



YOUR ADVENTURE CONTINUES



Lakehead
UNIVERSITY

Faculty of
Graduate
Studies

VIEWBOOK / 2027

THUNDER BAY | ORILLIA | BARRIE | [GRADUATESTUDIES.LAKEHEADU.CA](https://graduatestudies.lakeheadu.ca)





Lakehead is for **YOU**

When you become a Lakehead student, you become part of a diverse and dynamic community that will support you from the time you arrive through to graduation. We believe in the potential of our students, and are committed to helping you build the academic skills and confidence needed to succeed.

Ambition and curiosity to pursue the unconventional is at the heart of the Lakehead experience. Our highly acclaimed, award winning faculty will challenge and teach you how to think, not what to think.

Through hands-on learning opportunities and individual academic experiences, that expand beyond our lecture halls, our students are offered a truly unique experience. At Lakehead, you will develop the knowledge and skills for your university years and beyond.

Welcome to your future. Welcome to Lakehead.

Lakehead University respectfully acknowledges its campuses are located on the traditional lands of Indigenous Peoples.

Lakehead Thunder Bay is located on the traditional lands of the Fort William First Nation, signatory to the Superior Treaty of 1850, and on the northern portion of the Upper Great Lakes historic Métis homeland.

Lakehead Orillia and the Barrie STEM Hub are located on the traditional territory of the Rama First Nation, a member of Chippewa Tri-Council First Nations, signatories to Treaty 16, Treaty 18, Coldwater and the Williams Treaty of 1923. Lakehead acknowledges historic and contemporary Métis peoples, and the Huron-Wendat peoples who occupied the territory the middle of the 17th century.

Lakehead University honours the many nations who have occupied the lands our campuses are now situated upon and is committed to building relationships based on principles of mutual trust, respect, reciprocity, and collaboration in the spirit of truth and reconciliation.

ABOUT LAKEHEAD

- 4 Our Cities — Thunder Bay & Orillia
- 5 Barrie STEM Hub
- 6 Words of Welcome — Andrew P. Dean and Chander Shahi

ADMISSIONS

- 7 Admissions Process
- 8 International Admissions

9 FUNDING OPPORTUNITIES

10 RESEARCH

11 RESEARCH CENTRES & INSTITUTES

16 STUDENT SERVICES

PROGRAM OPTIONS

- 18 Business Administration
- 19 Education
- 20 Engineering
- 22 Health & Behavioural Sciences
- 25 Natural Resources Management
- 26 Science & Environmental Studies
- 29 Social Sciences & Humanities

31 PROGRAM OFFERINGS

Visit us online:

 @lakeheadgraduatestudies

 @LakeheadFGS

 @LakeheadGradStudies

 mylakehead

 /lakeheaduniversity



OUR CITY - THUNDER BAY

Experience the best in Canada with a dynamic city life along with the most breathtaking natural backdrop. You will find it difficult to imagine a more beautiful and natural place to live and learn. Situated in the heart of Canada on the north shore of Lake Superior, Thunder Bay is the largest urban centre between Winnipeg, Manitoba and Toronto, Ontario. A city with deeply-rooted Indigenous and European cultures, Thunder Bay is truly a culturally-diverse community. From live theatre, festivals and concerts, to shopping, great nightlife and a vibrant arts and culture scene, there is something for everyone.

thunderbay.ca

lakeheadu.ca/thunder-bay

Discover all Thunder Bay has to offer:

Thunder Bay Experience Guide

visithunderbay.com

The Walleye Thunder Bay Arts & Culture Alternative

thewalleye.ca

OUR HOMETOWN FACTS

123,200
POPULATION

200+ RESTAURANTS
FEATURING FOODS FROM
AROUND THE WORLD

4 MAJOR AIRLINES
THUNDER BAY INTERNATIONAL AIRPORT -
AIR CANADA, WESTJET, FLAIR & PORTER

7 SHOPPING
DISTRICTS

305 DAYS OF
SUNSHINE
PER YEAR

50+ ANNUAL
CITY FESTIVALS

OUR CAMPUS FACTS

77,898
ALUMNI FROM 116
COUNTRIES

1,700
GRADUATE STUDENTS

100+
HECTARES
OF CAMPUS SPACE

50+ GRADUATE
PROGRAMS

1 LAKE+
RIVER
RUNNING THROUGH CAMPUS



OUR CITY - ORILLIA*

Nestled on the shores of Lake Couchiching and Lake Simcoe near the Greater Toronto Area, the City of Orillia is vibrant with over 30,000 people. Orillia has all the amenities of a large urban centre, with small-town charm that offers year-round opportunities for arts, culture, recreation and music.

orillia.ca

lakeheadu.ca/about/orillia-campus

OUR HOMETOWN FACTS

33,400+
POPULATION

200+km
WALKING & BIKING
TRAILS

**20-MINUTE
DRIVE FROM
BARRIE**

101+
RESTAURANTS

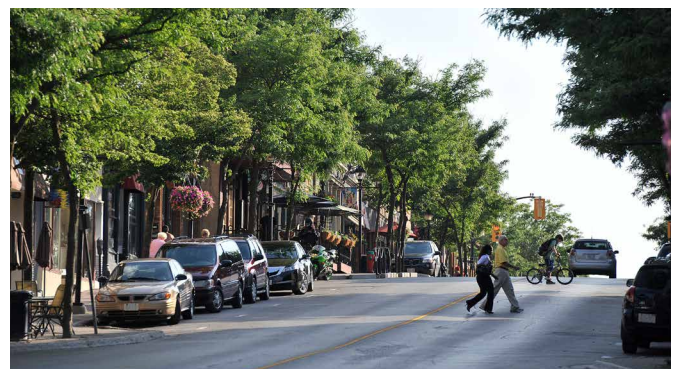
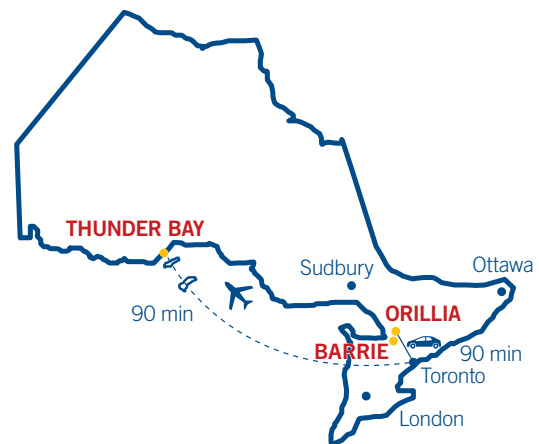
**GATEWAY TO
COTTAGE
COUNTRY**

OUR CAMPUS FACTS



ENVIRONMENTALLY
DESIGNED AND CERTIFIED CAMPUS (LEED)

2 CAMPUS LOCATIONS
UNIVERSITY AVENUE
AND HERITAGE PLACE



* While all graduate programs are offered from our Thunder Bay campus, selected programs have students located in Orillia and at the Barrie STEM Hub.



WHERE INNOVATION MEETS OPPORTUNITY

Lakehead University's Barrie STEM Hub is where innovation meets opportunity. Located in the heart of downtown Barrie, Ontario, Lakehead's STEM Hub offers cutting-edge education in engineering and computer science. Designed to meet the demands of the future workforce, the STEM Hub provides hands-on, high-tech learning in an intimate, purpose-built setting. With smaller class sizes, close mentorship, and strong connections to local industry, the STEM Hub empowers students to explore, innovate, and launch successful careers in STEM fields.

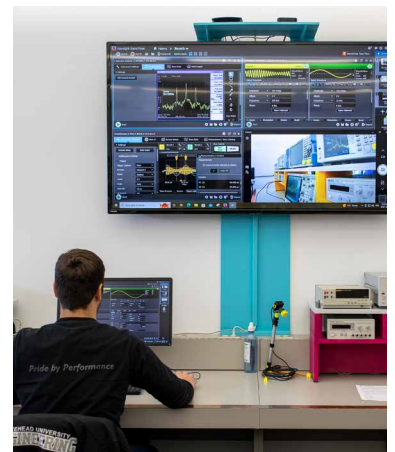
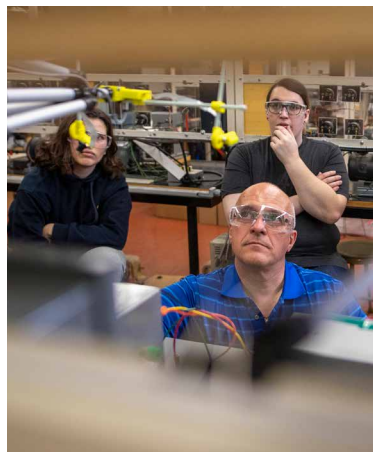
Lakehead University's Barrie STEM Hub offers hands-on, high-tech education in engineering and computer science, delivered in an intimate, purpose-built space that prepares students for in-demand careers.

lakeheadu.ca/about/barrie-stem-hub

Discover all Barrie has to offer:

Tourism Barrie
tourismbarrie.com

City of Barrie
barrie.ca



LAKEHEAD UNIVERSITY IS NO ORDINARY PLACE



Welcome to Lakehead University, where our innovative spirit and cutting-edge research are helping to drive real-world progress and meaningful change. I am Dr. Langis Roy, and I am excited to be starting my term as your new Vice-President, Research and Innovation.

Lakehead University is poised for a bright future. With the recent launch of our 2025-2030 Strategic Plan, we are charting a course for growth and transformation, reimagining our role in shaping society. Our commitment to excellence is widely recognized, and we are proud to be ranked as a top university by Maclean's for our exceptional education, research, and student outcomes.

Our success as a research-intensive university is largely due to the quality of our graduate programming, as well as our award-winning faculty and students. Graduate students are key contributors to the vast array of research conducted at Lakehead University.

As we look ahead, we will be developing a new Strategic Research Plan. This plan will put our students at the heart of our research enterprise, aligning with the new Strategic Plan's commitment to advancing societal impact and expanding student opportunity and success. The current Research Plan (2019-2026) identifies Lakehead University's research priorities and highlights the graduate programs that relate to each. You will

find the list very extensive. Whether you are passionate about addressing food security challenges in First Nations communities, advancing health care across the life span, or developing interdisciplinary sustainable solutions incorporating AI, Lakehead University has the equipment, world-class research centres, and faculty mentors to support you.

Within the Centre for Advanced Studies in Engineering and Sciences (CASES), the Faculty of Graduate Studies provides a vibrant lounge area for graduate students to gather and connect over shared interests. CASES is also home to Ingenuity, Lakehead University's first student business incubator. Ingenuity provides resources and space to support our student entrepreneurs looking to develop a start-up company or commercialize their innovations. Throughout the year, Ingenuity offers workshops from experts on intellectual property, commercialization, and the entrepreneurial ecosystem.

Lakehead University faculty researchers are passionate about mentoring the next generation of changemakers. From using state-of-the-art technologies to building relationships with industry leaders and community organizations, our students gain the hands-on skills and networks to thrive after graduation. I am confident that the spirit of inquiry and innovation at Lakehead University will remain strong. Whether you are a budding entrepreneur or researcher, boundless opportunities await you here at Lakehead University.

Langis Roy, PhD, Vice-President, Research and Innovation



Lakehead offers over 50 Graduate Programs at the Master and PhD levels. Students have the ability to work closely with their supervisor due to our smaller student population.

The Faculty of Graduate Studies at Lakehead University welcomes you to explore our exceptional graduate programs and potential research opportunities outlined in this guidebook. As a comprehensive and research-intensive university, Lakehead's graduate programs endeavor to provide you with the scholarly student-centered environment necessary to pursue your personal, professional, and intellectual development. The Faculty of Graduate Studies is geared towards your academic success and prepares you for an exciting, successful, and unstoppable career. We provide our graduate students the intellectual freedom to pursue the unconventional and help them realize their dreams and succeed. Our mission is to support and promote graduate education and research, to foster excellence in graduate programs, and to attract top national and international graduate students. The graduate students at Lakehead University come from many cultures and many Nations and are passionate about both their own individuality and their communities. At Lakehead University, your graduate experience extends beyond the lab or classroom, as many of our programs offer placements, fieldwork, co-op opportunities, and plenty of chances to socialize with fellow students on or off campus. I encourage you to explore the many unconventional opportunities available for you to engage with our community of scholars at Lakehead University, and I look forward to welcoming you to one of our campuses.



Chander Shahi, PhD, Dean, Faculty of Graduate Studies



ADMISSION PROCESS

We are proud to offer a diverse selection of Masters, PhD, and Diploma programs at the graduate level. Our students enjoy the guidance and support of highly dedicated faculty, competitive funding opportunities, and considerable freedom as to what and where they will study.

Please be advised that meeting the minimum admission requirements does not guarantee admission into a program. Also, departments may require further documentation to support your application. Please review the links provided in this guide to determine specific admission requirements.

Steps to Apply for Admission to Graduate Studies at Lakehead University:

- 1 EXPLORE OUR GRADUATE PROGRAMS
- 2 REVIEW ADMISSION REQUIREMENTS
- 3 PREPARE YOUR APPLICATION
- 4 APPLY ONLINE

lakeheadu.ca/academics/graduate/applying

MASTER'S DEGREE

Except where otherwise stated in the admission requirements of a particular program, domestic applicants to Master's degree programs must have a minimum B average on the last 20 half credits or equivalent at the third or fourth year level from a four year undergraduate degree.

For a complete list of our program offerings, please visit:

lakeheadu.ca/masters-programs

DOCTORAL DEGREE

Applicants for admission must be graduates of a recognized university and show evidence of scholarly achievement. Students must have a Master's degree or its equivalent with an academic average as specified

by the desired program. Applicants for our Doctoral programs are strongly encouraged to engage a supervisor for their studies before they apply.

For a complete list of our program offerings, please visit:

lakeheadu.ca/doctoral-programs

GRADUATE DIPLOMA

Please see individual faculty pages or for more information, visit:

lakeheadu.ca/graduate-diploma

ADDITIONAL ADMISSION REQUIREMENTS

The recommended deadline for admission and funding for most programs is February 1st. However, please be advised of the firm deadline requirements listed below:

- ▶ Joint PhD Educational Studies – October 1st, 2026
Please see uwindsor.ca/education/phd for application information
- ▶ Clinical Psychology (MA & PhD) – December 1st, 2026
- ▶ PhD Health Sciences – January 15th, 2027
- ▶ Health Sciences & Public Health (MHSc & MPH) – February 1st, 2027

GRADUATE APPLICATION DATES

Spring 2027	open in late-September, 2026
Fall 2027	open in October, 2026
Winter 2028	open in July, 2027
Spring 2028	open in late-September, 2027
Fall 2028	open in October, 2027

APPLICATION FEES

\$125 CAD fee applies for each program application.

TUITION FEES

For information regarding fees, please visit:

lakeheadu.ca/graduate-studies-fees

START DATES

A Fall (September), Winter (January) or Spring (May) intake may be available for your program; please check the inside back cover of this publication, or visit the link:

lakeheadu.ca/graduate-start-terms



LAKEHEAD UNIVERSITY WELCOMES INTERNATIONAL STUDENTS FROM AROUND THE WORLD.

INTERNATIONAL ADMISSIONS

At Lakehead, we welcome students from countries around the world. Lakehead University International offers a number of specialized services and supports to help you throughout your studies as well as during your transition to Canada, such as: study permit assistance, free airport pick-up services, English Language Program, on-campus IELTS testing centre, UHIP – University Health Insurance Program, homestay, and social & cultural activities.

LAKEHEAD UNIVERSITY INTERNATIONAL

As an International Student, you may have questions about Lakehead University and student life. At Lakehead International, we provide many services to assist with your transition, and we are committed to making your time here the best it can possibly be. The team at Lakehead International is available to answer any questions about admission, advising, registration, student visas and any other support you may need along the way.

lakeheadu.ca/international international@lakeheadu.ca

ADMISSION REQUIREMENTS AND DEADLINES FOR INTERNATIONAL APPLICANTS

The firm deadline to receive complete applications varies. Please visit lakeheadu.ca/programs/graduate to view your program's application deadline date. Our minimum admission requirement for international applicants is 75% or 3.0 on a 4 point Canadian scale, with an accredited university degree equivalent to a Lakehead University 4 year degree. Please note that admission into our programs is competitive, and meeting the minimum academic requirement does not guarantee admission. Should you wish to apply to a thesis program, we strongly advise you to contact a potential supervisor, and have your proof of English language proficiency complete.

We do not pre-assess qualifications.

ENGLISH LANGUAGE PROFICIENCY REQUIREMENTS FOR ADMISSION

Applicants whose first language is not English must demonstrate they can cope with the language demands of an English language university. Applicants to graduate programs may meet our English language requirements if they have successfully completed 3 years of full-time, post-secondary study in English.

Applicants whose native language is not English, and who cannot verify having recently studied in an English language post-secondary system for more than three years of full-time study, will be required to present proof of English language proficiency as follows:

Test	Minimum Score
TOEFL - Test of English as a Foreign Language (Paper based)	550 (no component score less than 50)
TOEFL* (Computer based)	213 (no component score less than 17)
TOEFL* (Internet based)	80 (no component score less than 19)
IELTS - International English Language Testing System	6.5 (no individual score less than 6.0)
MELAB - Michigan English Language Assessment Battery	85
CAEL - Canadian Academic English Language Assessment	60
Duolingo	120 (no individual score less than 115)

* Lakehead University's Institution Code for TOEFL scores is 0888.

Some academic units may require a higher score and meeting the minimum requirements does not guarantee admission to Lakehead University.

FUNDING OPPORTUNITIES

In the 2025/2026 academic year, we offered over 300 Faculty Research Awards to our graduate students with a combined value over \$2.8 million.

ENTRANCE AND IN-COURSE SCHOLARSHIPS & AWARDS

As a full-time graduate student at Lakehead University, you have the opportunity to apply for several scholarships and awards throughout the academic year. Many of these scholarships and awards are program specific, but there are several opportunities that are open to students in any program. It is important to regularly visit our graduate funding website listed below. There you will find all available in-course financial offerings, as well as any eligibility requirements, application forms, and deadlines to submit.

ENTRANCE AND IN-COURSE BURSARIES

If you are a full-time graduate student at Lakehead University who demonstrates financial need, you are invited to apply for our bursary program. Many of the bursary possibilities are made available by our generous donors. These bursaries are provided to help cover the costs of tuition and supplies.

Find further information regarding funding opportunities at:

lakeheadu.ca/graduate-student-funding

EXTERNAL AWARDS

External awards programs are offered by federal and provincial scholarship agencies and often require you to apply a year in advance of beginning your graduate studies. Many of these awards are adjudicated competitions that require a separate application and are considered highly competitive as the monetary value of these scholarships can be \$15,000 and higher. For additional information, please visit the graduate funding website listed below.

lakeheadu.ca/graduate-student-funding

MORE OPPORTUNITIES

Graduate Assistant appointments may be offered to eligible full-time graduate students (including Visa students) at a rate of \$11,314.28 (2025-2026) at the Master's level; and of \$12,338.50 (2025-2026) at the Doctoral level. A regular appointment constitutes a maximum of 270 hrs of work over the Fall and Winter terms averaging not more than 10 hrs of work per week.

FACULTY RESEARCH AWARDS

A stipend may be paid to a full-time degree candidate for research or academic activities relevant and related to the student's field(s) of study within the academic program. Faculty Research Awards are awarded by the student's supervisor. In the 2024-2025 academic year, we offered over 320 Faculty Research Awards to our graduate students with a combined value over \$2.3 million.

COMMUNITY-BASED LEARNING

At Lakehead University, some of our graduate programs offer the opportunity to participate in Community-Based Learning, a strategy that uses a variety of instructional methods, which can help students better engage with, preserve, and transfer knowledge. These opportunities may include:

- Fieldwork
- Co-op
- Practicum
- Internship



ONE OF CANADA'S TOP UNIVERSITIES IN INNOVATIVE RESEARCH

INGENUITY – Lakehead's student business incubator space nurtures start-up companies through business mentorship and entrepreneurship training. The strategic vision for **INGENUITY** is to foster an entrepreneurial culture, create employment and self-employment opportunities, and contribute to the region's economic development by leveraging existing community resources to deliver a range of on-campus entrepreneurship activities. The main goals of **INGENUITY** are to provide a professional working environment, teach essential entrepreneurial skills, and facilitate business development through mentorship to help solve the problems new ventures face. The most important outcome of **INGENUITY** to Lakehead University is to promote awareness about entrepreneurial resources, programming, and opportunities for students, and, in turn, to create and support entrepreneurial culture and passion on-campus.

The **INGENUITY** District within CASES utilizes 4232 square feet, including:

- ▶ Incubator/co-working space
- ▶ **INGENUITY** Connections Theatre
- ▶ Makerspace (3D Printer Room)
- ▶ Media room
- ▶ Bookable meeting rooms

Programming for **INGENUITY** includes:

- ▶ Workshops and speakers series
- ▶ Pitch competitions and hackathons
- ▶ Start-up grants for students
- ▶ Lunch-and-learns
- ▶ Boot camps
- ▶ Mentor network access
- ▶ Professional development training
- ▶ Ascend Accelerator Program

For more information, please contact: info.ingenuity@lakeheadu.ca

RESEARCH AND INNOVATION WEEK

As a comprehensive and research-intensive university, Lakehead strives to nurture discovery, support innovation, and advance achievement. Through close collaboration with local and global communities, ideas put forth by our talented researchers and students have created meaningful impacts and have led to the emergence of new companies and businesses. Research and Innovation at Lakehead University is celebrated annually during our Research and Innovation Week.

During this week, graduate students have the opportunity to participate in the 3MT® competition, and the winner moves on to compete at the provincial level. Participating in a 3MT® competition increases a student's capacity to effectively explain their research in three minutes, in language appropriate to a general audience. Competitors are allowed one static PowerPoint slide, but no other resources or props. Will you accept the challenge?



lakeheadu.ca/research-and-innovation-week





RESEARCH CENTRES AND INSTITUTES

Lakehead University is committed to fostering interdisciplinary and cross-disciplinary research in partnership with industry, community organizations and government. Through our Research Centres and Institutes, we foster intellectual environments in which researchers and students combine their expertise to create new forms of inquiry and solutions to real-world problems.

21 CUTTING-EDGE
RESEARCH CHAIRS

14 REVOLUTIONARY
RESEARCH
CENTRES & INSTITUTES

#1 IN CROSS-SECTOR
ARTIFICIAL INTELLIGENCE
PUBLICATIONS
(Undergraduate Tier, Research
Infosource 2025)

**DESIGNATED INNOVATION
& ECONOMIC PROSPERITY
UNIVERSITY**

As the second university in Canada to be granted this designation, Lakehead is recognized for its achievements in innovation and entrepreneurship, technology transfer, talent and workforce development, and community development.

ANISHINAABE KENDAASIWIN INSTITUTE (AKI)

The principle of Indigenous self-determination in research underpins this research institute. The purpose of AKI is to support mino-bimaadiziwin amongst Anishinaabe peoples, nations and territories through research that is situated in Anishinaabe knowledges and good relationships that are respectful, reciprocal, and anti-colonial. The acronym for the institute, “AKI” means “land” in Anishinaabemowin.

Dr. Lana Ray (Anishinaabe Kwe, Waaskone Giizhigook), Co-Director
Dr. Keira Loukes, Co-Director

t: (807) 343-8010 Ext 7131, AKI Admin
e: admin.aki@lakeheadu.ca

lakeheadu.ca/research-and-innovation/facilities-centres/anishinaabe-kendaasiwin-institute-aki-

BIOREFINING RESEARCH INSTITUTE (BRI)

The BRI's mandate is to develop cost-effective and environmentally-sound technologies and products from renewable resources as a substitute for imported oil-based fuels and petrochemicals that can create new opportunities for the bioeconomy.

Dr. Pedram Fatehi, Director
t: (807) 343-8010 Ext 8697
e: admin.bri@lakeheadu.ca

lakeheadu.ca/research-and-innovation/facilities-centres/bri

CENTRE FOR EDUCATION AND RESEARCH ON AGING & HEALTH (CERAH)

CERAH's mission is to advance health and social care for an aging population through research, education, and community engagement. Specializing in 4 key areas, Aging in Place, Dementia & Seniors' Mental Health, Indigenous Peoples' Health & Aging, and Palliative Care, CERAH aims to promote the health and well-being of people aging across the lifespan.

Dr. Katherine Kortess-Miller, Director
t: (807) 343-8010 Ext 7271
e: cerah.lakeheadu.ca

lakeheadu.ca/research-and-innovation/facilities-centres/cerah

CENTRE OF EDUCATION AND RESEARCH ON POSITIVE YOUTH DEVELOPMENT (CERPYD)

CERPYD is dedicated to the generation, dissemination, and application of knowledge concerning the health and well-being of children and youth, with a particular emphasis on mental health, substance use, education, and youth justice.

Dr. Jamie Dicasmirro, Director
t: (807) 343-8010 Ext 8248
e: cerpyd@lakeheadu.ca

lakeheadu.ca/centre/cerpyd

CENTRE FOR INNOVATION AND ENTREPRENEURSHIP RESEARCH (CIER)

The CIER fosters and supports multidisciplinary research that explores how organizations can innovate and adapt across all areas of management. CIER is committed to advancing knowledge in both innovation and entrepreneurship, emphasizing their roles in driving organizational change, enhancing performance, and creating value in diverse contexts.

Dr. Michael Dohan, Director
t: (807) 343-8010 Ext 8635
e: msdohan@lakeheadu.ca

cier.lakeheadu.ca

CENTRE OF EXCELLENCE FOR SUSTAINABLE MINING AND EXPLORATION (CESME)

CESME encourages and supports research, education and outreach activities regarding the nature and impacts of mineral resource exploration and extraction, particularly in Northern Ontario.

Dr. Peter Hollings, Director
t: (807) 343-8010 Ext 8329
e: peter.hollings@lakeheadu.ca

cesme.lakeheadu.ca

CENTRE FOR HEALTH CARE ETHICS (CHCE)

The mission of CHCE is to foster high quality, ethical health care through research, education, and capacity building.

Dr. Kristen Jones-Bonofiglio, Director
t: (807) 343-8010 Ext 8079
e: chce@lakeheadu.ca

lakeheadu.ca/centre/chce

FACULTY RESEARCH PROFILE – DR. AISLIN MUSHQUASH

“How can we better understand the best place for and use of technology in mental health care?” asks Dr. Aislin Mushquash, Lakehead University Research Chair in Youth Mental Health and Associate Professor in the Department of Psychology whose motivation is “supporting the needs of underserved community members and organizations to provide better access to evidence-based mental health supports in a timely manner.” A clinician-scientist, Dr. Mushquash conducts applied mental health research with a focus on implementation and evaluation of novel interventions to better meet the needs of underserved populations. Trained in psychopathology, ethics, research method/analyses and clinical practice, she focuses on testing the impact of individual difference factors (e.g., personality traits, motivation) on maladaptive coping behaviours. Working collaboratively with local community mental health organizations like Children’s Centre Thunder Bay and Dilico Anishinabek Family Care, some of her research projects include evaluating the impact of the JoyPop mobile mental health app as a tool to use alongside traditional therapy, as a tool when youth are waiting for services, and as a tool for post-secondary students.

For Dr. Mushquash, in a rapidly evolving field of digital mental health, “being able to use our skills as clinician scientists to answer questions of relevance to help people in need is at the core of what we do.” Integrating students in all stages of her work, she works with her research teams to do this. She works with her research teams to achieve this, integrating students in all stages of her work.



CENTRE FOR NORTHERN STUDIES (CNS)

The CNS is a senate approved research centre comprised of faculty from various disciplines and programs who are active researchers in the field of northern studies.

Dr. Chris Southcott, Acting Director

t: (807) 343-8010 Ext 8349

e: chris.southcott@lakeheadu.ca

lakeheadu.ca/research-and-innovation/facilities-centres/northern-studies

CENTRE FOR RESEARCH ON SAFE DRIVING (CRSD)

The Centre’s mandate is to contribute to the reduction of traffic-related crashes through the understanding of the fundamental processes that support safe driving and through the development of interventions to optimize safe driving.

Sacha Dubois, Director

t: (807) 343-8010 Ext 7160

e: crsd@lakeheadu.ca

crsd.lakeheadu.ca

CENTRE FOR RURAL & NORTHERN HEALTH RESEARCH (CRaNHR)

As a well-established Lakehead University research centre, CRaNHR continues to develop its program of research and evaluation to support priority areas identified in the Research Plan (2024-2026), specifically, Cultures, Societies, and Social Justice; First Nations, Métis, and Inuit research; and Health and Well-Being.

Dr. Christopher Mushquash, Director

t: (807) 343-8010 Ext 8239

e: chris.mushquash@lakeheadu.ca

Dr. Mary Ellen Hill, Senior Researcher

t: (807) 343-8010 Ext 7278

e: maryellen.hill@lakeheadu.ca

lakeheadu.ca/research-and-innovation/facilities-centres/rural-northern-health

RESEARCH CENTRE FOR SUSTAINABLE COMMUNITIES (RCSC)

RCSC is a Senate-approved, interdisciplinary research centre aimed at developing an improved understanding of factors that influence the sustainability of communities.

Dr. Rosario Turvey, Director

t: (705) 330-4010 Ext 2652

e: rturvey@lakeheadu.ca

lakeheadu.ca/research-and-innovation/facilities-centres/research-centre-for-sustainable-communities



DISCOVERY THROUGH **COLLABORATION**

GREEN PROCESSES RESEARCH CENTRE (GPRC)

The Green Process Research Centre (GPRC) is a hub for researchers working on cutting-edge green technologies to develop new products with the aim of transforming Canadian industries to adopt new sustainable processes with green products that will protect the environment. With its focus on sustainability, the vision of GPRC is well aligned with the strategic research priorities of the university including advanced systems and technologies and the environment and natural resources. As a hub that brings together local, national, and international researchers, the GPRC also fits well with Lakehead's internationalization mandate.

Dr. Pedram Fatehi, Director

t: (807) 343-8010 Ext 8697

e: pfatehi@lakeheadu.ca

lakeheadu.ca/research-and-innovation/facilities-centres/green-processes-research-centre

ENHANCING PREVENTION OF INJURY AND DISABILITY AT WORK (EPID@WORK) RESEARCH INSTITUTE

With the vision of being considered the premiere institute in Northwestern Ontario for high-quality research and knowledge mobilization resulting in healthy, safe and inclusive work, the EPID@Work Research Institute conducts research that addresses the unique occupational health and safety needs of Northwestern Ontario. The institute has three main focus areas that guide their research: mental health in the workplace; inclusion, diversity, equity, and accessibility; and knowledge mobilization and implementation. EPID@Work's mission is to conduct collaborative, transdisciplinary, and actionable research with and for the Northwestern Ontario community to support healthy, safe and inclusive work.

Dr. Vicki Kristman, Director

t: (807) 766-7184

e: epid.hbsc@lakeheadu.ca

lakeheadu.ca/centre/epid

HOW CAN YOU GET INVOLVED?

If you are interested in a particular field or would like to know about opportunities in a Research Centre or Institute, visit the Research and Innovation website:

www.lakeheadu.ca/research-and-innovation/facilities-centres

There you will find the list of Research Centres and Institutes. The faculty members associated with each Centre or Institute are listed on their respective websites. During your studies, you may wish to contact one of these professors to see if there are research projects or opportunities at the Centre or Institute that would be of interest to you. Also, most Centres and Institutes host public talks and events, and students are especially welcomed. Attending these is a great way to interact with members of the Centre or Institute, meet other graduate students, and learn more about current projects.

FACULTY RESEARCH PROFILE — DR. ADAM ALGAR



What sets boundaries on life?" asks Dr. Adam Algar, Associate Professor in the Department of Biology. "I study species' range edges – the places where species' geographical distributions end; my research aims to uncover the hidden rules that govern where species live, how they thrive, and what their future holds in a rapidly changing world." Beginning his career in zoology, Dr. Algar first aspired to be a wildlife veterinarian but his encounters with biodiversity, especially birds, inspired him to pursue ecological research. His current research focuses on understanding the dynamics of northern range edges of amphibians, especially Eastern Gray Treefrogs. This project focuses on a range of questions relating to temperature effects on physiology, behaviour and ecology of adults and tadpoles, and how adults communicate through sound. Another branch of his research focuses on climate change impacts on vector-borne diseases. He is part of a global research team from Madagascar, the UK, Norway and Canada that is studying the ecological dynamics of human plague in Madagascar to develop predictive models of plague risk.

The wonder of scientific discovery is, for Dr. Algar, "a rush!" He thrives in applying the scientific method "to discover things about how the world works that we didn't know before," and is inspired by "the opportunity to work in stunning ecosystems with amazing wildlife." But working with and mentoring graduate students is his favourite part of being a prof. He encourages students to find a research topic that really excites them: "Getting through the challenging times is much easier when you really love what you study."

CENTRE FOR ANALYTICAL SERVICES (LUCAS)

LUCAS operations have a proven track record in producing timely and accurate reports, allowing users to maintain productivity by responding quickly to production problems. LUCAS facilities are multiple use, providing advanced testing services to regional as well as international clients using the latest in research equipment. The laboratories also welcome Lakehead's brightest students providing the necessary training and hands-on access to the technologies of the future allowing them to develop essential skills to further their research careers or to secure jobs in fields that directly have an impact on Northern Ontario's economic future. LUCAS provides administrative and marketing support to member laboratories. Researchers who might be interested in attracting clients by providing services to commercial companies are encouraged to contact the Director of Analytical Services and Office of Research Services.

Dr. Francis Appoh, Director, Analytical Testing Services LUCAS/LUIL/PDNA

t: (807) 343-8010 Ext 8853

e: fappoh@lakeheadu.ca

Karen Maa, Administrative Assistant

t: (807) 343-8010 Ext 8590

e: karen.maa@lakeheadu.ca

lakeheadu.ca/centre/lucas

The following facilities are members of LUCAS:

Aquatic Toxicology Research Centre (ATRC):

The ATRC is an aquatic facility that can support a wide range of research into the evaluation and abatement of toxic effects from industrial wastes released into the environment. The ATRC also offers a full range of toxicity testing services to both industry and government, designed to meet current regulatory requirements. These services currently include acute testing with rainbow trout and daphnia. The ATRC is accredited to ISO17025 by the Canadian Association for Laboratory Accreditation (CALA) (see www.cala.ca directory for a list of tests).

Dr. Michael Rennie, Academic Director

t: (807) 343-8010 Ext 7860

e: mrennie@lakeheadu.ca

Tyson Bouchard, Toxicologist

t: (807) 343-8010 Ext. 8179

e: tbouchar@lakeheadu.ca

Biotechnology Laboratory for Enzymes and Bioproducts (BLEB):

BLEB focuses on applied biotechnological analytical services in bioproduct analysis, biodegradation studies, enzyme assays, microbial characterization, and molecular biology studies like gene cloning and protein expression.

Dr. Wensheng Qin, Director

t: (807) 343-8010 Ext. 8467

e: biotechnologylab@gmail.com

lakeheadu.ca/centre/lucas/laboratories/bleb

The Cancer Imaging & Therapeutics Laboratory (CITL):

The Cancer Imaging and Therapeutics Laboratory (CITL) offers comprehensive services to support multidisciplinary research aimed at discovering novel molecules for potential use in cancer imaging and therapy. These services include AI-assisted drug design, drug screening, organic synthesis, radiolabeling, and biological evaluation using protein-based and cell-based assays.

Dr. Jinqiang Hou, Director

t: (807) 343-8010 Ext. 8297

e: jhou3@lakeheadu.ca

Lakehead University Agricultural Research Station (LUARS):

LUARS, a facility with 36 acres well laid out plot ranges, at 5790 Little Norway Road off Hwy 61, has decades of experience and unique expertise in on-station and on-farm research, especially in the areas of crop, soil and nutrient management. LUARS welcomes collaborative research opportunities with other researchers, students and postdoctoral fellows, industry (seed, fertilizer, pesticide, procurement and processing), other universities, and farmers' and government organizations. In addition to researchers, students and postdoctoral fellows, our clients could include industry (seed, fertilizer, pesticide, procurement and processing), other universities, and farmers' and government organizations.

LUARS has strengths in small plot research in the following fields:

- Screening of high yielding, better quality and disease resistant varieties.
- Evaluation of new fertilizers/blends of fertilizers, bioproducts, soil amendments and agro-chemicals including root inoculants, growth hormones and pesticides.
- Identifying potential new/and alternate crops and cropping systems for higher and sustained agricultural production suitable for NWO; leading to development of small-scale industries. (e.g., a stone grinding flour mill and a canola crushing plant for edible oil.)
- Developing new agronomic practices for improving productivity.
- Medium to long term testing for increasing soil and crop productivity and cutting down costs.

Dr. Tarlok Singh Sahota, Director

t: (807) 475-8404

t: (807)-707-1987

e: tssahota@lakeheadu.ca

Lakehead University Environmental Laboratory (LUEL):

LUEL offers multi-parameters testing of soils, sediments, biological tissues, vegetation, waters, and specific chemicals. The laboratory focuses on developing analytical methods to fit specific requirements. The laboratory provides hands-on training of undergraduate and graduate students. LUEL is also accredited to ISO17025 by the CALA for total suspended solids in water.

Tyson Bouchard, Manager

t: (807) 343-8010 Ext 8179

e: tbouchar@lakeheadu.ca

Dr. Nathan Basiliko, Academic Director

t: 807-343-8010 ext. 8570

e: nbasilik@lakeheadu.ca

lakeheadu.ca/centre/lucas/services

The Fire Testing and Research Laboratory (LUFTRL):

This world-class research facility accommodates a large custom-designed fire testing furnace that is utilized to investigate the fire behaviour of various building structural components and assemblies (e.g., beams, columns, connections, etc.) while subjected to elevated temperatures of standard or realistic fire scenarios that can reach up to 1300 °C. The state-of-the-art research facility offers unique fire testing services to evaluate the fire resistance of building components and assemblies made of various construction materials (e.g., wood, concrete, steel, etc.). In addition, LUFTRL can provide consultancy services to research collaborators, industry partners, and clients in structural fire engineering by conducting required fire endurance tests and developing computer models.

Dr. Sam Salem, Founder and Director

t: (807) 343-8010 Ext 8011

e: sam.salem@lakeheadu.ca

Lakehead University Geospatial Data Centre (LUGDC):

Provides mapping, advanced spatial analysis and 3D imaging services to Northwestern Ontario and beyond.

Dr. Robert Stewart, Director

t: 807-343-8010 ext. 8430

e: rob.stewart@lakeheadu.ca

Lakehead University Instrumentation Laboratory (LUIL):

The Lakehead University Instrumentation Laboratory is a multi-purpose, centralized facility which serves researchers and students from three faculties, providing access to spectrometers, electron and laser microscopes, and analyzers needed for modern research and training of Canada's future scientists. The laboratory manages some of the university's most advanced research equipment, much of which is unique to the region. The LUIL provides extensive, hands-on training programs in the use of SEM/EDS, TEM, CONFOCAL Microscopes, NMR, FTIR, ICP-AES/MS, XPS and XRD Spectrometers to students before they begin their research projects. The facility is supported and used by regional resource and health care industries as well as government agencies for multi-party projects in the fields of mineral exploration, process control, material science, and bio-remediation.

Dr. Francis Appoh, Director, Analytical Testing Services

LUCAS/LUIL/PDNA

t: (807) 343-8010 Ext 8294

t: (807) 343-8010 Ext 8853

e: fappoh@lakeheadu.ca

Lakehead University Molecular Archaeochemistry and Residue Services (LUMARS):

LUMARS research and services include analyses of biological remains that have proved challenging to recover biomolecules through conventional methods. LUMARS services involve designing and developing methods to retrieve macromolecules of interest from degraded remains. This has applications in numerous fields - principally archaeology, forensic, and medical science.

Dr. Tamara Varney, Director

t: (807) 343-8010 Ext 8204

e: tamara.varney@lakeheadu.ca

lucas.lakeheadu.ca/lugen

Lakehead University Materials Characterization Services (LUMCS):

LUMCS provides chemistry and materials science consulting, plus a full range of chemical analysis and computation services.

Dr. Stephen Kinrade, Co-Director

t: (807) 343-8010 Ext.8683

e: stephen.kinrade@lakeheadu.ca

Dr. Robert Mawhinney, Co-Director

t: (807) 343-8010 Ext.8245

e: rcm@lakeheadu.ca

Lakehead University Mineralogical and Experimental Laboratory (LUMINX):

LUMINX serves as a bridge between the minerals industry and university researchers by providing advanced mineralogical and geochemical services that are not routinely available from commercial firms:

- Quantitative or qualitative phase and chemical composition analysis of solids.
- Mineralogical/petrographic assessment of geological samples.
- Fluid inclusion microthermometry.
- Characterization of gold- and platinum group-bearing phases, sulphides, and diamond indicator minerals.
- Analysis of high-tech and industrial minerals, and mineral synthesis.

- Compositional analysis of natural and synthetic glasses.
- Solubility testing of natural and synthetic materials.

Dr. Andrew Conly, Co-Director

t: (807) 343-8010 Ext 8463

e: andrew.conly@lakeheadu.ca

Dr. Shannon Zurevinski, Co-Director

t: (807)-343-8010 Ext.8015

e: shay@lakeheadu.ca

Lakehead University Wood Science Testing Facility (LUWSTF):

The LUWSTL offers state-of-the-art testing for the mechanical and physical properties of wood and wood products. We have three universal wood testing machines with all tools for mechanical tests for solid wood and engineered products as well as an impact testing machine. The lab can also do small scale hot press runs for composite research as well as large ovens for physical property research projects. The lab's Bomb Calorimeter conducts thermal testing for several industries. We have equipment to conduct pellet testing or thermal, ash, durability, fines, bulk density etc. We have a Taber tester for flooring product wear studies. Wood identification is also conducted in the labs for various clients. The labs have fiber analysis equipment for measuring fiber length and width as well as vessel dimensions for hardwoods. We also have a conditioning chamber to prepare all samples, and the labs can operate following ASTM or CSA or any standards required. The LUWSTL has a portable wood processing technologies program to aid communities in becoming involved in the value-added forest sector and to promote small scale manufacturing of value-added products. To this end, the LUWSTL has a Wood Mizer LT40HD Portable Bandsaw mill and also a portable twin edger and a solar powered drying kiln. We conduct research and testing of engineered wood products in the Mass Timber area. In collaboration with other labs on campus, we are also working on bio-products utilizing biomass and wood waste. This includes bio-fuels, bio-energy and also bio-chemicals. We also have the capacity to do full Fuel Specifications for boilers system designing.

Dr. Mathew Leitch, Director

t: (807) 343-8010 Ext.8659

e: mathew.leitch@lakeheadu.ca

luwstf.lakeheadu.ca/LUWSTF.html

Lakehead University Paleo-DNA Laboratory (LUPDNA):

The PDNA Laboratory is one of the top ancient DNA research laboratories in the world. The laboratory is specifically designed to accommodate low-copy number, degraded, or ancient samples and vigorously control contamination. This laboratory provides academic support to faculty and students of Lakehead University as well as extension services to the public in the form of paternity testing, universal genetic identification, canine DNA testing, and ancient DNA analysis. The PDNA Laboratory was one of the first Canadian laboratories to develop mitochondrial DNA analysis techniques and DNA training courses emphasizing mitochondrial DNA analysis. The PDNA Laboratory, as part of its commitment, offers tours, presentations, and activities with the aim of improving the teaching and learning of science in the field of molecular biology.

Dr. Francis Appoh, Director, Analytical Testing Services

LUCAS/LUIL/PDNA

e: fappoh@lakeheadu.ca

t: (807) 343-8010 Ext 8294

t: (807) 343-8010 Ext 8853

Stephen Fratpietro, Technical Manager

t: (807) 343-8010 Ext.8892

e: swfratpi@lakeheadu.ca

lakeheadu.ca/centre/lucas/laboratories/paleo-dna



STUDENT SERVICES INFORMATION

At Lakehead, we are here for you. We understand that university life at times can become stressful, and overwhelming, and we commend you for taking on this incredible challenge. We are proud to offer several supports, programs, and opportunities to promote your overall health and well-being.

FACULTY OF GRADUATE STUDIES

The Faculty of Graduate Studies offices are located on the upper level in the new CASES building. Our staff are happy to assist prospective and current graduate students in many areas including: admissions, program requirements, regulations, campus information, potential financial support, thesis processing and much more. We want your experience at Lakehead to be positive and rewarding. Make us your first stop if you have any questions throughout your program.

graduatestudies.lakeheadu.ca

LAKEHEAD UNIVERSITY GRADUATE STUDENTS' ASSOCIATION (LUGSA)

The Lakehead University Graduate Students' Association (LUGSA) seeks to represent the interests and needs of graduate students at Lakehead University. The LUGSA aims to encourage and foster collaboration while facilitating networking, learning, and mentorship opportunities. All registered graduate students are members of the LUGSA.

ATHLETICS

Graduate students can elevate their campus experience with access to Lakehead's athletic facilities and a dynamic array of varsity sports, recreational activities, and wellness programs. Lakehead's Athletics Centre features three interconnected hubs, and is designed to meet every fitness and recreational need. The new Wolf Den welcomes you with a cutting-edge gymnasium, weight room, cardio room, and lounge areas. The C.J. Sanders Fieldhouse impresses with its Thunderdome gymnasium, functional fitness area, additional weight room, Modo Yoga hot yoga studio, 50 metre pool and Kinesiology labs, complete with change rooms, showers, and saunas. The Hangar adds its indoor turf field, additional cardio and weight areas and aerobics room. Outdoor soccer field, beach volleyball courts, and recreational trails provide many opportunities for outdoor recreation as well.

These expansive facilities are home to Lakehead's Campus Recreation leagues and thriving Thunderwolves varsity sport programs while providing top-tier facilities to ensure a vibrant, active, and healthy lifestyle for all students.

For more facility information, campus rec leagues and varsity schedules please visit our website.

thunderwolves.ca
lakeheadu.ca/orillia-athletics



INDIGENOUS STUDENT SERVICES CENTRE

The Indigenous Student Services Centre, provides a culturally-supportive environment to all Indigenous students in a variety of ways:

cultural workshops and teachings, seasonal feasts, sweat lodge ceremonies, annual Fall Harvest and Indigenous Cultural Traditions Club Powwow. We also offer academic support and mental health support. Gakina Nindinawemaaganag, the Indigenous Student Lounge in Thunder Bay that acts as a hub for student activities throughout the year.

lakeheadu.ca/indigenous



LIBRARY

As a graduate student, we know you balance your time between learning, researching and instructing. The Lakehead University Library provides you access to the resources, space and informational services you will need to excel as a student, researcher and instructor. The Graduate Reading Room is a quiet space dedicated to you, located on the 4th floor of the Chancellor Paterson Library.

library.lakeheadu.ca

LUSU

The Lakehead University Student Union (LUSU) represents all students studying at Lakehead University. We are over 8,000 strong, uniting undergraduate and graduate, full and part-time, and domestic and international students. Founded in 1981, LUSU has been a part of student life for over thirty years. We are a democratic institution run by students who are elected by students.

lusu.ca

NANABIJOU CHILD CARE CENTRE

Inspired by two Lakehead University students and the continuous support of Lakehead University administration, Nanabijou Child Care Centre opened in January 1988. Over time, we have expanded our services; however, it has always been our mission to provide inclusive, affordable, licensed quality child care. Nanabijou Child Care Centre is located on the Lakehead University Campus in Thunder Bay. We currently provide care for 108 children ranging from infancy to school age.

lakeheadu.ca/nanabijou

STUDENT ACCESSIBILITY SERVICES

Student Accessibility Services (SAS) coordinates services and facilitates the provision of reasonable academic accommodations for students with documented disabilities/medical conditions. SAS staff collaborate with students, staff and faculty in developing strategies for a successful learning experience while maintaining the academic standards and integrity of Lakehead University. To learn more about our services please visit:

lakeheadu.ca/sas

STUDENT CENTRAL

At Student Central you will be able to access everything you need - from technical issues with course registration to help with your OSAP application, Student Central is the place to go. Our dedicated, cross-trained Student Central Professionals are able to solve issues from start to finish with improved consistency of service and answers.

lakeheadu.ca/studentcentral

STUDENT HEALTH AND WELLNESS

Our Student Health and Wellness Centres are environments that facilitate physical, emotional, intellectual and spiritual health. In accordance with our vision, these Centres offer medical care, mental health counselling, and clinical referrals to support students' personal, academic, and professional success.

lakeheadu.ca/shw

STUDENT SUCCESS CENTRE

The Student Success Centre has many programs and support services in place to help you achieve your academic and personal goals while studying at Lakehead University. We provide academic support through career exploration, co-operative opportunities and leadership development.

lakeheadu.ca/ssc



FACULTY OF BUSINESS ADMINISTRATION (BUSINESS, MANAGEMENT, COMMERCE)

Accredited by the Association to Advance Collegiate Schools of Business (AACSB) and Chartered Professional Accountants (CPA) and recognized by the Chartered Financial Analyst (CFA) Institute University Affiliation and the Human Resources Professional Association (HRPA).

MASTER OF BUSINESS ADMINISTRATION (MBA)

The Master of Business Administration (MBA) program at Lakehead University is designed for students with undergraduate degrees in any discipline to prepare for success in a wide range of management careers. Students develop technical skills and practical knowledge about managing in organizations.

The program achieves these goals through stimulating lectures, energetic class discussions, analysis of relevant cases, and projects with industry partners.

Full-Time Option:

Finish the MBA program in 12 months (3 terms, general option) or 16 months (4 terms, with specialization)

lakeheadu.ca/masters-mba

Part-Time Option:

Working professionals can opt to take the program part-time, which can be done either in person, or online (remote).

lakeheadu.ca/mbaonline

GRADUATE DIPLOMA IN ACCOUNTING (GDA)

Lakehead University's Graduate Diploma in Accounting (GDA) is a one semester professional accounting program, which prepares students to pursue the Chartered Professional Accountant (CPA) designation. The program is designed for graduates from Lakehead University who have completed the accounting major courses from the H.B.Commerce Program, which includes the prerequisite courses for the CPA Professional Education Program (PEP).

lakeheadu.ca/diploma-accounting

MASTER OF SCIENCE IN MANAGEMENT (MScMgt)

The Master of Science in Management program is designed for students with degrees in Business or a related field. The program develops analytical and research skills along with an understanding of managerial applications. Students accepted for a project may participate in the CIER Analytics Lab Fellowship Program, where they will receive guidance and mentoring on their projects from their supervisors and industry partners, including training as they complete their project into a final report.

The program is comprised of interactive seminars, enriching courses and a final project or thesis that allows students to perform research in their chosen areas of interest, including:

- ▶ Accounting
- ▶ Business analytics and information systems
- ▶ Entrepreneurship and innovation
- ▶ Finance
- ▶ Human resources and organizational behaviour
- ▶ Marketing
- ▶ Strategic management
- ▶ Operations management

The program can be completed within 12 months of full-time study. A two-year flexible option is available for working professionals.

lakeheadu.ca/masters-business-management

GRADUATE DIPLOMA IN MANAGEMENT (GDM)

The Graduate Diploma in Management (GDM) is a flexible way for professionals to develop critical skills and business knowledge for their next step in their professional careers.

Not all learners are able to commit to a graduate degree program. The GDM allows students to gain a customized management credential that can be used to address their individual learning needs.

This is a course-based program that is offered in-person or online* with optional term intake.

*online course selection is limited



CFA Institute



CPA
CHARTERED
PROFESSIONAL
ACCOUNTANTS
CANADA

FACULTY OF EDUCATION

Lakehead University's Faculty of Education provides you with the knowledge, skills, and opportunities to be a leader in educational research, theory, and practice. Our Master of Education and Joint PhD in Educational Studies programs allow you to study topics that are important to you, while challenging you to improve your teaching skills. We help you to address the latest educational theories and support you in the acquisition of skills and knowledge to positively affect learners. We offer full-time and flex-time programs at the Master's level at both Orillia and Thunder Bay campuses, or completely online.

MASTER OF EDUCATION (MEd) — EDUCATIONAL STUDIES

Our Educational Studies program provides a unique learning experience, which addresses the current landscape of both education and research.

Specializations in Women's Studies and Gerontology are available.

lakeheadu.ca/masters-education

lakeheadu.ca/masters-specialization-gerontology

lakeheadu.ca/masters-specialization-womens-studies

MASTER OF EDUCATION (MEd) — EDUCATION FOR CHANGE

Education for Change provides an innovative learning experience that allows you to complete your Master of Education with one of the following specializations:

Environmental and Sustainability Education (ESE)

ESE focuses on theory, research, and practices that analyze the cultural and ecological politics of sustainability and fosters mutually flourishing relationships between humanity and the natural world. It includes approaches such as climate change pedagogy, ecopedagogy, environmental justice education, food education, humane education, outdoor education, and place-based education.

North American Indigenous Education (IE)

IE is grounded in Indigenous historical, philosophical, sociocultural, and political foundations and Indigenous research, protocols, and practices that focus on educational aspects of the politics of colonization and decolonization, honouring Indigenous knowledges and relationships to Land, exploring Indigenous approaches to well-being, and revitalizing traditional worldviews and languages.

Social Justice Education (SJE)

SJE focuses on theory, research, and practices that analyse and address social forces both in and out of schools that perpetuate injustice and oppression, and includes approaches with diverse emphases such as anti-racist education, anti-classist education, fat pedagogy, feminist pedagogy, humane education, Indigenous education, inclusive education, and queer pedagogy.

It is also possible to include a Gender and Women's Studies specialization with any of the above program choices. Please note, the Gender and Women's Studies specialization is not available as an online option.

lakeheadu.ca/masters-education

lakeheadu.ca/masters-specialization-womens-studies

Should you be interested in a Portfolio, Thesis, or PhD program, areas of faculty research include, but are not limited to:

- ▶ Cutting-edge math
- ▶ Climate change education
- ▶ Large-scale testing
- ▶ Holistic education
- ▶ Digital literacies
- ▶ Early language development
- ▶ Moral education
- ▶ Indigenous education
- ▶ Special education
- ▶ Science as inquiry
- ▶ Fat studies
- ▶ Poetic inquiry
- ▶ Men's violence against women



JOINT DOCTOR OF PHILOSOPHY IN EDUCATIONAL STUDIES (PhD)

The Joint PhD in Educational Studies is offered by Lakehead University, Brock University and the University of Windsor. There are three fields of study: Cognition and Learning, Educational Leadership and Policy Studies, and Social/Cultural/Political Contexts of Education.

The Joint PhD in Educational Studies Program promotes scholarly inquiry and the production of new knowledge within the context of a research culture.

Application Deadline: October 1st

lakeheadu.ca/doctoral-educational-studies

**INNOVATIVE
HANDS-ON APPROACH**

FACULTY OF ENGINEERING

Graduate programs in Engineering provide pathways for students to continue their education while working closely with faculty members on fundamental and translational research that crosses traditional boundaries. We are committed to providing educational opportunities to a diverse population as we train students for wide-ranging careers in engineering and to become leaders focused on developing technology to improve the human condition. Please note: applicants wishing to pursue a thesis-based program are strongly encouraged to find a supervisor before applying to their program of interest.

MASTER OF SCIENCE IN CHEMICAL ENGINEERING (MSc)

The Master of Science in Chemical Engineering program at Lakehead University satisfies the demand for highly qualified personnel who are prepared to address global challenges within the field of Chemical Engineering. Students in the MSc program have the opportunity to work collaboratively with world-class researchers, research facilities, and research institutes. Graduate students will benefit from participating in industrially driven projects, and close supervisor-student interactions.

Both thesis and course-based options are offered. The thesis stream aims to foster the development of students' independent research abilities, and is ideal for students seeking to pursue doctoral studies, as well as students interested in research and development careers within the industry.

Areas of faculty research include, but are not limited to:

- ▶ Cement chemistry
- ▶ Membrane bioreactors
- ▶ Wastewater treatment
- ▶ Biorefinery
- ▶ Biodiesel, renewable chemicals
- ▶ Air pollution control
- ▶ Fluid mechanics
- ▶ Removal of inorganic gases from air by adsorption
- ▶ Polymerization and polymer applications
- ▶ Fundamental and application of colloid and interface science
- ▶ Surface science and engineering
- ▶ Drug delivery processes

lakeheadu.ca/masters-chemical-engineering

MASTER OF SCIENCE IN CIVIL ENGINEERING (MSc)

The MSc in Civil Engineering satisfies the demand for highly-qualified personnel in the field of Civil Engineering. This demand is fueled by the requirements to maintain an aging infrastructure and to preserve and develop natural resources with minimal environmental impact to natural systems. Sustainability and structural durability and the impact of climate change on civil engineering works have become increasingly important challenges in the field of civil engineering.

Both thesis and course-based options are offered. The thesis option fosters and develops the independent research abilities of students. This option is ideal for students seeking to continue on to doctoral studies as well as students interested in research and development careers within the industry. Whereas, the course-based option allows students broad exposure to advanced topics within the field. Optionally, students in the course-based program may apply for cooperative education/internship experience.

Areas of faculty research include, but are not limited to:

- ▶ Construction engineering
- ▶ Environmental engineering
- ▶ Fire Safety engineering
- ▶ Geotechnical and geo-environmental engineering
- ▶ Rock engineering
- ▶ Structural and bridge engineering
- ▶ Transportation engineering
- ▶ Water resources engineering
- ▶ Wind engineering

lakeheadu.ca/masters-civil-engineering
lakeheadu.ca/graduate-program-civil-engineering

MASTER OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING (MSc)

The MSc in Electrical and Computer Engineering at Lakehead University provides students with the opportunity to develop specialized knowledge, through a combination of coursework and research. The program offers two routes to the degree.

The thesis option fosters and develops the independent research abilities of students. This option is ideal for students seeking to continue on to doctoral studies as well as students interested in research and development careers within the industry.

The course-based option allows students broad exposure to advanced topics within the field. Optionally, students in the course-based MSc may apply for cooperative education/internship experience.

Areas of faculty research include, but are not limited to:

- ▶ Control engineering
- ▶ Circuits and systems
- ▶ Electron devices and semiconductors
- ▶ VLSI
- ▶ Power systems
- ▶ Software engineering
- ▶ Computer engineering
- ▶ Communications and networking

lakeheadu.ca/masters-elco-engineering
lakeheadu.ca/graduate-program-elco-engineering

MASTER OF SCIENCE IN ENVIRONMENTAL ENGINEERING (MSc)

This unique Master of Science in Environmental Engineering program provides a dynamic curriculum to train graduates in engineering and related natural sciences in delivering effective solutions to environmental challenges faced by industries and communities. Both thesis and course-based options are offered.

Our extensive research capabilities are supported by outstanding laboratory facilities, including a centralized instrumentation laboratory. Our faculty members and graduate students conduct cutting-edge research in both fundamental studies and applied science and engineering to address global environmental issues, such as climate change, water crisis, and energy crisis.

Areas of faculty research include, but are not limited to:

- ▶ Biorefinery and Bioenergy Production
- ▶ Geoenvironmental Engineering
- ▶ Green Cements
- ▶ Greenhouse Gases Reduction
- ▶ Water Resources Engineering
- ▶ Water and Wastewater Purification
- ▶ Utilization of Industrial Wastes and Byproducts

lakeheadu.ca/masters-enve-engineering
lakeheadu.ca/graduate-program-enve-engineering

MASTER OF SCIENCE IN MECHANICAL ENGINEERING (MSc)

Lakehead University's Master of Science in Mechanical Engineering program aims to foster students' independent research abilities through a combination of course work and systematic research. This program provides a dynamic and unique curriculum to train graduates to tackle mechanical engineering challenges faced by industries and communities effectively and efficiently. Graduate students in the MSc Mechanical Engineering program will benefit from small class sizes, friendly work environment, and close supervisor-student interactions.

Areas of faculty research include, but are not limited to:

- ▶ Mechatronics
- ▶ Vibration and control
- ▶ Machinery health condition monitoring
- ▶ System state prognostics
- ▶ Design and manufacturing
- ▶ Fluid and thermal dynamics
- ▶ Alternative energy and powertrain

lakeheadu.ca/masters-mechanical-engineering
lakeheadu.ca/graduate-program-mechanical-engineering

DOCTOR OF PHILOSOPHY IN ENGINEERING (PhD)

• Chemical Engineering

The objective of the program is to provide students with a strong basis for careers in chemical engineering, both in academia and in industry. This will be achieved through a combination of course work and independent research study in which the students will be encouraged to think independently, collaborate with other researchers and provide solutions to practical problems and developments in industry in an innovative manner. Areas of Faculty research include:

- ▶ Chemical engineering
- ▶ Biochemical engineering
- ▶ Sustainable materials
- ▶ Green processes
- ▶ Water and wastewater purification
- ▶ Multiphase systems
- ▶ Computational fluid dynamics and thermodynamics
- ▶ Mixing
- ▶ Drug delivery processes

• Civil Engineering

The PhD in Civil Engineering program is designed for highly qualified personnel interested in a rewarding career in fundamental or applied research. The Doctor of Philosophy program involves advanced courses and an intensive research program culminating in a thesis.

The development of applied research skills will also prepare PhD graduates for a career either in or outside of academia in new and traditional fields of Civil Engineering including but not limited to:

- ▶ Structural
- ▶ Fire safety
- ▶ Geotechnical
- ▶ Water resources
- ▶ Construction
- ▶ Environmental and transportation engineering

• Electrical & Computer Engineering

Our PhD program is designed to train independent researchers. Our students are called upon to perform highly specialized and original research that makes a distinct contribution of knowledge to:

- ▶ Circuits
- ▶ Energy systems
- ▶ Semiconductors
- ▶ Communications
- ▶ Computer architecture
- ▶ Quantum computing
- ▶ Natural language processing
- ▶ Semantic web
- ▶ Artificial intelligence

• Mechanical Engineering

This program satisfies the demand in academia and industry for highly qualified personnel in the field of Mechanical and Mechatronics Engineering. The major focus areas of our program are:

- ▶ Mechatronics
- ▶ Vibration and control
- ▶ Diagnostics
- ▶ Prognostics
- ▶ Alternative energy
- ▶ Energy harvesting
- ▶ Engines
- ▶ Dynamics
- ▶ Design and manufacturing

lakeheadu.ca/doctoral-programs
lakeheadu.ca/graduate-programs-engineering

FACULTY OF HEALTH & BEHAVIOURAL SCIENCES

The Faculty of Health and Behavioural Sciences brings together three schools and two departments who are united by a shared commitment to understanding and enhancing health, behaviour, and well-being across individuals, communities, and environments. Through innovative teaching and research, we address complex challenges with particular attention to northern, rural, remote, and Indigenous contexts.

HEALTH SCIENCES

The Department of Health Sciences offers a Master's and PhD program in Health Sciences, and a Master of Public Health program.

Areas of Faculty research include, but are not limited to:

- ▶ Dementia, aging, and health
- ▶ Determinants of safe and unsafe driving
- ▶ Ecosystem and place-based approaches to health
- ▶ Food systems and health
- ▶ Geographic information systems (GIS)
- ▶ Health and social service utilization of marginalized populations
- ▶ Indigenous, northern, and rural health
- ▶ Mental health
- ▶ Prevalence and management of chronic diseases and multi-morbidity
- ▶ Social justice and determinants of health
- ▶ Sustainability and health
- ▶ Work disability prevention and occupational health epidemiology

MASTER OF HEALTH SCIENCES (MHSc)

The on-campus Master of Health Sciences (MHSc) program provides students with an understanding of the complexities of health sciences through a focus on individuals, communities, and organizations. Students emerge with advanced methodological and health-related education to enhance their ability to contribute to the advancement of health.

Several specializations are offered in the MHSc program, including:

- ▶ Epidemiology
- ▶ Indigenous and northern health
- ▶ Gerontology
- ▶ Social-ecological systems, sustainability and health

<https://www.lakeheadu.ca/programs/graduate/programs/masters/health-sciences/node/7242>

MASTER OF PUBLIC HEALTH (MPH)

The Master of Public Health program provides students with an understanding of current issues in the science and/or service of public health, and is primarily intended to prepare graduates for a career in public health practice. This program is delivered to full-time students on-campus or at a distance or on a flexible full-time basis (distance option only). The MPH program also includes a 400-hour practicum component.

Several specializations are offered in the MPH program:

- ▶ Epidemiology
- ▶ Indigenous and northern health
- ▶ Social-ecological systems, sustainability and health
- ▶ Gerontology
- ▶ Nursing

<https://www.lakeheadu.ca/programs/graduate/programs/masters/public-health/node/7256>

DOCTOR OF PHILOSOPHY — HEALTH SCIENCES (PhD)

The PhD in Health Sciences is an on-campus, research-intensive program emphasizing the development of research skills with a particular focus on populations who historically have higher rates of poorer health (such as seniors and Indigenous populations). Applied health research is an integral part of the PhD in Health Sciences program. As such, it includes a hands-on experience through an innovative Research Internship that provides students with the opportunity to apply program content in a real-world, applied health research setting.

lakeheadu.ca/doctorsal-health-science
lakeheadu.ca/phd-health-sciences

KINESIOLOGY

The School of Kinesiology offers 3 graduate-level programs: A thesis-based MSc in Kinesiology, a course-based MSc in Kinesiology, and a Graduate Diploma in Professional Kinesiology.

All of our programs can lead to similar and multiple career pathways. Deciding which program is best for you may depend on your interests, career goals, study preferences, geographic location, and employment situation.

GRADUATE DIPLOMA IN PROFESSIONAL KINESIOLOGY (GDIP)

The Graduate Diploma in Professional Kinesiology is a distance-friendly, 12-month program, which is specifically designed to provide advanced academic opportunities for professional training and clinical skills upgrading for current and future practitioners of Kinesiology. Through the Graduate Diploma, individuals will be given advanced training in the specific areas of Professional Kinesiology that will enable them to work within the scope of practice for a Registered Kinesiologist as established by the College of Kinesiologists of Ontario.

In addition to the 4 online and 4 in-person practical courses, the program includes a 200-hour placement that may occur within the province, the country, or internationally.

lakeheadu.ca/diploma-kinesiology



MASTER OF SCIENCE IN KINESIOLOGY (MSc) – THESIS-BASED (24 MONTHS)

The thesis-based MSc in Kinesiology is a research-intensive program where students collaborate with faculty mentors to design and conduct original thesis projects, advancing academic and practical knowledge. Over two years, tailored coursework (two core and two elective) strengthens research skills and subject expertise. By engaging in cutting-edge research, graduates develop critical thinking and scholarly communication abilities, preparing them for careers in healthcare, sports performance, industry, or doctoral studies. Graduates emerge as confident researchers equipped to address real-world challenges in kinesiology, backed by a robust foundation in research best-practices.

Specialty Areas:

- ▶ Adapted Physical Activity
- ▶ Applied Ergonomics
- ▶ Biomechanics
- ▶ Exercise Physiology
- ▶ Gerontology
- ▶ Health Promotion
- ▶ Motor Control and Learning
- ▶ Psychology of Physical Activity
- ▶ Sports Medicine and Rehabilitation

lakeheadu.ca/masters-kinesiology

lakeheadu.ca/masters-specialization-gerontology

MASTER OF SCIENCE IN KINESIOLOGY (MSc) – COURSE-BASED (16 MONTHS)

The course-based MSc in Kinesiology is a program for those that want to build clinical skills, gain professional training, and develop understanding of clinical-based research commonly used in health care settings. A more applied, evidence-based pathway that will add value to your credentials both academically and experientially.

The combination of online and on-campus courses gives students the option to live in Thunder Bay or to live in an alternate location and attend the Thunder Bay campus to complete the practical courses. This distance-friendly MSc degree offers students the opportunity to study from home and still engage with professors and peers. The format of course delivery may also allow students to maintain employment while completing their studies.

Six full course equivalents (FCEs) are required to fulfill the requirements for graduation. The program has a set curriculum that includes both online and in-person practical courses.

lakeheadu.ca/masters-kinesiology

**ONE-OF-A-KIND
PROGRAMS**

NURSING

MASTER OF NURSING (MN) – ADVANCED NURSING SPECIALIZATION OR MASTER OF NURSING (MN) – NURSE PRACTITIONER SPECIALIZATION

The Master of Nursing (MN) program is a coursework master's degree program, which includes a clinical practice component. The Master of Nursing (MN) program prepares BScN educated Registered Nurses to enhance skills and synthesize in-depth knowledge and theory to meet the needs of diverse populations, families, and communities.

There are two streams in the program: one stream for students interested in tailoring courses to areas of advanced practice nursing, and the other for students interested in completing the Nurse Practitioner (NP) specialization that leads to licensure as a Registered Nurse (Extended Class) Nurse Practitioner.

The MN program with Advanced Nursing Specialization is delivered synchronously through Zoom technology; students can complete the program remotely. Upon successful completion of the MN courses, students complete an Advanced Nursing Practicum, which can be arranged with the School of Nursing Professional Practice Lead.

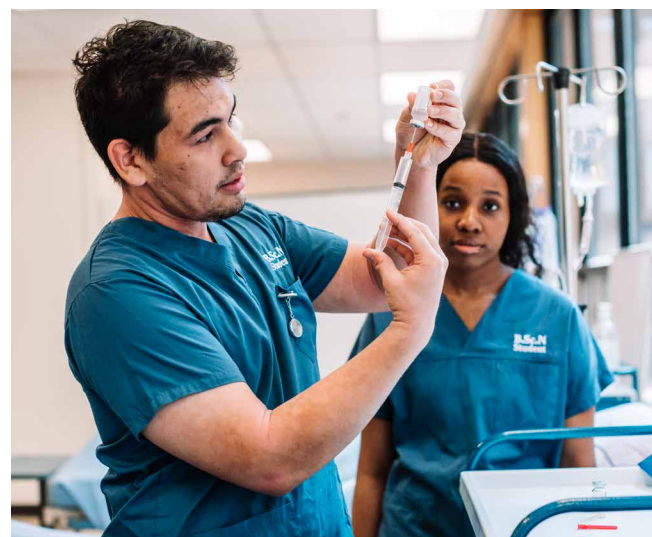
The MN program - Nurse Practitioner Specialization uses a blended delivery model of face-to-face instruction and distance education. There are some face-to-face, on-campus requirements associated with clinical courses. Attendance at the scheduled on-campus seminars is mandatory. The clinical placements are required to be completed in Lakehead University's geographic boundary.

lakeheadu.ca/programs/departments/nursing/programs/graduate-programs

GRADUATE SPECIALIZATION IN GERONTOLOGY

The Department of Health Sciences offers a Master's level Specialization in Gerontology that provides students with the multidisciplinary knowledge and skills necessary to understand individual and societal influences on aging, and their relevance to function, health, and well-being. The specialization is available to students who have been admitted into master's degree programs in Education, Health Sciences, Kinesiology, Psychology, Social Work, or Sociology. Upon completion of the program, the degree awarded specifies the discipline of the participating academic unit and notes the Specialization in Gerontology.

<https://www.lakeheadu.ca/programs/graduate/programs/masters-specialization/gerontology/node/7263>



PSYCHOLOGY

Applications for Clinical Psychology programs are due **December 15th**

The Department of Psychology offers Master's and PhD programs in Clinical Psychology and in Psychological Science.

Areas of faculty research areas include, but are not limited to:

- ▶ Indigenous mental health and addiction
- ▶ Cognitive-behavioural considerations in eating disorders, self-regulatory processes in eating behaviour, body image, and stress
- ▶ Cognitive processes, problem solving, and memory
- ▶ Mood and anxiety disorders, problem gambling, chronic pain, evolutionary psychology
- ▶ Vision, attention, multisensory integration, face perception and biorhythmicity
- ▶ Cultural clinical psychology, gender and depression, suicide and nonsuicidal self-harm, resilience, student mental health
- ▶ Social cognition, systems thinking, and the self; application of social and personality theory
- ▶ Mental health and addiction services, systems, and policy; outcomes research; health behaviour
- ▶ Behavioural endocrinology, women's health, clinical neuropsychology
- ▶ Psychological strengths and positive youth development
- ▶ Mental illness stigma, clinical, ethical, and professional issues
- ▶ Application of social & personality theories into applied setting
- ▶ Health behaviours, mental health & substance use; personality, social & contextual contributors
- ▶ Positive psychology, interpersonal relationships, sexuality, well-being

MASTER OF ARTS IN CLINICAL PSYCHOLOGY (MA)

The goal of the MA Clinical Psychology program is to prepare students for doctoral-level training in clinical psychology. The clinical programs focus on the scientific understanding of the behaviour of individuals, groups and social systems, and the application of this understanding to enhance the functioning and well-being of individuals, groups, and societies. The program of study includes foundational and professional courses, thesis work, and practicum training.

lakeheadu.ca/masters-psychology-clinical

lakeheadu.ca/masters-specialization-gerontology

lakeheadu.ca/masters-specialization-womens-studies



MASTER OF SCIENCE IN PSYCHOLOGICAL SCIENCE (MSc)

The Master of Science in Psychological Science is a research-intensive program that addresses all areas of psychology including biological, cognitive, and individual and social bases of behaviour. The Psychological Science curriculum is based on an apprenticeship model, which includes flexible core courses that are appropriate to a student's area of research.

lakeheadu.ca/masters-psychological-science

lakeheadu.ca/masters-specialization-gerontology

lakeheadu.ca/masters-specialization-womens-studies

DOCTOR OF PHILOSOPHY - CLINICAL PSYCHOLOGY (PhD)

The PhD Clinical Psychology program trains students at a doctoral level in clinical and research skills, and allows graduates to pursue a career in professional practice. The clinical programs provide generalist training that allows career flexibility in urban or rural practice settings, and in academic institutions. The program of study includes coursework and practical training in core content areas, historical and scientific foundations of psychology, foundations of professional practice, and specific professional skills. The PhD program is accredited by the Canadian Psychology Association and graduates can pursue professional licensure/registration.

lakeheadu.ca/doctorsal-psychology-clinical

DOCTOR OF PHILOSOPHY – PSYCHOLOGICAL SCIENCE (PhD)

The PhD program in Psychological Science is a research-intensive program that advances the student's Master's level knowledge and skills in psychology research through an apprenticeship model appropriate to the student's area of focus.

lakeheadu.ca/doctorsal-psychological-science

SOCIAL WORK

MASTER OF SOCIAL WORK (MSW)

Lakehead University offers a Master of Social Work (MSW) degree, which emphasizes an advanced generalist practice approach to working with individuals, families, communities, organizations, and political systems based on an ecological view of social work practice. The curriculum focuses on the knowledge, values, and skills necessary for professional practice in environments characterized by urban regional centres, rural and remote communities, large geographic distances, low population density, diverse Indigenous communities and people, and a mix of formal services. Please note: students will initially be accepted into the project track, then after consultation with their faculty supervisors, students who prefer the thesis track may request a change in program. The project track includes a 450-hour practicum component.

Applicants must be completing or hold an Honours Bachelor of Social Work degree to be considered for admission.

This program is offered at both the Thunder Bay and Orillia campuses.

lakeheadu.ca/masters-social-work

lakeheadu.ca/masters-specialization-gerontology

lakeheadu.ca/masters-specialization-womens-studies



FACULTY OF NATURAL RESOURCES MANAGEMENT

Modern Natural Resources Management is about people, science and technology, and applying natural and social sciences to the management of the environment for the benefit of society. Our professional programs offer a balanced view of sustainable ecosystem management with respect to the many social, economic and environmental challenges and opportunities facing us now and in the future. While our location in the midst of Canada's vast boreal forest is unbeatable, we also recognize the need to ensure you are aware of, and prepared for, stewardship on a global scale.

MASTER OF FOREST MANAGEMENT (MFMgt) - 16 MONTHS

The Course-based Master's degree (Master's in Forest Management) emphasizes professional development in forest management, policy, geomatics, and ecology. The degree entails 4 terms of coursework (16 months). Three terms are on campus and one term, comprised of an internship and field school, is off-campus.

lakeheadu.ca/masters-forestry

The MFMGT program has an international 24-month option called TRANSFOR-M where students can get two degrees: the MFMGT degree from Lakehead U and an MSc degree from a European university. The participating European universities are Bangor (Wales), BOKU (Vienna, Austria), SLU (Sweden), Padova (Italy) and UEF (Finland).

lakeheadu.ca/programs/departments/nrm/program-options/graduate-program-options/transform

MASTER OF SCIENCE IN FORESTRY (MScF) - 2 YEAR

The MScF thesis-based program is a research-oriented degree designed to give graduates a firm foundation in the process of scientific inquiry. Most research projects are undertaken in one or more of the biophysical forest sciences, but social science research may also be undertaken. Research projects are designed jointly by the student and the supervisory committee comprising the student's Faculty Supervisor.

lakeheadu.ca/masters-forestry

DOCTOR OF PHILOSOPHY IN NATURAL RESOURCES MANAGEMENT (PhD)

The PhD in Forest Sciences is a research-based program focused on the development of researchers in the field of forest sciences, including, but not limited to the following subject areas:

- ▶ Management planning
- ▶ Integrated forest resources management
- ▶ Fish and wildlife
- ▶ Regulation and scheduling
- ▶ Policy and legislation
- ▶ Soils / hydrology
- ▶ Pathology
- ▶ Entomology
- ▶ Fire management and ecology
- ▶ Dendrology
- ▶ Ecology/silvics
- ▶ Genetics / tree improvement
- ▶ Remote sensing
- ▶ Photogrammetry
- ▶ Geographic information system
- ▶ International forestry
- ▶ Wood technology/utilization
- ▶ Harvesting/mechanization/roads
- ▶ Economics
- ▶ Business principles
- ▶ Operations research
- ▶ Mensuration
- ▶ Statistics/experimental design/research methods
- ▶ Restoration ecology
- ▶ Watershed management
- ▶ Invasive species control

lakeheadu.ca/doctoral-forest-sciences

FACULTY OF SCIENCE & ENVIRONMENTAL STUDIES

The broad disciplinary expertise in the Department of Biology is enhanced by collaborations with local organizations (e.g., Northern Ontario School of Medicine, Ontario Ministry of Natural Resources and Forestry, Wildlife Conservation Society of Canada) and several departmental facilities (Claude-Garton Herbarium, Biology Aquatic Facility, etc.) that support our faculty to explore a wide range of research topics. Our graduate students conduct field research from the Caribbean to the Canadian Arctic, aboard Great Lakes research vessels and at state-of-the-art outdoor facilities including the Habitron and the IISD Experimental Lakes Area.

MASTER OF SCIENCE IN ARCHAEOLOGICAL SCIENCES (MSc)

This 2-year thesis based MSc in Archaeological Sciences focuses upon the application of science and technology to studying humans and their biological origins, histories and cultures.

Areas of faculty research include, but are not limited to:

- ▶ Paleoanthropology
- ▶ Biological anthropology
- ▶ Human osteology
- ▶ Zooarchaeology
- ▶ Morphometrics
- ▶ Forensics
- ▶ Stable isotopes, trace elements
- ▶ Paleoenvironmental analysis
- ▶ Archaeobotany (micro and macro botanical analysis)
- ▶ Pleistocene geomorphology
- ▶ Geoarchaeology
- ▶ Field Archaeology
- ▶ Cultural Heritage Management
- ▶ Material Culture studies
- ▶ Residue and use-wear
- ▶ Micro-botanical residues
- ▶ Microscopy, hair and fibre analysis
- ▶ Near-surface geophysics and site prospection
- ▶ 3D modelling and printing
- ▶ UAV mapping, photogrammetry
- ▶ Remote Sensing, Spatial Analysis

lakeheadu.ca/masters-archaeological-science
lakeheadu.ca/graduate-program-archaeological-science

MASTER OF SCIENCE IN BIOLOGY (MSc)

The Department of Biology maintains modern laboratories and animal care facilities, unique field sites, and access to a wide spectrum of analytical services.

Areas of faculty research include, but are not limited to:

- ▶ Aquatic Ecology and Fisheries Biology
- ▶ Biomedical Science
- ▶ Biorefining and Bioenergy
- ▶ Conservation Biology
- ▶ Environmental Microbiology and Microbial Ecology
- ▶ Evolutionary Ecology
- ▶ Herpetology
- ▶ Immunology and Microbiology
- ▶ Ornithology
- ▶ Parasitology
- ▶ Physiology and Cell Biology
- ▶ Plant and Animal Ecology, Community Ecology, Genomics, and Limnology.
- ▶ Plant Physiology and Biochemistry

lakeheadu.ca/masters-biology
lakeheadu.ca/biology-research

MASTER OF SCIENCE IN CHEMISTRY (MSc)

Our Department of Chemistry offers a graduate program that provides students with diverse opportunities across the sub-disciplines of analytical, biochemical, inorganic, organic, and physical chemistry.

Areas of faculty research include, but are not limited to:

- ▶ Electrochemistry and surface analysis
- ▶ Material science
- ▶ Molecular design
- ▶ Pulp and paper research
- ▶ Organometallic chemistry and catalysis
- ▶ Organic synthesis
- ▶ Aqueous silicon chemistry
- ▶ Photochemistry
- ▶ Environmental and medicinal chemistry
- ▶ Food Chemistry
- ▶ Radiochemistry
- ▶ Medical Imaging
- ▶ Colloid and Interface Science
- ▶ Separation Science and Technology

lakeheadu.ca/masters-chemistry

MASTER OF SCIENCE IN COMPUTER SCIENCE (MSc)

The MSc in Computer Science provides an opportunity to explore the breadth and depth of advanced knowledge in the discipline. Faculty, staff, and students are equipped with state-of-the-art computing facilities including smart lecture rooms, labs, and a variety of computing technologies (e.g. virtual reality, parallel computing). Students benefit from a selection of advanced courses and a chance to pursue research that aligns with their interests and aspirations.

A co-op option is available after completion of two terms (four half graduate courses). Suitability for the co-op option will be based on academic performance in the program.

lakeheadu.ca/masters-comp-sci

SPECIALIZATION IN ARTIFICIAL INTELLIGENCE (AI) OPTION

Students will develop the skills and knowledge to conduct research in the field of Computer Science with a focus on core AI techniques. Upon completion, students will be able to apply and select appropriate AI algorithms and techniques in a variety of industrial sectors and further advance the AI-related research. Topics will include deep learning, natural language processing, machine learning, image processing, pattern recognition, and other emerging technologies. Finally, students will develop research and application-based ethical awareness. In 2020, five of our MSc students have been awarded the 2020-21 Vector Institute Scholarships in Artificial Intelligence to conduct research using AI techniques.

lakeheadu.ca/masters-comp-sci

This specialization is only available for the thesis-based Computer Science program.

MASTER OF ARTS IN ECONOMICS (MA)

The Economics program offers training in core economic theory subjects while emphasizing several applied fields such as index number analysis, industrial organization, economics of national defence, public economics, international trade, economic development, natural resource economics, and econometrics. Our graduates are well-prepared for employment in government agencies and the private sector, as well as for further academic studies in reputed doctoral programs in North America.

lakeheadu.ca/masters-economics



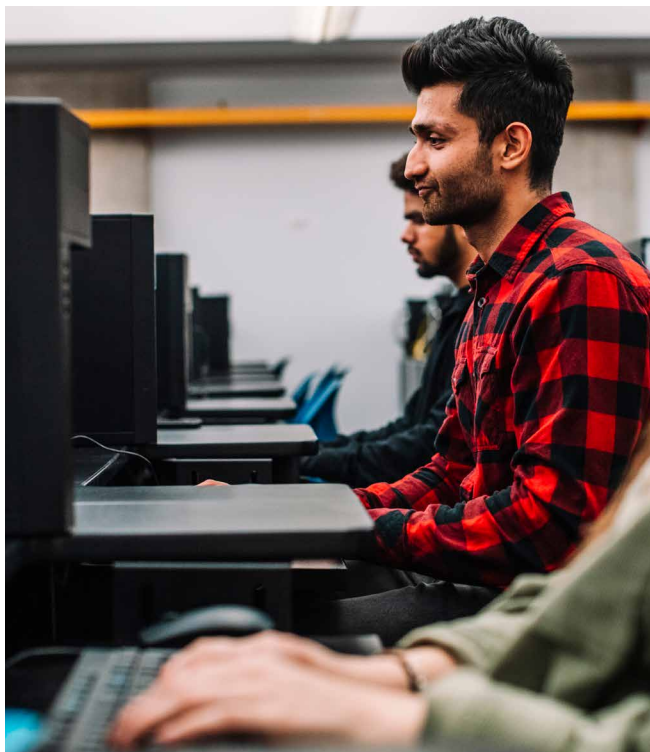
MASTER OF ENVIRONMENTAL STUDIES (MES)

The thesis-based 2 year MES focuses on field training and interdisciplinary study, focusing on challenges in the relationships between humans and the natural environment.

Areas of faculty research include, but are not limited to:

- ▶ Sustainable communities
- ▶ Indigenous land use and occupancy
- ▶ Social impacts of natural resource extraction
- ▶ Environmental justice
- ▶ Nature-based tourism
- ▶ Treaty and Aboriginal rights
- ▶ Urban and rural food security
- ▶ Culture and identity
- ▶ Economic development
- ▶ Protected areas
- ▶ Conservation
- ▶ Traditional subsistence
- ▶ Paleo-ecology
- ▶ Climate change
- ▶ Biological and aquatic remediation
- ▶ GIS, remote sensing

lakeheadu.ca/masters-mes





MASTER OF SCIENCE IN GEOLOGY (MSc)

The Master of Science in Geology has a strong focus on various aspects of Precambrian geology with a secondary focus on soil science, terrestrial biogeochemistry and environmental geology.

Areas of faculty research include, but are not limited to:

- ▶ Mineralogy and petrology
- ▶ Geochemistry
- ▶ Structural Geology
- ▶ Mapping and tectonics
- ▶ Sedimentology and Basin analysis
- ▶ Economic geology
- ▶ Terrestrial biogeochemistry and soil science

lakeheadu.ca/masters-geology

MASTER OF SCIENCE IN MATHEMATICAL SCIENCES (MSc)

Graduate students in the Mathematical Sciences program will work on research in the area of expertise of one or more of our faculty members.

Areas of faculty research include, but are not limited to:

- ▶ Algebra
- ▶ Graph theory
- ▶ Functional analysis
- ▶ Harmonic analysis
- ▶ Numerical analysis
- ▶ Operator algebras
- ▶ Optimization
- ▶ Operations research
- ▶ Partial differential equations
- ▶ Probability and statistics

lakeheadu.ca/masters-mathematics

MASTER OF SCIENCE IN PHYSICS (MSc)*

MSc Physics students benefit from close working relationships with their advisors, and these relationships help to facilitate students' research in Condensed Matter & Optical Physics:

- ▶ Semiconductor
- ▶ Surface science
- ▶ Soft-condensed matter
- ▶ Fibre optics

Also, our collaboration with the medical physics staff at the Regional Cancer Centre in Thunder Bay provides a number of applicable research opportunities with medical physics professionals. As well as the regular core courses, students are provided with special topics courses. This combination of general and thesis-specific courses prepares students for further graduate work and provides a solid background in their area of specialization.

*Students enrolled in the MSc Physics program may take the co-operative option subject to the approval of the Department.

lakeheadu.ca/masters-physics

DOCTOR OF PHILOSOPHY IN BIOTECHNOLOGY (PhD)

The PhD in Biotechnology is a research-based, interdisciplinary program with two areas of specialization:

Environmental Biotechnology

- ▶ Biorefining
- ▶ Community ecology of altered environments and aquatic toxicity
- ▶ Microbial engineering
- ▶ Fisheries management and ecology
- ▶ Pollutant degrading microorganisms
- ▶ Pulp and paper biofilm analysis
- ▶ Renewable bioenergy
- ▶ Wastewater treatment
- ▶ Pathogenic microorganisms/ Infectious disease
- ▶ Movement ecology
- ▶ Multiphase flow and sediment transport

Medical Biotechnology

- ▶ Bioinformatics /Genomics/ Protein folding
- ▶ Biosurveillance/Computer modelling
- ▶ Cancer biology - targeted therapies and synthetic vaccines
- ▶ Cardiac and skeletal muscle dysfunction
- ▶ Medical imaging / Optical fibre lasers
- ▶ Medicinal plants/natural compounds as anti-cancer and antioxidant agents

lakeheadu.ca/doctorsal-biotechnology

DOCTOR OF PHILOSOPHY IN CHEMISTRY AND MATERIALS SCIENCE (PhD)

The PhD in Chemistry and Materials Science is an interdisciplinary research-intensive graduate program focused on the intellectual development and advanced training of scientists in two fields of specialization: physical chemistry - the study of physical principles which govern the behaviour and properties of chemical systems; and molecular and materials science - the synthesis and characterization of novel compounds and materials.

Areas of faculty research include, but are not limited to:

- ▶ Molecular design
- ▶ Pulp and paper research
- ▶ Organometallic chemistry and catalysis
- ▶ Organic synthesis
- ▶ Aqueous silicon chemistry
- ▶ Photochemistry
- ▶ Environmental chemistry
- ▶ Radiochemistry
- ▶ Medicinal Chemistry
- ▶ Medical Imaging
- ▶ Colloid and Interface Science
- ▶ Separation science and technology
- ▶ Surface analysis
- ▶ Nanoscale Science and Technology
- ▶ On-surface Synthesis and Nanoscale Characterization
- ▶ Molecular Nanoscience at Surfaces and Interfaces
- ▶ Surface and Interface Science
- ▶ Food chemistry

lakeheadu.ca/doctorsal-chemistry-material-science



FACULTY OF SOCIAL SCIENCES & HUMANITIES

Our graduates are entrepreneurial, creative and highly adaptable to new and ever-changing workplace environments, possessing essential skills and knowledge sought after by employers, particularly in the area of critical thinking and advanced communication and research. Your Lakehead University education will prepare you for a wide range of career choices.

MASTER OF ARTS IN ENGLISH AND CULTURAL STUDIES (MA)

Scholarship in English and Cultural Studies seeks to explain the complex ways in which words and images produce meaning. Bridging the critical and the creative, our MA program encourages innovative approaches to reading, writing, and degree-planning. Our internationally recognized faculty work in a diverse range of research areas from the Medieval period to the current day.

We offer a number of different program options: the traditional coursework option that provides students with coverage of many fields and the experience of working with a greater number of professors; a combined coursework and thesis option for those students who want the experience of writing an in-depth study on their topic of choice; a coursework and research-project option that allows students to pursue a shorter study on their topic of choice. We also offer a coursework plus creative-project option, which allows students to write a creative work, while still engaging in critical analysis of the genre and form in which they are writing.

In addition, we offer the unique option of pursuing an MA in English with either a Specialization in Gender and Women's Studies or a Specialization in Social Justice Studies.

lakeheadu.ca/masters-english

lakeheadu.ca/masters-specialization-womens-studies

lakeheadu.ca/masters-social-justice

MASTER OF ARTS IN HISTORY (MA)

Historians seek to bring the past to life with the understanding that what we know of the past is not static but constantly evolving. Our Master's program offers the option of a Major Research Project/Paper, Course-Work, or Thesis Program. It provides excellent preparation for further graduate studies at the Ph.D. level.

The specializations of members of the Department of History are geographically and thematically broad with a focus on the 19th and 20th centuries.

Areas of faculty research include, but are not limited to:

- ▶ Canada with an emphasis on political and labour history
- ▶ Modern South Asia with an emphasis on people and the environment
- ▶ Latin America with an emphasis on immigration and racism
- ▶ Western Europe with an emphasis on the Holocaust and human rights
- ▶ Eastern Europe with an emphasis on political and social movements
- ▶ Canada with an emphasis on the military and external relations

For more information about the Department of History and the research and teaching interests of faculty members, along with a list of completed theses, papers, and where our grads are now, please visit:

lakeheadu.ca/masters-history

lakeheadu.ca/graduate-program-history

lakeheadu.ca/academics/departments/history/our-alumni

MASTER OF ARTS IN SOCIAL JUSTICE STUDIES (MA)

Have you ever wondered “What can I do to make a difference? How can I combine my academic interests with activism?” The Social Justice Studies (SJS) program at Lakehead university is designed to help you answer those questions. Our program empowers students with the practical skills and theoretical knowledge necessary to challenge the informal and formal configurations of power and oppression within local, national, and global contexts.

The program offers four streams that students can pursue during the two-year degree: coursework, research project, creative project, or practicum. Connecting scholarly inquiry and community-based learning provides students with practical experience and an opportunity to develop necessary critical skills through an intersectional approach to social justice.

The flexibility of the program allows students to take courses with and be supervised by dynamic faculty from across the Social Sciences and Humanities. Our faculty come from a broad range of disciplinary specialties (including, but not limited to, Indigenous Learning, Gender and Women’s Studies, Music, Visual Arts, and English), and our program is open to students from a wide range of undergraduate disciplines. Students who have completed the program go on to pursue doctoral studies, attend law school, work in the non-profit or education sectors, or use the program for other forms of personal and professional development.

For a list of available specializations, refer to the back cover of this publication.

lakeheadu.ca/masters-social-justice

MASTER OF ARTS IN SOCIOLOGY (MA)

We offer expertise in a number of theoretical and substantive research areas in Sociology, and offer training in both qualitative and quantitative research methods. Our faculty have been very successful in garnering publications and research grants, and enjoy global reputations for their scholarly contributions. Our main research streams include: Health, Food and the Life Course; Media, Culture and Technology; and Social Justice and Northern communities. We also offer specializations with the programs of Gerontology, Gender & Women’s Studies and Social Justice Studies. Our students have obtained funding support through internal and external scholarships, as well as research and graduate assistantships. Through our professional training, they have also presented at academic conferences, published in peer-reviewed journals, and moved on to PhD programs and professional careers.

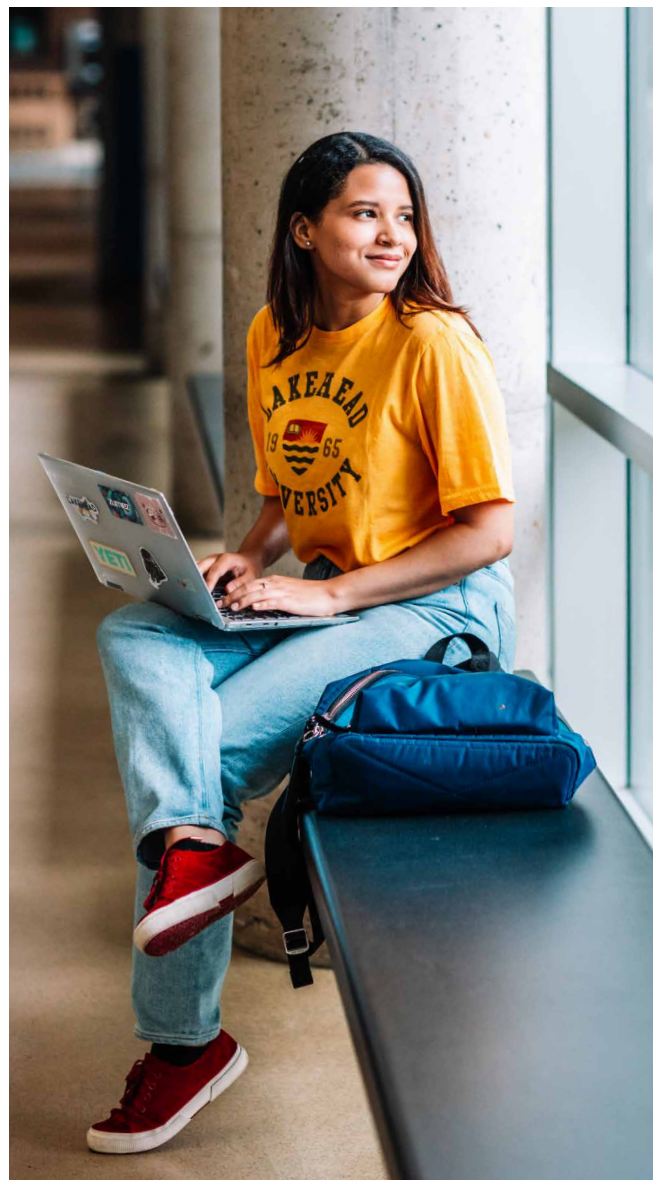
Please note: the course-based option is a 16 month program.

lakeheadu.ca/masters-sociology

lakeheadu.ca/masters-specialization-gerontology

lakeheadu.ca/masters-specialization-womens-studies

lakeheadu.ca/masters-social-justice



INTERDISCIPLINARY SPECIALIZATION IN GENDER AND WOMEN’S STUDIES

Your interdisciplinary work will critically assess the relevance of existing models of knowledge in reflecting experience and scholarship on women, gender, and sexuality. The program allows you to develop and integrate feminist teaching, learning, and research in the university and the community. Our graduates hold careers in a broad range of fields, and use their training to engage in anti-oppressive, diversity-driven, gender-related work. Faculty research areas include law, law and literature, the body, anti-violence work, fan studies, cultural studies, women in leadership, reproduction and technology, and more.

lakeheadu.ca/masters-specialization-womens-studies

**EXCEPTIONAL.
UNCONVENTIONAL.**

PROGRAM OFFERINGS	Thesis	Course	Research Project/Portfolio	Start Terms			Location			
				Sept	Jan	May	TBay	Orillia	Barrie	
Faculty of Business Administration										
Master of Business Administration (MBA) (12 or 16 months) ★●		•		•			•			
Master of Science in Management (MScMgt) ▲	•		•	•			•			
Graduate Diploma in Accounting (GDA)* (1 term/3 months)		•		•			•			
Graduate Diploma in Management (GDM)		•		•			•			
BEng/MBA		•					•			
Faculty of Education										
Master of Education in Educational Studies (MEd)** ●▲	•	•	•	•	•	•	•	•		
Master of Education in Education for Change (MEd)										
Environmental and Sustainability Education** ●▲	•	•	•	•	•	•	•	•		
North American Indigenous Education** ●▲	•	•	•	•	•	•	•	•		
Social Justice Education** ●▲	•	•	•	•	•	•	•	•		
Joint Doctor of Philosophy in Educational Studies (PhD)	•					•(July)	•	•		
Faculty of Engineering										
Master of Science in Chemical Engineering (MSc)*** ◆	•	•		•	•	•	•			
Master of Science in Civil Engineering (MSc)*** ◆	•	•		•	•	•	•			
Master of Science in Electrical and Computer Engineering (MSc)*** ◆	•	•		•	•	•	•		• (Thesis Only)	
Master of Science in Environmental Engineering (MSc)*** ◆	•	•		•	•	•	•			
Master of Science in Mechanical Engineering (MSc)*** ◆	•	•		•	•	•	•			
Doctor of Philosophy in Engineering (PhD):										
Civil Engineering	•			•	•	•	•			
Chemical Engineering	•			•	•	•	•			
Electrical and Computer Engineering	•			•	•	•	•		•	
Mechanical Engineering	•			•	•	•	•			
Faculty of Health & Behavioural Sciences										
Master of Health Sciences (MHSc) ▲	•			•			•			
Master of Public Health (MPH) ◆●▲		•		•			•			
Doctor of Philosophy in Health Sciences (PhD) ▲	•			•			•			
Graduate Diploma in Professional Kinesiology (GDIP)		•		•			•			
Master of Science in Kinesiology (MSc) (● for course-based only)	•	•	•	•			•			
Master of Arts in Clinical Psychology (MA) ▲	•			•			•			
Master of Science in Psychological Science (MSc)	•			•			•			
Doctor of Philosophy in Psychology - Clinical Psychology (PhD) ▲	•			•			•			
Doctor of Philosophy in Psychology - Psychological Science (PhD)	•			•			•			
Master of Social Work (MSW) ▲	•		•	•			•	•		
Master of Nursing – Advanced Nursing Specialization (MN) ▲▲●		•		•			•			
Master of Nursing – Nurse Practitioner Specialization (MN) ▲▲		•		•			•			
Faculty of Natural Resources Management										
Master of Environmental Management				•	•	•	•			
Master of Natural Resource Management (16 months) ▲		•		•	•	•	•			
Master of Science in Forestry (MScF) (2yr)	•			•	•	•	•			
Doctor of Philosophy in Natural Resources Management (PhD)	•			•	•	•	•			
Faculty of Science & Environmental Studies										
Master of Science in Archaeological Sciences (MSc)	•			•			•			
Master of Science in Biology (MSc)	•			•	•					
Master of Science in Chemistry (MSc)	•			•	•					
Master of Science in Computer Science (MSc) (1yr)		•		•	•		•		•	
Master of Science in Computer Science (MSc) (2yr) ◆	•		•	•	•		•		•	
Master of Arts in Economics (MA) ◆		•		•			•			
Master of Environmental Studies (MES)	•			•			•			
Master of Science in Geology (MSc)	•			•	•	•	•			
Master of Science in Mathematical Sciences (MSc)	•	•		•			•			
Master of Science in Physics (MSc) ◆	•		•	•	•		•			
Doctor of Philosophy in Biotechnology (PhD)	•			•	•	•	•			
Doctor of Philosophy in Chemistry and Materials Science (PhD)	•			•	•	•	•			
Faculty of Social Sciences & Humanities										
Master of Arts - English and Cultural Studies (MA)	•	•	•	•			•	•		
Master of Arts - History (MA)	•	•	•	•			•			
Master of Arts - Social Justice Studies (MA) ◆		•	•	•			•	•		
Master of Arts in Sociology (MA)	•	•		•	•		•			



Lakehead
UNIVERSITY

- ▲ Flex-Time Option Available
- ★ Part-Time Option Available
- Online Option Available
- ◆ Co-op or Practicum Streams Available
- ▲ Fieldwork and/or Placement

**Please note, the Gender and Women's Studies specialization is not available as an online option.

***Co-op opportunities are available in course-based programs only.

The Senate of Lakehead University reserves the right to change regulations, program start terms, and course requirements, as outlined in this Viewbook, without prior notice.

Lakehead University also offers a variety of undergraduate and professional programs - for a detailed list please visit mylakehead.ca



STAY CONNECTED

-  @lakeheadgraduatestudies
-  @LakeheadFGS
-  @LakeheadGradStudies
-  mylakehead
-  /lakeheaduniversity

Your university years will define the
REST OF YOUR LIFE.

Don't let them be typical.



Lakehead
UNIVERSITY

EXCEPTIONAL. **UNCONVENTIONAL.**

Tour Campus



Faculty of Graduate Studies | (807) 343-8010 Ext. 8785 | gstudent@lakeheadu.ca

mylakehead.ca | [mylakehead](https://www.instagram.com/mylakehead)