

# DALHOUSIE UNIVERSITY

Located on Canada's East Coast, the university blends world-class academic programs with breakthrough thinking and leading-edge research. Dalhousie was ranked as the 125th Most International University in the World by the Times Higher Education World University Rankings in 2016. As a key driver of economic growth and knowledge generation, Dalhousie delivers groundbreaking work in fields such as oceans, advanced materials and clean technology, health and wellness, governance, society and culture, information science and communication, energy and the environment, and agriculture. Research collaborations extend through nearly 100 countries.

Priority Research Areas:

- Ocean Studies
- Advanced Materials and Clean Technology
- Health and Wellness
- Governance, Society and Culture
- Information Science and Communication

Established 1818 12 Faculties 149 Master and PhD Programs 277 Position in the 2015 QS World University Ranking \$135 Million External Research Funding 50 Canada Research Chairs\* in 2015

1 Canada Excellence Research Chair in 2015

\* Canadian Government program to attract and retain some of the world's most accomplished and promising minds.



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# Dalhousie University Highlights

The <u>Collaborative Health Education Building</u> is a transformative health education facility enabling integrated learning experiences for medicine, dentistry and health profession students. The state-of-the-art skills and simulation labs mimic realistic homecare, rehabilitation and hospital settings.

The <u>Steele Ocean Sciences Building</u> is a one-of-a-kind space that clusters ocean experts and innovators under one roof. It is home to the Aquatron laboratory, one of the best aquatic research facilities in the world.

The <u>Institute for Big Data Analytics</u> creates knowledge and expertise in the field of Big Data Analytics by facilitating fundamental, interdisciplinary and collaborative research, advanced applications, advanced training and partnerships with industry.

Tesla Motors has partnered with Dalhousie researcher **Dr. Jeff Dahn** and his team to help create longer lasting, cost-effective batteries that will pack a punch against climate change.

The <u>Global Ocean Tracking Network</u>, a \$168-million conservation project, is headquartered here.

The <u>Life Science Research Institute</u> is a state-of-the-art facility. The open-concept design presents new opportunities for collaboration that begins with laboratory research and moves on to the commercialization of new products and processes and the incubation of new companies, all of which results in improved healthcare and a stronger economy.

The <u>Precision Agriculture lab</u> works to improve agricultural practices and protect environment. Dr. Qamar Zaman and his team are developing innovative technologies for famers to increase crop productivity and reduce cost of production.

Halifax's urban charm is complemented by its natural beauty. The ocean is part of our life here--Dalhousie is just 300 metres from the Atlantic--so sailing and water sports are enjoyed through spring, summer and fall, with surfing being popular year-round.

Our Agricultural Campus is located an hour outside of Halifax. Students can fill their spare hours with amazing trails and water falls, check out the world's highest tides in the Cobequid Bay and visit the Truro's Farmer's market for great food, local produce and live music.

#### **Dalhousie University**

#### **Priority Research Areas**

#### • Ocean Studies

- Marine Biological Resources and Conservation of Biodiversity
- Marine Technologies
- Ocean Environmental Processes
- Arctic Studies
- Ocean Law and Governance
- Atmospheric Science
- Marine Bio-Resources
- Marine Affairs
- Advanced Materials and Clean Technology
  - o Clean Energy and Storage
  - o Semiconductors
  - o Environmentally Sustainable Materials and Clean Manufacturing
  - Sustainable Civil Infrastructure
  - o Water Management
- Health and Wellness
  - Biological Structures and Mechanisms
  - Medical Products, Vaccines and Technologies
  - Clinical Patient-Oriented Research and Translation to Health Outcomes, Services and Policy
  - o Social, Cultural and Environmental Determinants of Health and Wellness
  - Life Course Development

#### • Governance, Society and Culture

- o Peace, Conflict Management, Mediation and Security
- Ethics, Values and Expert Knowledge
- Studies of Europe
- Social Justice and Development
- o Cultural Studies, including Aboriginal and Migration Research





o Cultural Aspects of Digital and Social Media

### Areas of Emerging Research Strengths

- Information Science and Communication
  - Computer and Wireless Information Networks
  - Information Systems
  - New Media

# • Agriculture and Food Technologies

- Sustainable Agro-Ecosystems
- Applied Molecular Biology, Genomics and Biotechnology
- Bio-Product and Bio-Resource Management

# • Energy and the Environment

- Sustainable Energy
- Non-Renewable Energy
- Reduction of Energy Use