Beijing Normal University

Ranked #1 in China

- In 2017, BNU entered the national “world-class university” construction category A list. BNU is the first batch of “211 Project” and “985” projects.

- They have an excellent water science research platform. with 1 national key laboratory, 4 Key Laboratories (Engineering Center) of MOE and Beijing.

- At present, a comprehensive talent training base of “surface water-groundwater, water quantity-water quality, water ecology-water environment” has been formed and the employment rate of graduate students has reached 100% in the past five years.
University of Saskatchewan

Ranked #1 in Canada

- Water security is a signature area of research focus and excellence at the University of Saskatchewan (USask).

- USask combines expertise in natural sciences, health, social sciences, public policy, and engineering and recognizes that people and their activities are of critical importance for water science and management.

- USask is home to five Fellows of the Royal Society of Canada in Water Science, four Fellows of the American Geophysical Union, one Einstein Professor of the Chinese Academy of Science, and two IAHS-UNESCO-WMO Dooge Medal for Hydrology winners.

- USask is home to the Global Insti.

The Global Institute for Water Security (GIWS) at the University of Saskatchewan (USASK) is the top water resources research institute in Canada and one of the most advanced cold regions hydrology centers in the world.
EXCELLENCE IN WATER RESEARCH

Dr. Hao Fanghua
PROFESSOR | BNU COLLEGE OF WATER SCIENCES
Dr. Hao has served as Vice President at BNU. Her main research areas are: environmental assessment, planning, and management; watershed non-point source pollution research; and water resources protection and planning.

Dr. Liu Chanming
PROFESSOR | BNU COLLEGE OF WATER SCIENCES
Dr. Changming is a hydrologist, academician of the Chinese academy of sciences, distinguished professor, and the first dean of the College of Water Sciences at BNU. His work focuses on water cycling processes, simulation, and prediction, and HIMS hydrological modelling.

Dr. Lin Xueyu
PROFESSOR | BNU COLLEGE OF WATER SCIENCES
Dr. Lin is an academician of the Chinese Academy of Sciences. She has been engaged in groundwater management models, theory and method research as well as evaluation of urban groundwater resources.

Dr. Xu Zongxue
PROFESSOR | BNU COLLEGE OF WATER SCIENCES
Dr. Zongxue is the Director of the Beijing Key Laboratory of Urban Hydrological Cycle and Sponge City Technology. He also serves as Vice President, International Commission on Water Resources Systems (ICWRS), International Association for Hydrological Science (IAHS), etc.

Dr. Karsten Liber
DISTINGUISHED PROFESSOR AND EXECUTIVE DIRECTOR
USASK SCHOOL OF ENVIRONMENT AND SUSTAINABILITY
Dr. Liber is a Distinguished Professor at the U of S and currently serves as Executive Director (Interim) of the School of Environment and Sustainability. His research focuses primarily on metal bioavailability and toxicity in aquatic ecosystems.

Dr. Jay Famiglietti
PROFESSOR
USASK SCHOOL OF ENVIRONMENT AND SUSTAINABILITY
Dr. Famiglietti is a hydrologist, professor, and the Director of the Global Institute for Water Security at the University of Saskatchewan where he holds the Canada 150 Research Chair in Hydrology and Remote Sensing.

Dr. Jeff McDonnell
PROFESSOR
USASK SCHOOL OF ENVIRONMENT AND SUSTAINABILITY
Dr. McDonnell is the Associate Director of the Global Institute for Water Security. His work focuses on new ways to measure, understand, and model streamflow generation processes.

Dr. Helen Baulch
PROFESSOR
USASK SCHOOL OF ENVIRONMENT AND SUSTAINABILITY
Dr. Baulch is the Centennial Chair in Aquatic Ecosystem Biogeochemistry and a member of the Global Institute for Water Security. Her research primarily focuses on water quality, eutrophication and climate change.
College of Water Sciences
Beijing Normal University

Beijing Normal University (BNU) is a key university directly under the Ministry of Education. The predecessor of the school was founded in 1902. After more than 100 years of development, the school now has 23 colleges, 10 research institutes, three faculties, and two departments. Due to its comprehensive strength, BNU ranks among the top universities in the country. In the 2017/18 World University Rankings published by the UK Higher Education Survey (QS), BNU ranked 256th and ranked 8th among Chinese universities. The BNU College of Water Sciences was formally established in 2005. Presently, there are four departments: Department of Hydrology and Water Resources, Department of Groundwater Science and Engineering, Department of Water Ecology and Environment, and Department of Water Security. They also have one Key Lab of Ministry of Education (MOE) and one Key Laboratory of Beijing. The College of Water Sciences of Beijing Normal University is the first water science research institute established by a comprehensive university in China. The excellence of the college is led by academicians Liu Changming and Lin Xueyu, along with young talents in the fields of surface water, groundwater, and water safety. In the world-class discipline ranking of the Academic Ranking of World Universities (ARWU), the College’s water resources engineering ranked 1st in China and 4th to 7th in the world for two consecutive years. The College of Water Sciences, in possession of sufficient research funds, is now undertaking abundant research projects, including the National Water Pollution Control and Treatment Science and Technology Major Project, the National Key Research and Development Program and the National Natural Science Foundation. The College has made important contributions to support national and local economic and social development in areas such as water security, sponge city construction, water and soil pollution prevention and control, as well as water conservancy information.

School of Environment and Sustainability
University of Saskatchewan

Established in 1907, the University of Saskatchewan (uSask) is one of Canada’s top 15 research universities and home to more than 24,900 students from around the world. uSask offers a wide variety of degree-level programs at the undergraduate and graduate level within our 13 interdisciplinary colleges, three graduate schools, and six affiliated or federated colleges. uSask provides a highly collaborative research environment with some of the best facilities and analytical tools in Canada including the Global Institute for Water Security, the Canadian Light Source, the Sylvia Fedoruk Canadian Centre for Nuclear Innovation, the International Vaccine Centre, and the Global Institute for Food Security. The 2017 Academic Rankings of World Universities (ARWU) ranked uSask among the top 100 globally in five subject areas including: water resources (#1 in Canada), environment science and engineering, agricultural sciences, veterinary sciences, and food science and technology. The university has a long history of excellence in water research, spanning over 50 years of advances in the hydrological sciences, and is a premier destination for cold region hydrology research. The School of Environment and Sustainability (SENS) is an international model of excellence for interdisciplinary, problem-oriented, and experience-based graduate studies related to the environment and sustainability. SENS has 18 faculty members conducting leading water-related research in the fields such as aquatic toxicology, aquatic biogeochemistry, hydrology, and human dimensions of water security.

SENS: sens.usask.ca
University of Saskatchewan: www.usask.ca
UN-Water defines water security as “the capacity of a population to safeguard sustainable access to adequate quantities of and acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability.”

In February 2018, the Ministry of Education officially approved Beijing Normal University to cooperate with the University of Saskatchewan in Canada to hold a master’s degree program in water security (approval number MOE11CA1A20171870N). The Master of Water Security (MWS) program trains students in science, social science, engineering, health, planning, and policy analysis to investigate complex water security issues of national and international consequence. MWS is a 12-month full-time program in which students earn a Master’s degree from the University of Saskatchewan through courses taken at Beijing Normal University’s campus.

PROFESSIONAL SKILLS

GRADUATE PROGRAM REQUIRED COURSES
- Theory and Practice of Socialism with Chinese Characteristics and Dialectics of Nature

CONCEPTS
- Breakthroughs in Water Security Research
- Advanced Hydrology
- Introduction to Ethics (online course)
- River Science

TOOLS AND TECHNIQUES
- Field Skills in Environment and Sustainability
- Geographic Information Systems and Earth Surface Sensing
- Water Resources Engineering

WATER AND HEALTH
- Chemicals in the Environment
- Seminar in Environment and Sustainability

WATER, POLICY AND MANAGEMENT
- Sustainable Water Resources
- The Water Policy of Uncertainty or Equality

PROFESSIONAL PRACTICE

ENTREPRENEURIAL PROJECT
- Team Based Project in Water Security

Note: Beijing Normal University requires all students to complete a political theory course as part of the program. This would be in addition to the University of Saskatchewan required courses.
Entrepreneurial project: team based project in water security

MWS students complete a team-based course in which they will work with a partner organization as part of their degree requirements to foster project management and critical thinking skills. The project provides an opportunity for students to investigate applied topics in water security. Projects are interdisciplinary in scope and may include scientific, technical, social, economic, cultural, institutional, or other appropriate attributes of water security challenges. Through active hands-on experience, students will be well-equipped to begin a successful career in water science.

MWS program tuition (2019 rates)
$23,700 CAD (approximately 119,100 RMB)

All payments will be made to BNU (except for the application fee)
Details will be sent after successful admission.
YOUR FUTURE

Build networks with professionals inside and outside of academia and explore breakthroughs in water security.

Advance knowledge of concepts.
Faculty will outline the fundamentals of water-related sciences, including hydrology, biogeochemistry, and the ecology of watersheds, wetlands, rivers, and lakes.

Frame complex issues by linking water to environmental and human health.
Examine the importance of water on environmental health as well as the multi-faceted ways that water and human health are connected using a biopsychosocial model.

Seek solutions through policy and management.
The program will explore the challenges of managing complex water systems in an era of deep uncertainty and climate change.

Apply concepts using relevant tools and techniques.
Students will become well-versed in key methods of water security data collection and analysis through:

- Hands-on training with a variety of practical tools and techniques in water sciences.
- Statistics coursework to enable hypothesis testing and experimental design as well as temporal and spatial analyses of both quantitative and qualitative data.
- Geoscience training (geographic information systems and remote sensing) to provide students with skills to collect, analyze, and visualize data.
- Modelling experience, from simple water budgets to more complex watershed models, to predict water, nutrient, and contaminant flows under global change.

Innovate solutions and their consequences.
Students will be mentored in leadership, project and financial management, and communication. They will learn to overcome personal biases to develop innovative solutions that account for unintended consequences.

Benefits of MWS

- Graduate with a degree from a Canadian university (University of Saskatchewan).
- Expand your résumé with global experience.
- Explore your interests at a local or international level through a final project.
- Learn from a world-class faculty.
- Join an international cohort of water specialists.
- Become part of the solution to complex sustainability challenges.

Career Opportunities
Globally, we are facing unprecedented water-related challenges. With increasing pressures on water resources, there is a worldwide need to improve efficiency and effectiveness of water use and to assess impacts of contaminants on environmental and human health. Graduates will be poised to become water scientists, managers, and policy-makers with the necessary expertise to tackle the complex and multidisciplinary water problems facing us now and in the future.

Potential careers upon graduation from this program include: Water Quality Analyst, Business Development Representative, Environmental Project Coordinator, Technical Writer, and many more.
Application Requirements

• A strong interest in water security.

• An undergraduate four-year Honours degree, or equivalent, in a related field of study from a recognized college or university, with a cumulative weighted average of at least 70% (uSask grade system), or equivalent, in the last two years of study (i.e. 60 credit units).

• First-year university-level mathematics (for example, data management, calculus, and algebra) and statistics are essential.

• When applying, please make it clear in your statement of intent that you want to complete the program at BNU.

• Proof of English Language Proficiency

o PLEASE NOTE: The MWS program cannot admit students based on Graduate Pathway Certificate (GPC) qualifications. All successful applicants must be fully qualified. The most common tests used to prove English language proficiency are the TOEFL and IELTS.

o It is your responsibility to have completed an official and approved test with the appropriate score before the application deadline.

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<tr>
<th>FULL QUALIFICATION</th>
<th>CONDITIONAL QUALIFICATION</th>
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<tbody>
<tr>
<td><strong>TOEFL</strong></td>
<td><strong>TOEFL</strong></td>
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<tr>
<td>Minimum of 86 with no score below 19</td>
<td>Minimum of 78 with no score below 18</td>
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<tr>
<td><strong>IELTS</strong></td>
<td><strong>IELTS</strong></td>
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<tr>
<td>Overall score of 6.5 with no score below 6.0</td>
<td>Minimum overall score of 6.0 with no score below 5.5</td>
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Students whose English language scores meet the requirements for conditional qualification for the MWS program will be admitted into a uSask English training course that will be conducted at BNU. Conditionally qualified applicants will need to successfully complete this course before they will be admitted into the MWS program. At BNU, these students will receive a minimum of 200 hours of in-class training from uSask educators and will receive individual coaching. The language training will take place over a maximum of 10 weeks and will cost $5,000 CAD (approximately 26,200 RMB) in tuition, which includes all course materials and textbooks that may be required. The students who successfully complete this accredited English training program will also receive a certificate. We ask students whose English language scores are below the requirements for conditional qualification to please contact sens.admissions@usask.ca for further information.

For more information about the program and how to enroll contact sens.admissions@usask.ca or visit our website at www.sens.usask.ca.

APPLY BY:  
April 12, 2020 (for conditional acceptance)  
July 30, 2020 (for unconditional acceptance)
APPLICATION PROCESS

REQUIRED DOCUMENTS

• A curriculum vitae (CV) or résumé

• Statement of Intent (1-2 pages) including:
  o Specific areas of interest that could lead to a project topic.
  o A description of why you want to pursue professionally-oriented graduate study in the interdisciplinary context of the School of Environment and Sustainability.
  o A description of any relevant employment or study experiences.
  o Clearly state that you want to complete the program at BNU.

• Preliminary Statement of Marks:
  o Upload a scanned (PDF) copy of official transcript(s) from each post-secondary institution attended. Official copies of your transcripts will only be required once you have been offered admission.

• Undergraduate Degree Preliminary:
  o If the awarding of your degree is not clearly indicated on the post-secondary transcript, you will also be required to upload a PDF copy of the degree certificate(s).

• English Language Proficiency Test Results

• Three Letters of Reference

Step 1:
Complete your Application Form online at grad.usask.ca/admissions/how-to-apply.php

During the application you will be asked for:
  o Personal information such as name, address, etc.
  o Names and email addresses of your three referees.
    Two of your referees must be persons under whom you’ve studied. The third may be either a person who you have worked under professionally, or whom you’ve studied under.
  o Educational history from all post-secondary institutions you’ve attended.

Step 2:
Pay the non-refundable CAD $90 (approximately 500 RMB) application fee.

It is recommended that you pay online with a credit card.

If you do not pay online when completing your application, you will need to use an alternate form of payment. Your application will not be processed until payment is received.

Once your application form is complete and payment has been received, you will receive an automatic email within 24-48 hours with your new uSask ID and temporary password.

Step 3:
Submit your required documents.

Log into your online application and upload all your required documents
If you require assistance uploading your documents you can access a guide at Grad.usask.ca/documents/uploading-documents.pdf

Step 4:
Interview.

Applicants will be interviewed by USask and BNU representatives.
FREQUENTLY ASKED QUESTIONS

• Has my referee completed their reference?
  o Be sure to reach out to the referee FIRST. Ask your referee to check their junk/spam folder as automatic emails are occasionally redirected.
  o Is the email address you provided correct? Ensure that you have provided the exact email address with no errors.
  o Is the referee available? Are they on sabbatical/vacation/leave of absence?
  o If you would like to change a referee you may request this change by writing to sens.admissions@usask.ca. You must include the full name of the referee you would like to remove and the full details of the new referee – name, email address, position, university/college, address, and phone number.

• Will my application still be considered if I submit documents after the application deadline?
  o Applications must be fully COMPLETE by the application deadline. This means USask must have received:
    • Application fee payment (processed and received)
    • Application form
    • ALL documentation required for admission uploaded onto your PAWS account:
      - CV/Resume
      - Degree certificates
      - Letter of intent
      - English language proficiency test scores
      - Transcripts
      - Three Letters of Reference
  o Applications that are completed by the deadline will be reviewed first. Any applications that are completed after the deadline will be considered second. We cannot guarantee an application review or available space to any applications that were incomplete on the deadline. However, if seats in the program remain, you will be reviewed for them at that time. A maximum of 30 students will be accepted into the program. The applications will be reviewed starting in January 2020.

• I just applied and paid my fee. Why can’t I upload my documents?
  o You must wait 24-48 hours after submitting an application form and fee to receive your PAWS login information, which you then use to login and upload your documents. Please note, the new username (NSID) and password sent to you are different from the username and password you created to begin the application.
  o If you experience any difficulty with your PAWS account or do not receive your NSID and password within 48 hours, please contact the IT Service Desk at servicedesk@usask.ca or 1-800-966-4817.

• What is PAWS?
  o PAWS is the University of Saskatchewan’s Personal Access to Web Services. This is a website portal where you can access a variety of services including your application.
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cws.bnu.edu.cn

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