

DISCOVER YOUR STORY IN SCIENCE 2+2

UNIVERSITY OF
WATERLOO



YOU+ WATERLOO

uwaterloo.ca/science-2-plus-2

At the
University of
Waterloo –
in the heart
of Canada's
technology
triangle.

I invite you to join our community of world-class scientists at the University of Waterloo. International collaborations, which include more than 30 university 2+2 partnerships in China alone, have helped us earn the reputation of being Canada's most innovative university.

Let's explore your story in Science 2+2 at Waterloo.

BOB LEMIEUX, DEAN OF SCIENCE

The Science 2+2 program is an ideal way for you to combine your strengths in science with your interest in experiencing Canadian culture first-hand. Your first two years in China gives you a firm foundation in your studies to succeed in your last two years at the University of Waterloo. Our 2+2 graduates consistently demonstrate superb academic performance, valued contributions in cutting-edge research projects, and a competitive edge in the international job market. I encourage you to find out more about this program and hope to see you on our campus in the near future.

**#1 MOST INNOVATIVE
UNIVERSITY IN CANADA**
(2022 Maclean's University Rankings)



“What’s happening here in Waterloo is truly special – a dedication to the kind of deep, fundamental science that will benefit generations to come.”

STEPHEN HAWKING

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MORE TO EXPLORE

Meet us online for more tips and stories:

 [WaterlooSci](#)

 [UWScience](#)

 [WaterlooScience](#)

THE CITY

**500+ TECH
STARTUPS**

working on solutions in fintech, autotech, robotics, automation, artificial intelligence, and more (*Waterloo Region Economic Development Corporation, 2021*)

610,000+ people call the Region of Waterloo home

CITY OF DREAMERS

A PLACE TO ROAM AND FEEL AT HOME

If you love the energy of a big urban centre – transportation, culture, and nightlife – with the charm and familiarity of a small town, you'll find your happy place in the city of Waterloo.

FOR AN INSIDER'S LOOK AT WATERLOO CHECK OUT:

#KWAwsome

Uptown Waterloo restaurants, shops, cafés, music, and clubs are a quick walk or bus ride from campus.





BALANCE WORK WITH PLAY

Need a break from the books? Warriors refuel with fun! Attend any of Waterloo's 1,200+ festivals and events, enjoy the international culinary scene, or explore natural areas where you can camp, hike, fish, or even river tube. Plus, Canada's entertainment capital, Toronto, is just a bus or train ride away.

GO YOUR OWN WAY

Use your student card to ride local buses and light rail transit for easy access to adventure in all three of Waterloo Region's cities – Waterloo, Kitchener, and Cambridge. You can also get around by bikeshare, carshare, shuttle service, and more. Need to see family, visit friends, or catch a flight at Toronto's Pearson International Airport? The Greater Toronto Area (GTA) and surrounding cities are about 115 km away by bus or train.

IMMERSE YOURSELF IN STARTUP CULTURE

Whether you want to be an entrepreneur or land an opportunity in a vibrant job market, living in one of the world's top tech hubs gives you a leg up. Everything you need to kickstart a venture or brush elbows with up-and-coming founders is within a few minutes of campus.

GET TO KNOW THE CITY

uwaterloo.ca/future/city



WHY WATERLOO

WHY SCIENCE 2+2 AT WATERLOO?

MORE FOR YOUR MONEY

2 years of study in Canada reduces international education expenses by approximately 50%

EARN 2 DEGREES

graduate with 2 Honours Bachelor's degrees from the University of Waterloo and your home university

DESIGNED FOR SUCCESS

2 years in your home university, plus 2 years at the University of Waterloo

GRADUATE WITH AN ADVANTAGE

studying abroad makes you more competitive in the international job market

EXPERIENCE A CANADIAN
university education



10 DIFFERENT PROGRAMS

10

outstanding international
STUDENT SUPPORT SERVICES



VOLUNTEER OPPORTUNITIES

get experience for your career



REAL WORLD EXPERIENCE

international work-study programs give you opportunities to work with researchers while getting paid



CONDUCT RESEARCH

projects with professors and researchers



INTERNATIONAL STUDENTS

can work in Canada for up to 3 years after graduation, gaining international work experience



Science brings in over
\$49M PER YEAR IN RESEARCH FUNDING



WATERLOO GRADS LAUNCH

many world-class companies such as BlackBerry and Google



SCIENCE, WITH AN EDGE

Our EDGE certificate program helps you boost your résumé potential and identify new career paths.

uwaterloo.ca/edge

SCIENCE PROGRAMS

EARTH SCIENCES

Learn about the world under your feet by exploring topics such as geology, geophysics, rocks and soil, and hydrogeology. From rocks and soil to water and the effects of climate change, dive into a fascinating science that shows how the earth is a constantly changing entity. Take advantage of a versatile curriculum where your courses, field trips, and lab studies will prepare you for a variety of prominent and exciting careers.

- › **Specializations:** Geology, Geophysics, Hydrogeology
- › **Possible Career Fields:** Energy and natural resources; Field research and laboratory analysis; Environmental Consulting; Geological exploration

ENVIRONMENTAL SCIENCES

Explore earth processes as they relate to living systems to better understand the impacts of human activities on environmental sustainability, biodiversity, and water quality. Enjoy examining the interactions between, and within, the biosphere, atmosphere, hydrosphere, and lithosphere. Focus on field sampling and analysis to understand how our natural environment works, and the impacts of human activities.

- › **Specializations:** Ecology, Geoscience, Water Science
- › **Possible Career Fields:** Environmental consultation and assessment; Geoscience research; Field research; Water quality management

LIU XIAOMING, CLASS OF 2005
ASSOCIATE PROFESSOR, UNIVERSITY
OF NORTH CAROLINA AT CHAPEL HILL

The “2+2” experience at Waterloo helped me greatly in improving my communication skills in English, my understanding of North American culture, and my overall personal growth. It also provided me with a great platform and boosted my confidence in pursuing a career in academia. More importantly, it was a fun adventure and I would do it again in a heartbeat!

SCIENCE PROGRAMS

CHEMISTRY

Harness the power of chemistry by studying the composition, structure, and properties of matter. Gain more than 500 hours of valuable, hands-on experience synthesizing compounds and characterizing them using advanced chemical instrumentation. Upper-year students also have the opportunity to participate in a cutting-edge research project of their own, preparing students for careers in research and industry.

› **Optional Specializations:**
Computational Chemistry

› **Possible Career Fields:** Industrial research and development;
Bio-based materials; Polymer science, Cosmetics, Forensics

MATERIALS AND NANOSCIENCES

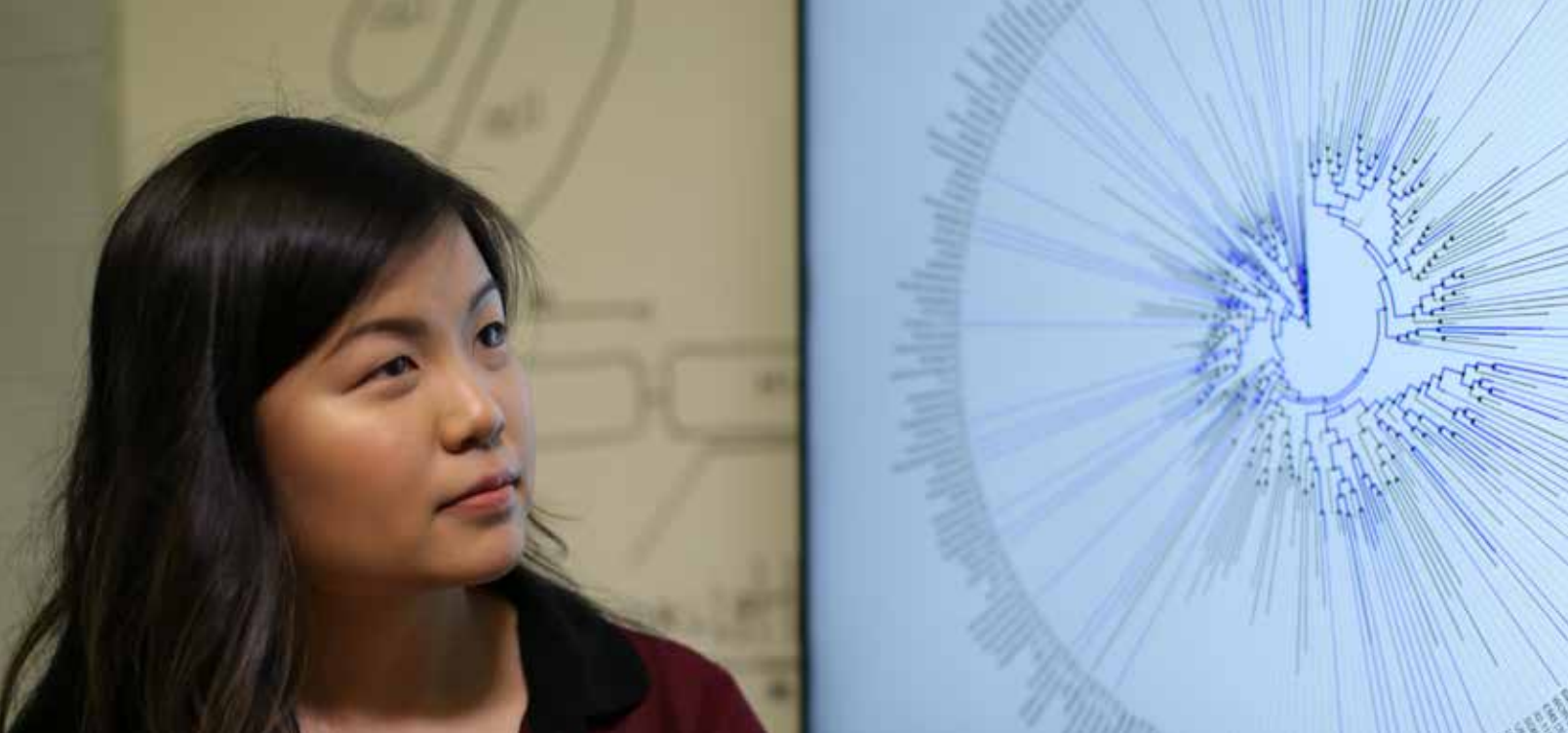
Dive into the world of nanoparticles and learn about the properties of various materials, such as superconductors, insulators, and biomaterials. Prepare for a variety of careers including nanotechnology, quantum materials, bionic research, and the energy sector while taking advantage of our affiliation with the Waterloo Institute for Nanotechnology.

› **Possible Career Fields:** Medicine and pharmaceuticals; Renewable energy; Cosmetics; Aerospace; Quantum computing

PHYSICS

Explore matter, energy, and forces at fundamental levels while building your knowledge and skills through experiential learning opportunities in laboratory experiments and upper-year research projects. Learn about a broad range of topics, including quantum mechanics, electromagnetism, optics, condensed matter, gravitation, and relativity. Take your studies further by exploring physics within our graduate programs.

› **Possible Career Fields:** Quantum computing; Physics research; Education; Financial analysis and forecasting; Optical software engineering



MATHEMATICAL PHYSICS

Apply your love of mathematics to understand how the natural world works. Solve physics problems by studying theories and laws in areas such as quantum physics, electromagnetism, mechanics, and cosmology. Graduates are prepared for master's programs or a wide range of careers in research and development – from quantum technologies to mathematically intensive theories applied to the laws of physics.

- › **Possible Career Fields:** Industry analysis and modelling; Software development; Theoretical physics research; Quantum computing; Cosmology

BIOCHEMISTRY

Biochemistry is a challenging interdisciplinary field that increases our understanding of living systems at the cellular and molecular levels. Explore topics such as chemistry, metabolism, genetics, and microbiology – providing you with robust skills that are essential in many career fields.

- › **Optional Specialization:** Biotechnology
- › **Possible Career Fields:** Medicine and Pharmaceuticals; Cosmetics; Molecular research and development; Biotechnology; Quality control

BIOLOGY

Explore all aspects of life and living creatures – from cells and genes to species and diversity. Biology at Waterloo is at the cutting edge of research and continues to expand its disciplinary range so that your course selection is highly diverse and stimulating. With a flexible course load, you can customize your degree to meet your personal goals.

- › **Possible Career Fields:** Medicine and health care; Microbiology and virology; Genetics and molecular research; Biotechnology; Veterinary science

BIOMEDICAL SCIENCES

Study human systems and their functions related to health, disease, and the healing process. Prepare for professional schools such as optometry, pharmacy, and medicine – or look to work in health care once you graduate. This major gives you the flexibility to pursue other courses outside of science, providing you with a well-rounded education that professional schools and employers value.

- › **Possible Career Fields:** Medicine and health care; Optometry; Pharmacy; Dentistry; Medical research

PSYCHOLOGY

Explore human behaviour and mental functions while connecting the physiological and biological processes that underlie neuroscience. Gain hands-on skills in labs and seek to understand the scientific foundations of psychology as you work toward your Honours Bachelor of Science degree.

- › **Possible Career Fields:** Psychiatry; Neuroscience; Education; Childhood development; Psychological research

HOW TO APPLY

APPLICANTS MUST:

- › Be currently enrolled in year two or three in a 2+2 program partner university with a major related to one of the following areas: biology, chemistry, earth sciences, environmental sciences, physics, or psychology.
- › Have an average of 70% or greater in major required courses.

APPLICATION PROCEDURE

- › Consult with your university and get information.
- › Take the University of Waterloo's English language exam and attend an interview.
- › Complete the online application for admission.
- › Mail application documents to the University of Waterloo.
- › Obtain an admission decision by email.

REQUIRED APPLICATION DOCUMENTS

- › A printed copy of your completed application submission summary form with your institution's nomination signature.
- › Your current official university transcript.
- › A certified copy of your official senior high school graduation diploma.
- › A certified copy of your official National University Entrance Exam (Gao Kao) result.
- › A copy of your CET4/TOEFL/IELTS scores, if you have taken any of these tests.

ENGLISH LANGUAGE EXAM AND INTERVIEW

Each fall (October to December), Waterloo's Faculty of Science will send a certified examiner to each partner university to assess the English proficiency of Science 2+2 applicants with a written test and personal interview. Admission decisions will be made based on both your English test score and academic standing.

uwaterloo.ca/science-2-plus-2/future-students/renison-english-test

TRANSFER CREDITS

The University of Waterloo will grant transfer credits for the first two years of course work to participating students who obtain marks that are at, or above, 60% in courses at the partner universities. Only courses that qualify as either core or elective in the relevant programs at Waterloo will be considered for transfer.

Maximum transfer credits allowed:



10 lecture units

plus any associated lab

20 courses



FINANCING YOUR EDUCATION

CHINESE UNIVERSITY PROGRAM AWARD

Each year, the Faculty of Science will offer a certain number of Chinese University Program Awards. You are automatically considered for one of these awards. No application is needed.

uwaterloo.ca/safa/undergraduate-awards/database

OTHER WAYS TO FINANCE YOUR EDUCATION

- › Find a part-time job. You can work on or off campus during your studies.
- › Work in Canada after graduation. As an international student, you can work in Canada for up to three years after graduation to gain experience and pay for your education.
- › Get work experience. There are opportunities to work with researchers while getting paid.

SCHOLARSHIPS

Scholarships are based on the first two years of university academic standing and the University of Waterloo's English language exam.



TUITION AND FEES

Please see tuition and fees at:

uwaterloo.ca/finance/tuition-fee-schedules-undergraduate-programs

LIVING EXPENSES

See our budget calculator at:

uwaterloo.ca/future-students/financing/budget-calculator

ACKNOWLEDGEMENT OF TRADITIONAL TERRITORY

The University of Waterloo acknowledges that much of our work takes place on the traditional territory of the Neutral, Anishinaabeg, and Haudenosaunee peoples. Our main campus is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River.

YOU+WATERLOO

Our greatest impact happens together

DR. JONATHAN WITT

Associate Dean, International Programs
Director, Science 2+2

DR. CHANGCHENG LI

Associate Director, Science 2+2

DR. MEILING WU

Academic Advisor, International Students

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**STUDY
ONTARIO
CANADA**

Welcome to the World's Favourite Classroom



EduCanada®
A world of possibilities
Un monde de possibilités

Waterloo is committed to acting on the climate emergency and is working toward carbon neutrality and zero waste in our own practices. The paper this publication is printed on contains 100% post-consumer fiber, is manufactured using renewable energy and is Forest Stewardship Council® (FSC®) certified.