

DEPARTMENT OF EARTH & ATMOSPHERIC SCIENCES

UNDERGRADUATE STUDIES

OVERVIEW

THE DEPARTMENT OF **EARTH AND ATMOSPHERIC SCIENCES (EAS)** IS ONE OF THE LARGEST AND BEST-SUPPORTED DEPARTMENTS OF ITS KIND IN CANADA. IT HAS AN INTERNATIONAL REPUTATION FOR LEADING-EDGE RESEARCH AND OFFERS INTERDISCIPLINARY APPROACHES TO DIVERSE TEACHING AND RESEARCH THEMES.

DEGREE PROGRAMS

With a breadth of focus areas, students can specialize in a variety of disciplines.

ENVIRONMENTAL EARTH SCIENCES

Environmental Earth Science programs examine the interactions between the physical, biological, and human components of the Earth to understand our local and global environments and provide solutions to environmental problems. This is of increasing importance as we continue to face challenging environmental issues.

GEOLOGY

Geology is the study of the solid Earth, its structure, the rocks of which it is made, and the processes that affected it through time. Our geology degree is certified by the Association of Professional Engineers and Geoscientists of Alberta (APEGA) and field work is an important component of this program.

HUMAN GEOGRAPHY

Human Geography is a branch of social science that focuses on relationships between human societies and the built and natural environments in which they operate. Key interests of human geographers include: the social and

spatial characteristics of towns, cities, and regions; the ways in which places and communities can support health and wellbeing; the impacts of environmental changes and hazards on households and communities.

PLANNING

The Planning program educates students on how to weigh multiple public interests and to work collaboratively with various stakeholders to shape decisions about land, resources and services to create healthy, sustainable communities. The Bachelor of Science Specialization in Planning focuses on natural science elements of planning, including environmental management and the use of geographic information sciences. The Bachelor of Arts major in Planning focuses on the aesthetic, economic, and social issues of planning.

PALEONTOLOGY

Paleontology programs are concerned with the evolutionary history of life beginning billions of years ago, when matter and energy first organized life out of chaos, to the present day's astonishing diversity of living things. As a science, paleontology examines and explains the patterns and processes of evolution as preserved in the fossil record. This program is jointly offered with the Department of Biological Sciences.

See ualberta.ca/admissions for admission requirements.



UNIVERSITY OF ALBERTA
FACULTY OF SCIENCE

Department of Earth & Atmospheric Sciences

RESEARCH AREAS

- + Atmospheric sciences and oceanography
- + Climate change
- + Environment
- + Invertebrate paleontology
- + Natural resources and energy
- + Northern research
- + Oil and gas
- + Petroleum geology
- + Social geography
- + Solid earth sciences
- + Structural geology
- + Sustainable development
- + Urban planning
- + Vertebrate paleontology

UNIQUE OFFERINGS

The Faculty of Science offers one of the most comprehensive and extensive undergraduate field school experiences in Canada. Our students have unparalleled access to the most coveted field locations in the world, thanks not only to the university's physical proximity to unique learning sites, but also to the international partnerships fostered all over the globe through researcher and faculty connections. From Jasper National Park, Canada to the Monteverde Cloud Forest Reserve in Costa Rica, students have many opportunities to join field schools near and far.

Twenty in-house analytical and computing facilities, support the EAS Department's teaching and research programs, such as the De Beers Laboratory of Diamond Research and the Ocean/Climate Modelling Laboratory.

EAS is home to a number of museums and collections that aid the department's educational goals. For example, the Geoscience garden, an experiential teaching laboratory on the north edge of campus, represents more than one billion years of Earth's history. The Paleontology Museum houses

specimens ranging in age from over 600 million to 10,000 years, from dinosaurs to fish to trilobites.

For a full list of EAS facilities visit ualberta.ca/earth-sciences/facilities.

CAREERS

Our graduates lead successful careers in many areas, including:

- + City planner
- + Ecologist
- + Environmental consultant
- + Field researcher
- + Geologist
- + Global change researcher
- + Hydrogeologist
- + Museum curator
- + Oceanographer
- + Policy Analyst
- + Sustainability Coordinator

For more information on the programs and opportunities in Earth and Atmospheric Sciences, visit: uab.ca/eas

CONTACT

For admission related questions, contact **science.recruiting@ualberta.ca**.

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