technological advances. This program can also involve the design of the places we live and work, such as environments for older adults or persons with disabilities.

COURSE EXAMPLES:

- HECOL 333: Cross-Cultural Textiles
- HECOL 470: Advanced Materials for Protective Clothing

EXPERIENCES:

Anne Lambert Clothing and Textile Collection: Students have access to this leading collection of fashion and textiles. It's one of the biggest in Canada with over 23,000 garments and accessories spanning over 350 years.

Family Science

No other environment affects people as profoundly as family. Learn about family strengths, issues and intervention techniques, and develop skills in areas that include parent-child relationships, couple relations, program planning and evaluation, community diversity and development, sexuality, family challenges, policy development and analysis, and family finances.

COURSE EXAMPLES:

- HECOL 210: Intimate Relationships
- HECOL 211: Human Sexuality

HUMAN ECOLOGY PRACTICUM PLACEMENT

Our 200-hour for-credit placements allow students in Family Science and Clothing, Textiles & Material Culture to gain hands-on knowledge and skills under the guidance of a practicing professional. Recent placements include: Special Olympics Alberta, Queer & Trans Health Collective, Edmonton Garrison Military Family Resource Centre, Lululemon, Royal Alberta Museum and many others. Graduates frequently secure full-time employment from their placements.

Studying human ecology will prepare you to contribute to the UN's Sustainable Development Goals, such as #10 Reduced Inequalities and #5 Gender Equality.

CAREERS

- Fashion Interior Decorator
- Fashion Marketer/Buyer
- Museum Curator
- Product Development Specialist
- Theatre Costume Designer

As the only four-year BSc degree of its kind in Canada, graduates may be eligible for accreditation as a Professional Human Ecologist (P.HEc)

CAREERS

- Community Developer
- Professional Human Ecologist
- Social, Community, Correctional Services



ALES students performing experiments in a Nutrition and Food Science Lab.

Students in this program can choose a minor:

- Food Marketing & Policy
- Food Safety & Quality
- Food Service Management
- Global Health or Physical Activity
- Human Ecology
- Nutrition Communication & Education
- Physical Activity

BSc in Nutrition & Food Science (General Program)



Develop fundamental knowledge in chemistry, physics, biology, physiology, microbiology and behavioural science, and how they are applied in the study of nutrition and health, and food science related to engineering, preservation and product development. Students become qualified for careers in the public or private sector ranging from nutrition-health education and promotion to the food industry and related sectors.

COURSE EXAMPLES:

- NU FS 356:** Nutrition Across the Lifespan
- NU FS 450:** Food Product Development

Dietetics Specialization

This professional program specializes in how the body processes and uses nutrients and how food choices can help promote human health and wellness as well as manage disease. This health science specialization trains students in the knowledge and practical skills to become a Registered Dietitian.

COURSE EXAMPLES:

- NU FS 310:** Teaching and Communication in Nutrition
- NUTR 477:** Advanced Population and Public Health Nutrition

DID YOU KNOW?

Our Dietetics Specialization is the only program in Alberta to be accredited by the Alberta College of Dietitians and incorporates built-in internships in various professional health practices!

Food Science & Technology Specialization

Apply chemistry, microbiology and food processing to the manufacturing, preservation, storage and distribution of food. Students focus on the science of producing quality food products, learning about development, sensory analysis, food safety, quality assurance and nutritional content analysis. Students can also take an internship in the food industry for credit.

COURSE EXAMPLES:

- NU FS 283:** Introduction to Food Engineering
- NU FS 430:** Principles of Sensory Evaluation of Foods

Honors in Nutrition or Food Science

These programs are designed for highly motivated achievers with a keen interest in pursuing research. Honors programs offer specialized academic and research training and can prepare students for entry to other programs and graduate studies.

COURSE EXAMPLES:

- NU FS 407 and NUTR 401: Independent Research Project** – Tackle a nutritional science topic of your interest with a research project supervised by a professor.

NUTRITION & FOOD SCIENCE EXPERIENCES

Human Nutrition Research Unit (HNRU): This world-class facility is home to elite clinical nutrition research and technology. Did you know our whole body calorimetry unit is one of two in Canada? It can measure energy consumption to inform wellness plans for individuals with medical conditions.

Stand out from the crowd

Our Food Science programs are the only ones in Alberta that meet the program outcomes for the Institute of Food Technologists, the largest professional organization in food science!

CAREERS

- Community Educator
- Food Inspector
- Food Market Researcher
- Food and Nutrition Policy
- Food Product Developer
- Food Quality Assurance Officer
- Food Safety Specialist
- Food Scientist
- Nutrition Consultant
- Nutrition/Food Science Researcher
- Nutrition Research Coordinator
- Registered Dietitian
(Graduates of Dietetics Specialization only)
- Public Health Inspector



Carla Prado, Director of the Human Nutrition Research Unit, instructs in this state-of-the-art research and training facility. Her laboratory is dedicated to the study of nutrient intake, energy metabolism and skeletal muscle and adipose tissue dynamics and their effect on health.



ALES students participating in Renewable Resources field school in the North Saskatchewan River in Edmonton.

BSc in Environmental & Conservation Sciences



Conservation Biology

Apply the principles of biology, ecology, social science, economics and statistics to species and landscapes conservation, promoting ecological well-being for the benefit of all.

COURSE EXAMPLES:

REN R 205: Wildlife Biodiversity and Ecology
REN R 462: Parks, Ecology, and Society

Environmental Economics & Policy

Develop skills in the economic analysis and policy process by considering the economic, social, political and legal background associated with environmental concerns.

COURSE EXAMPLES:

ENCS 352: Natural Resource and Environmental Law
R SOC 355: Rural Communities and Global Economies

Human Dimensions of Environmental Management

Learn how to use collective action, institutions, policy and management approaches to address challenges in environmental and natural resource management.

COURSE EXAMPLES:

R SOC 375: Public Participation and Conflict Resolution
R SOC 443: Resilience and Global Change

Land Reclamation

Combine the natural and social sciences to understand, assess and minimize the impacts of human activities on natural resources. Students learn how remediation, soil reclamation, re-vegetation and other conservation measures restore and maintain quality environments.

COURSE EXAMPLES:

REN R 305: Principles and Practices of Land Reclamation and Restoration
REN R 440: Disturbance Ecology Fundamentals

Northern Systems (Yukon University)

Protect Canada's northern systems! Explore factors in climate change, such as non-renewable energy resources, land use, changes in water quantity and quality and wildlife conservation. This unique major is entirely offered at Yukon University, but students are taking University of Alberta courses.

COURSE EXAMPLES:

REN R 465: Environmental and Conservation Field Studies
REN R 491: Land-use Planning in Canada's North

Wildlife & Rangeland Resources Management

Students learn to manage soil, plant and animal relationships on both private and public lands, better understanding multiple-use issues including grazing, intensive agriculture, forestry and recreational activities.

COURSE EXAMPLES:

REN R 474: Utilization of Wildlife Resources
REN R 376: Fisheries and Wildlife Management

ENVIRONMENTAL & CONSERVATION SCIENCES EXPERIENCES

SWAMP Laboratory: Take part in research right on campus at the Soils, Water, Air, Manures and Plants Laboratory – an ultra-clean research facility focused on environmental quality.

Field trips: Many courses offer field trips for experiential learning. For example, REN R 205: Wildlife Biodiversity and Ecology includes visiting the North Saskatchewan River Valley to observe wildlife in their natural habitat.

Graduates may be eligible for accreditation as a Professional Biologist (P.Biol), which boosts your yearly salary!

CAREERS

- Agrologist
- Conservation Officer
- Environmental Consultant
- Environmental Interpreter
- Environmental Impact Assessor
- Environmental/Indigenous Relations Advisor
- Land Reclamation Specialist
- Land Use Planner
- Park Manager
- Policy Analyst
- Soil Scientist
- Sustainability Coordinator
- Wildlife/Conservation Biologist



Native Studies students participate in a classroom discussion.

BSc in Environmental & Conservation Sciences / BA Native Studies (Combined 5 Year)



Obtain two degrees in the combined degree offered in partnership by the Faculty of ALES and Faculty of Native Studies. Learn how Indigenous history, politics and cultural values influence natural resource management. Students promote Indigenous land stewardship within the context of government policies and industrial development.

Human Dimensions of Environmental Management

Learn how to use collective action, policies, institutions and management approaches to influence environmental and natural resource conflicts, with consideration for Indigenous history, politics and cultural values.

COURSE EXAMPLES:

R SOC 460: Perspectives on Traditional Knowledge

REN R 260: History and Fundamentals of Environmental Protection and Conservation



Having taken everything from Indigenous politics to agriculture economics and remote sensing, environmental studies has also exposed me to a broad range of perspectives, giving me a great appreciation for interdisciplinary studies.”

EMILY

4th Year, BA Environmental Studies Student, from Edmonton, AB



BA in Environmental Studies



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. This degree is jointly offered with the Faculty of Arts and allows access to courses from many faculties to tailor your degree!

Culture, Society & Peoples of Canada

Understand environmental challenges facing Canadians, including Indigenous perspectives and issues in environmental stewardship.

COURSE EXAMPLES:

NS 115: Indigenous Peoples and Technoscience

PHIL 368: Topics in Social Justice

Food & Society

Explore sustainable food and agriculture by incorporating social, political, cultural, economic, ethical and feminist perspectives on issues of contemporary food production.

COURSE EXAMPLES:

ANTHR 372: Anthropology of Food

PL SC 200: Urban Plants: Gardening and Sustainability

Politics, Society & the Global Environment

Learn about political and social methodologies relevant to understanding environmental issues from a global perspective.

COURSE EXAMPLES:

HGEO 252: Human Dimensions of Environmental Hazards

REN R 364: Principles of Managing Natural Diversity

ENVIRONMENTAL STUDIES EXPERIENCES

AREC 173: The Plate, the Planet and Society is a popular cornerstone course in this program that introduces students to social perspectives on everything from what we eat for breakfast to how we protect endangered species and agricultural landscapes.

DID YOU KNOW?

Many Environmental Studies students pursue law after graduation. It's an ideal program for a career as an Environmental Lawyer!

CAREERS

Communications Officer

Community Engagement Specialist

Community Relations Advisor

Environmental Education Specialist

Environmental / Indigenous Relations Advisor

Non-Profit Organization Administrator

Policy Analyst

Public Servant

Sustainability Consultant

Sustainability Coordinator

Writer

Experiential learning:

Students can take part in various opportunities outside of the classroom, such as Campus as a Living Lab and the Undergraduate Research Initiative. These experiences help students thrive in a diverse and increasingly complex workplace.



ALES students participating in field school Ecosite, just North of Cynthia, Alberta.



ALES students participating in Renewable Resources field school.

High demand in forestry means graduates are often employed in middle management positions directly after graduation – with an average starting wage of \$40/hour! (Source: ALIS)

CAREERS

- Conservation Professional
- Forest Health Specialist
- Forest Resource Policy Analyst
- Land Use Planner
- Operations Forester
- Registered Professional Forester
- Silviculture Forester
- Urban Forester
- Water Resources Scientist
- Wildland Firefighter

BSc in Forestry



Do you love the outdoors? Do you want to take care of the environment and sustainably manage forests? Top 2 in Canada and Top 25 globally, this program prepares students to manage natural resources through sustainable forest management practices based on our ecological, social and cultural values. Courses include forest management, silviculture, forest policy, conservation and ecology.

COURSE EXAMPLES:

- REN R 340:** Wildland Fire Science and Management
- REN R 345:** Wood Science and Utilization

EXPERIENCES:

Forest Industry Lecture Series (FILS): Attend this annual collaborative event for members of Alberta’s forestry community to enrich your experience – it’s free for current students!

RESEARCH IN FORESTRY

Students can get involved in various projects while still in their undergraduate studies, such as:

- **Resilient Forests (RES-FOR) Project:** a study that applies genomics to improve the health of Alberta’s forests
- **Ecosystem Management Emulating Natural Disturbance (EMEND) Project:** a large-scale harvest experiment in a northern Alberta boreal mixed wood forest.

BSc in Forest Business Management



This program is designed for students wanting to pursue forestry and develop business management skills. Students build analytical, scientific and broad educational foundations in business and forestry. The forestry component includes courses within ecology, forest biology and management, while business management consists of introductory and advanced courses in business – including accounting, finance, marketing and human resources.

COURSE EXAMPLES:

- REN R 335:** Forest Harvesting and Transport
- REN R 430:** Forest Resources Management

FOREST BUSINESS MANAGEMENT EXPERIENCES

Co-op Program: Students can access the School of Business Co-op Program – develop a diverse skill set in a 12-month paid work experience.

Graduates of either accredited program are eligible for registration as a Registered Professional Forester (RPF), which boosts your yearly salary!

CAREERS

- Forest Ecologist
- Forest Economist
- Forest Operations Manager
- Interpretive Naturalist
- Policy Analyst
- Registered Professional Forester
- Silviculturist



ALES students Savannah and Ashley working at West Gimlet Yak Farm as part of the ALES Mini-internship Program.

BSc in Agriculture



Agricultural & Resource Economics

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

COURSE EXAMPLES:

- AREC 200:** Current Economic Issues for Agriculture and Food
- AREC 384:** Food Market Analysis

Animal Science

From the field to the fork – 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 while also taking agronomy courses such as soil and plant sciences.

**Students may complete all pre-veterinary course requirements in this major.*

COURSE EXAMPLES:

- AN SC 310:** Physiology of Domestic Animals
- AN SC 485:** Animal Genetics and Breeding

Crop Science

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

COURSE EXAMPLES:

- PL SC 210:** Exploring Field Crop Agronomy
- PL SC 365:** Genetic Improvement of Crop Plants

Sustainable Agricultural Systems

Maintain and enhance the performance of agricultural systems (including people, plants, animals, soil, water and other resources) for maximum efficiency and sustainability. Key areas of study include natural resource management and their relationship to social and economic systems.

COURSE EXAMPLES:

- ENCS 356:** Principles of Rangeland Conservation and Habitat Management
- REN R 450:** Environmentally Sustainable Agriculture

AGRICULTURE EXPERIENCES

Did you know 40% of the world's population works in agriculture?

Prepare to join this exciting network by learning with your hands in our plant and animal research facilities:

- **South Campus:** Houses some of North America's leading agricultural research. In addition to 240 acres of farmland, you'll find dairy, swine and poultry research facilities, including our Heritage Chicken Program.
- **Agri-Food Discovery Place:** Links our research in food safety, AgTech, and functional foods with industry collaborators.
- **Mattheis Research Range:** 12,000 acre ranch located near Duchess, AB that supports U of A research and teaching in rangeland and grassland ecology, wildlife management and impacts of climate change on rangeland and land reclamation.
- **ALES Mini-Internship (AMIP):** Many students opt to take a donor-funded mini-internship – truly getting their boots and hands in the mud!

Graduates may be eligible for accreditation as a Professional Agriologist (P.Ag), which boosts your yearly salary!

CAREERS

- Agricultural Inspector or Consultant
- Animal Nutritionist
- Biotechnologist
- Crop Producer
- Entomologist
- Geneticist
- Livestock Producer
- Market Gardener
- Soil Scientist
- Technical Services and Consulting

DID YOU KNOW?

Students often have summer jobs lined up by late October because there is so much demand for expertise in this field.



“

I love how diverse the course material is in the Food Business Management program, from learning the science behind the food we take for granted every day to business practices that will equip me to enter the workforce one day.”

CAROLINE

3rd Year, BSc Food Business Management Student, from Calgary, AB

CAREERS

- Business Development Officer
- Commodities / Stock Trader
- Food Manufacturing / Processing Supervisor
- Management Consultant
- Market Development Specialist
- Market Research Analyst
- Policy Analyst

Elevate your skills by taking a variety of business courses, including finance, accounting, strategic management and marketing.

BSc in Agricultural/ Food Business Management



Agricultural Business Management

Discover the significance of scientific and economic relationships within the agri-food sector. Courses cover agricultural and resource economics, as well as animal, plant and soil sciences. Learn business management skills needed to manage organizations effectively and efficiently within this global industry.

COURSE EXAMPLES:

- AN SC 101:** Principles of Animal Agriculture
- INT D 303:** Economics of World Food and Agriculture

Food Business Management

Work to understand the scientific and economic relationships that influence activities in the food industry. Courses in food chemistry and microbiology, combined with agricultural economics and business, build skills that can be applied to careers in the food processing and grocery retailing sectors.

COURSE EXAMPLES:

- NU FS 374:** Food Fundamentals and Quality
- AREC 484:** Strategic Management in Food and Resource Businesses

AGRICULTURAL/FOOD BUSINESS MANAGEMENT EXPERIENCES

Co-op Program: Students can access the School of Business Co-op Program, where companies welcome your skill set in a 12-month paid work experience.

BSc in Animal Health



Companion & Performance Animals

Develop an understanding of the physiology, nutrition, behaviour and evolving role of companion and performance animals. This major emphasizes physiology, nutrition, immunology, welfare and behaviour (including animal learning). Courses focus on the animals found in our homes, search and rescue, sports, animal-assisted therapy and service.

COURSE EXAMPLES:

- AN SC 310:** Physiology of Domestic Animals
- AN SC 325:** Equine Science

Food Animals

Learn how livestock, poultry and food industries interface by studying animal and human disease, animal nutrition, microbiology, physiology, behaviour and production. Students work closely with agricultural animals and have many opportunities for industry interaction. This major includes courses in immunology, one health and animal welfare.

COURSE EXAMPLES:

- AN SC 377:** Food Animal Behaviour
- AN SC 312:** Reproductive Physiology of Domestic Animals

ANIMAL HEALTH EXPERIENCES

Research at South Campus: You can get involved in research, including areas like beef (meat processing), dairy (nutrition and milk processing), swine and chickens.



ALES student, Kayesyl, working at Stony Plain Veterinary Clinic as part of the ALES Mini-internship Program.

Students may complete all pre-veterinary course requirements in this degree and go on to complete veterinary programs in Canada and around the world!

CAREERS

- Animal Behaviour Consultant / Trainer
- Animal Nutritionist
- Animal/Pet Sector Sales and Marketing Manager
- Animal Welfare Officer
- Feed/Ingredient Sales and Technical Services
- Livestock Production
- Pharmaceutical Researcher
- Policy Analyst



ALES Human Ecology student, Tanna, working in the Mactaggart Art Collection at the University of Alberta Museums as part of her 200-hr Human Ecology practicum placement.



Cindy, a current ALES undergrad, volunteering at the Dairy Research and Technology Centre as part of the ALES Mini-internship Program.

What can you do during your degree? uab.ca/ALEsexp

WORK EXPERIENCE DURING YOUR DEGREE

ALES Mini-Internship Program (AMIP)

Get industry experience during fall and/or winter reading weeks! Students are matched with an industry-specific host organization for 3 days of volunteering and can complete the program as many times as they like during their degree, even if it's not related to their area of study.

Students get first-hand career experiences in the following areas:

- Agriculture
- Animal health
- Environment
- Food science

Program benefits:

- Test a career you're interested in before you make a commitment to pursue it
- Make connections and build relationships with a wide range of people to build your professional network
- Experience unique out-of-province opportunities (some fully subsidized)
- Receive a certificate of attendance to add on your resume

Human Ecology Practicum

Required for students in Human Ecology, this practicum formally integrates a student's academic study with work experience in community organizations and agencies.

Dietetics Internship

Students in the Dietetics Specialization are required to participate in professional practice during their fourth year. During this year, students work in various community settings (including rural areas) such as hospitals, food service operations, schools and community agencies/clinics. These placements fulfill several of the requirements to qualify as a Registered Dietitian in Alberta.

Business Co-op

Students in any ALES Business Management Program can access the School of Business Co-op Program — an exciting opportunity for companies to take on your skill set in a 12-month paid work experience.

Science Internship Program (SIP)

Invites ALES students to apply knowledge gained in academic studies to the workplace through a full-time, paid 4, 8, 12 or 16-month internship experience.

RECENT PLACEMENTS

- **Beaverlodge Research Farm:** An environmental and conservation sciences student worked as an intern for Agriculture & Agri-Foods Canada assisting with field work and lab research on bee hives which included bee collection, colony assessment and harvesting honey.
- **Daiya Foods:** A nutrition and food sciences student worked at Daiya Foods and analyzed food product formulations and ingredients for pH, moisture, viscosity and stability, and engaged in micro-testing.
- **Environment Canada:** An environmental and conservation sciences student worked as a Hydrometric Technologist with Environment Canada: Meteorological Service of Canada Department. Their role included height modernization and benchmark installations.



Students taking part in the Northern Systems field course co-hosted with Yukon University.

FIELD WORK OPPORTUNITIES

Introductory Forestry Field School

REN R 101: Join other first-year forestry and forest business management students in August for this 6-day course that will introduce you to the broad field of forestry through experiential learning.

You'll travel through the forested areas of west-central and northern Alberta, learning about forest plants, animals and ecology, field operations (including harvesting and silviculture) and forest protection. You'll even visit manufacturing facilities.

Learn basic field skills and meet forest practitioners and professionals, many of whom participated in field school themselves! You'll also get to know your "cohort" of students – and feel well-prepared for your upcoming classes!

Field Skills in Environmental, Conservation & Forest Sciences

REN R 290 & REN R 295/ENCS 299: After completing second year, you'll have the opportunity to take part in this immersive 10-day program to learn field skills on location and to help solve current and future landscape management issues. You'll apply the academic knowledge you've gained so far in practical and experiential environments alongside your fellow students.

REN R 465: Explore Yukon's natural and cultural history with this week-long field studies course! Discuss environmental, social and economic challenges in this region, and identify ecologically and culturally appropriate research and management approaches for Canada's northern systems.

CERTIFICATES

Set your degree apart with an embedded certificate on a topic that interests you. Popular certificates that pair well with our programs are:

- Certificate in Sustainability
- Certificate in International Learning
- Certificate in Innovation and Entrepreneurship
- Certificate in Community Engagement and Service-Learning

STUDY ABROAD

Imagine taking courses somewhere else in the world... and having them count for credit towards your degree! Planning with our advisors is recommended to ensure options fit into your program and maximize your ALES experience.

Wageningen University & Research Experiential Learning (Netherlands)

ALES students have an opportunity to study, research and work in a wide variety of fields at the historic Wageningen University and learn the leading-edge agricultural practices that have made that country the world's second-leading agricultural exporter.

Semester in the North – Yukon University (Whitehorse, YK)

Students in environmental-related programs can spend a semester in the Yukon to learn about protecting Canada's northern systems and help develop solutions to global climate change, all while earning credit towards their degree.

Bangor University (Wales)

Get credit for specialized coursework in forestry or environmental and conservation sciences programs.



“Over the past four years, this program has opened doors for me to gain hands-on experience through various internships. From creating mouthwatering menus in food service facilities to counselling patients in transplant clinics to educating kids in elementary schools about the basics of nutrition, the program has equipped me with the necessary skills and knowledge to become a professional in the field of nutrition and dietetics.”

SHELDON

4th Year, BSc Nutrition and Food Sciences Student specializing in Dietetics, from Abbotsford, BC

Students get the Spotlight

In addition to sustainability-focused research and the pursuit of environmentally-friendly campus operations, it was student-led initiatives that boosted us to top ranks in sustainability. Students pursuing the Certificate in Sustainability turned ideas to reality for the greater good with their campus-wide initiative DishZero, a reusable takeout container program.



ALES students, Brittney and Danial, in the Agriculture/Forestry Building rooftop greenhouse.

HANDS-ON OPPORTUNITIES DURING YOUR DEGREE

There's always something to do in our community!

- **Volunteer at South Campus in our Green & Gold Garden.** Whether you're new to gardening or have a seasoned green thumb, get dirty to learn!
- **Join the Hands-on a Holstein Volunteer Program.** At the Dairy Research and Technology Center on South Campus, you can apply your learnings in the classroom to a practical environment. Students participate in daily operations and special projects centred around animal welfare and management.



U of A Green and Gold Garden.

DID YOU KNOW?

The Ag Club is one of the oldest student clubs (established in 1911!) still in existence at the U of A.

ALES STUDENT CLUBS

- Agriculture Club
- **Environmental and Conservation Sciences Students' Association (ECSA)**
- Environmental Studies Students' Association (ESSA)
- Faculty of ALES Undergraduate Students' Association (FAUnA)
- **Forest Society**
- **Human Ecology Students' Association (HESA)**
- Multi-Species Judging Club
- Nutrition and Food Science Students' Association (NUFSSA)
- Poultry Research Centre Student Club
- Pre-Vet/Animal Health Club
- U of A Chapter of the Wildlife Society

- **ECSA** hosts outdoorsy events right here on campus! You can host plant sales, pet animals, cook over a campfire and give back while you have fun. Many of these events also raise money for conservation efforts.
- **The Foresty Society** connects like-minded students in their favourite forestry and conservation activities, like annual Christmas tree sales and logger sports! High school students can sit in on forestry courses and meet professors on campus through the society's Shadow Day.
- **HESA** members volunteer for the Human Ecology Department's Clothing Repair Café, which teaches mending to increase the lifespan of garments and decrease waste in the fashion industry.

READY, SET, APPLY!

ACADEMIC REQUIREMENTS

Admission to the Faculty of Agricultural, Life & Environmental Sciences varies depending on applicant type (directly from high school or post-secondary transfer) and program.

Required Alberta Grade 12 Courses (or equivalents)

**Most programs share the same required courses:*

- English 30-1
- Chemistry 30
- Biology 30
- Math 30-1 (or Math 30-2 for select programs)
- Additional course:
 - Fine Arts
 - Humanities
 - Languages other than English
 - Math/Sciences
 - Options

Programs and admission requirements:

uab.ca/programs

Historical admission averages by faculty:

uab.ca/averages

Apply for scholarships and awards:

uab.ca/awards

University access program for Indigenous students – Transition Year Program:

uab.ca/typ

Important deadlines and to apply: uab.ca/apply

SEE YOURSELF HERE!

The sunny atrium in the Agriculture/Forestry Building is a popular spot to study and socialize.




FIND YOUR **PURPOSE**

uab.ca/ales

ASK US

You've got questions.
We've got advisors.
ales.recruiting@ualberta.ca
uab.ca/advising

FOLLOW US

 [@ualberta_ales](https://www.instagram.com/ualberta_ales)
 [@UofA_ALES](https://www.youtube.com/@UofA_ALES)
 [@UofAALES](https://twitter.com/UofAALES)



**UNIVERSITY
OF ALBERTA**