

Graduate Studies in Engineering

Jinghua Nie

**Faculty of Engineering & Applied Science
Memorial University**

2019



MEMORIAL
UNIVERSITY Newfoundland and Labrador, Canada



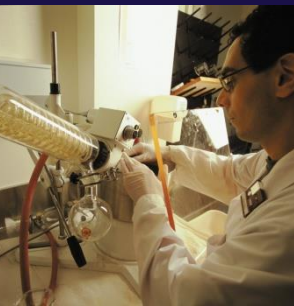
become

PRESIDENT'S REPORT 2006



Programs

- Arts
- Business
- Education
- **Engineering**
- Fine Arts
- Human Kinetics
- Maritime Studies
- Medicine
- Music
- Nursing
- Pharmacy
- Science
- Social Work
- Technology



Our reputation



2019 Maclean's University Rankings



- Ranked 8th in top comprehensive university category for 2020

Award winning researchers and faculty

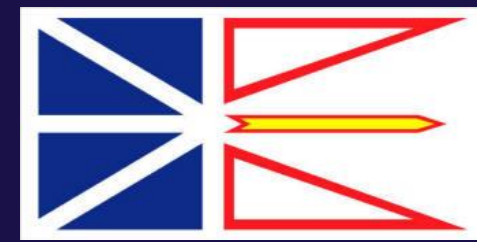
- 20 Canada Research Chairs (CRC)
- 29 Fellows of the Royal Society of Canada
- 16 Fellows of the Canadian Academy of Engineering
- 11 Fellows of the Canadian Academy of Health Sciences



Location Newfoundland and Labrador

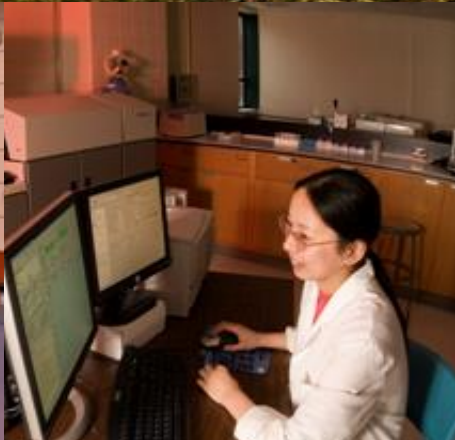


Newfoundland and Labrador, Canada



- Most easterly point of North America
- Britain's first overseas colony (one of the oldest cities in North America)
- Newfoundland time zone (9 hours behind India)
- Titanic sinks off Newfoundland
- 5 hours' direct flight to UK

Memorial University: St. John's



Scenic Beauty



Traditional Industries

Fishing

Forestry



New Industries



Oil & Gas

**Nickel
Culture**

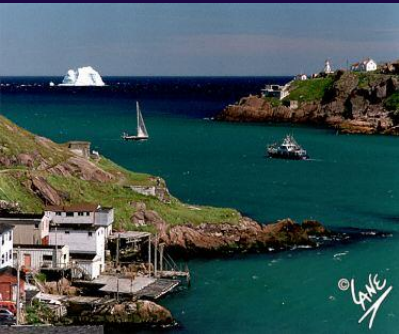


**Iron Ore
Tourism**

Knowledge

City of St. John's

- rich history and culture
- “small town” quality of life
- one of the safest cities in the world
 - music and cultural festivals, wildlife tours, sports clubs, recreation facilities
 - vibrant high tech industry



Bowring Park

© City of St. John's



Population



- **18,000 students**
- **3,800 graduate students**
- **1,000 faculty members**
- **100 countries represented**



Faculty of Engineering and Applied Science

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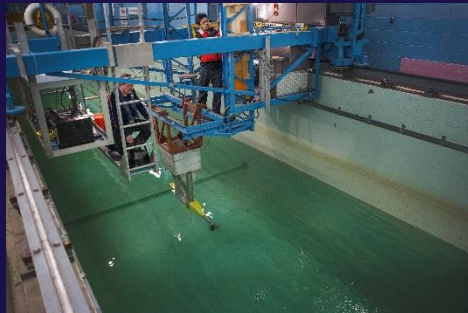
State-of-the-art facilities



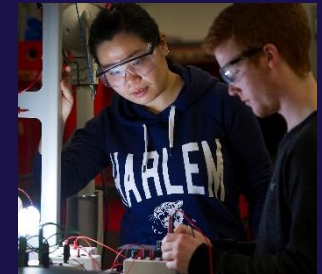
- Electrical Eng.
- Computer Eng.
- Mechanical Eng.
- Civil Eng.
- Oceans and Naval Architectural Eng.
- Process Eng.
- Oil and Gas Eng.



Multiphase Flow Lab



Ocean Engineering Research Centre



Information and communications technology

Structures Laboratory



Simulation



Thermal Laboratory



Mechatronics Laboratory

Graduate Studies

- M.Eng & PhD
 - Thesis based
- MASC
 - Course based



Master of Engineering and PhD Programs (Research-based)

- Computer Engineering
- Electrical Engineering
- Civil Engineering
- Mechanical Engineering
- Oil & Gas Engineering
- Process Engineering
- Ocean and Naval Architecture



Master of Applied Science Programs (Course-based)

- **Computer Engineering**
- **Environmental Systems Engineering & Management**
- **Oil & Gas Engineering**
- **Safety and Risk Engineering**
- **Energy Systems Engineering**



Special Features



- The programs are designed in response to the high demand for expertise in computer engineering, oil and gas engineering, environmental engineering, safety and risk, and energy sector in the labor market
- Most courses are the same as those taken by all graduate students
- Challenging, high quality programs leading to master's degree from Memorial University
- Optional internship for 4 or 8 months
- **12 to 24 months to complete**
- **2 in-program scholarships based on academic merit**

Master of Applied Science (M.A.Sc.) in Computer Engineering



Master of Applied Science in Environmental Systems Engineering & Management



Master of Applied Science (M.A.Sc.) in Oil & Gas Engineering



Master of Applied Science (M.A.Sc.) in Safety and Risk Engineering

This program will address serious issues faced by the industry, such as sustainable, reliable and safe resource development while minimizing risk and prepare students for professions such as safety engineers and risk analyst.

- Course-based master's program
- 12-24 months to complete
- In-Program Scholarships (\$1,500 to 2,000) are awarded to top students that have completed at least 5 graduate courses after 3 semesters in the program



Master of Applied Science (M.A.Sc.) in Energy Systems Engineering

This program will provide professional training at the graduate level demanded by the energy industry so that students will contribute to the research and innovation in the industry to achieve energy production and utilization that is financially viable, readily available and environmentally benign.

- Course-based master's program
- 12-24 months to complete
- In-Program Scholarships (\$1,500 to 2,000) are awarded to top students that have completed at least 5 graduate courses after 3 semesters in the program



Admission Requirements

- 4-year Bachelor Degree in relevant disciplines
- CGPA 2.75/4 (Canadian equivalency)
- English competency



English Competency



- Internet-based TOEFL score of 80 or higher
- IELTS with an overall band score of 6.5 or higher
- Pearson Test of English Academic (PTE Academic) with minimum scores of 58 in each of reading, writing, listening, and speaking.
- Conditional Admission with intensive English as Second Language (ESL) Training

Costs

	MASc (Comp Eng)	MASc (ESEM, OGE, SFRE, ESEN)
Program Cost	\$29,948	\$25,948
Estimated Living Expenses for 1.5 yrs	\$15,000	\$15,000
Total (Canadian)	\$44,948	\$40,948
Intake	Fall	Fall

- Fees are subject to change.
- Details is available at http://www.mun.ca/become/graduate/fees_funding/



Where do graduates go?

- Upon graduation, international students can obtain a work permit and can work in Canada for up to 3 years**
- Some opt for research programs (doctoral or master's), some prefer to work in Canada and some return to home country
- Some graduates pursue PhD at Memorial or other universities in Canada, China or other countries
- Some graduates work in Toronto, Calgary, Ottawa, St. John's or Australia
- Some graduates who stayed in Canada have received Permanent Residence status. Graduates who return to China work in Lenovo, HuaWei, Microsoft and other top firms



3+1+1 Program

Timeline	
Year 1, 2 and 3	Study at home university
Year 4	Study at Memorial University Receive a bachelor's degree from home university
Year 5 – 6	Pursue a Master of Applied Science Degree at Memorial



3+1+1 Program

Year 4

- Two semesters: Sep to Dec and Jan to Apr
- 2-3 courses per semester
- Courses are pre-approved by home university for credit transfer
- Supervised by Memorial prof for final project

Cost estimate	
5 Courses @ \$1,146/course	\$5,730
8 month living cost @\$850/month	\$6,800
8 month ancillary fees	\$1,257
Total estimate	\$13,787
RMB @ 5.17	71,214 RMB



3+1+1 Program

Year 5-6 Pursue a M.A.Sc degree at Memorial

Programs:

- Environmental Systems Engineering and Management
- Safety and Risk Engineering
- Oil and Gas Engineering
- Computer Engineering
- Energy Systems Engineering

Features:

- 12 – 24 months
- 8-10 courses plus a capstone project
- In-program Scholarships
- Tuition cost is about \$25,900 CAD



3+1+1

Admission Requirements

录取要求

➤ CGPA 2.75/4

本科总绩点2.75/4

➤ TOEFL 79

- at least 20 in Reading and Writing

- at least 17 in Listening and Speaking

托福最低**79**分

- 阅读和写作不低于20分

- 听力和口语不低于17分

➤ IELTS 6.5

- at least band 6 in Writing and Reading

雅思最低6.5分

-阅读和写作不低于**6**分



A Great Place to Be!

Apply Today!

www.mun.ca/become/graduate/apply

MEMORIAL
UNIVERSITY

