

Choose a career that makes a difference

Drought. Pollution. Flooding. Scarcity. Overuse. These are some of the global issues facing water security in the 21st century. One of the most pressing challenges of our time, protecting our water resources requires training that merges traditional disciplines and looks at solutions using a holistic approach.

New in 2016, the Master of Water Security (MWS) program is a project-based master's degree that trains students in science, engineering and policy analysis to investigate water security issues of regional, national and international significance. The MWS is the first program of its kind in North America.

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.

Program details

The MWS is a cross-disciplinary, project-based and professional-style program that may be completed in 12 months of full-time study. All students are required to complete 15 credit units (cu) of core courses, 9 cu of pre-selected electives and a 6 cu research project. The core courses are intended to develop interdisciplinary knowledge of water security and build field and problem-solving skills. The elective courses allow students to customize their learning through three specialized tracks:

Hydrology: This track focuses on the surface water cycle and the availability, distribution, movement, quality and quantity of water. Particular attention is paid to water resources management, modelling and planning in an era of climate change.

Hydrogeology: This track focuses on the distribution and movement of groundwater. Students choose from a variety of courses examining groundwater and its properties from a geochemistry, engineering or soil science perspective.

Socio-Hydrology: This track studies the dynamics between human use, control, value and culture related to water and its place in the global community. It offers courses centered on health, community, aboriginal peoples and policy.

In the Spring and Summer terms, each student works with a faculty supervisor to complete a project focused on an aspect of water security related to their chosen track. This may take the form of a modelling exercise, a case study or evaluation of a management practice or system, among other things. Students will present written and oral reports on their projects to their peers and faculty members.



U of S excellence in water research

The U of S has one of the highest concentrations of faculty working in water research worldwide and is home to the \$30-million Global Institute for Water Security (GIWS) and the internationally renowned Toxicology Centre. The U of S is the destination point internationally for those seeking integrated, comprehensive training in water research.

Join us and study with one of the strongest water security research communities in North America. Our expertise includes the Canada Excellence Research Chair in Water Security and the Canada Research Chairs in Water Resources and Climate Change, and Predictive Aquatic Ecotoxicology.

Our faculty areas of expertise are varied and include: hillslope and watershed hydrology; ecology and lake biogeochemistry; water quality; groundwater resource management; First Nations water and health; and, water resource management and planning. For a comprehensive list of faculty expertise, visit our website.

Want to learn more?

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