



**RUSS EDWARDS  
SCHOOL**  
Agriculture & Environment

# LAND & WATER MANAGEMENT

2-YEAR  
DIPLOMA

Learn how ecosystems are affected by soil, water, plants, and animals, and how the diversity and health of these organisms serve as the foundation for the program's capstone project. In this project, students collaborate with industry partners to solve local environmental challenges while balancing land use.

## GET CAREER-READY

- » Demonstrate a comprehensive understanding of environmental science, including principles of ecology, geology, hydrology, and soil science.
- » Apply advanced techniques for monitoring, assessing, and managing land and water resources using GIS and geospatial tools.
- » Evaluate environmental impacts of land use practices, and develop strategies for sustainable land management.
- » Analyze regulatory and policy frameworks for land and water management, and navigate complex legal environments.
- » Design and implement sustainable environmental management plans in collaboration with stakeholders.
- » Apply techniques for land reclamation, restoration, erosion control, and habitat restoration.
- » Evaluate social and economic implications of land and water use, and optimize sustainable and equitable use.
- » Apply advanced techniques for water management, including conservation, monitoring, and treatment.
- » Evaluate climate change impacts on land and water resources, and develop resilience strategies.
- » Communicate effectively with diverse stakeholders about land and water management issues.
- » Apply principles of environmental ethics and sustainability to land and water management work.
- » Address environmental risks and hazards associated with land and water management proactively.
- » Develop and implement sustainable rural planning and development strategies through community engagement.
- » Apply best practices for environmental stewardship, including responsible use of natural resources and promoting biodiversity.
- » Evaluate the effectiveness of land and water management practices through ongoing professional development.



**Campus/Delivery Options**  
Victoria Avenue East campus



**Available Intakes**  
September



**Work Placement(s)**  
YR 1 | 16 weeks

## INDUSTRY EXPECTATIONS

- » Be able and willing to travel
- » Possess a valid driver's licence and access to a vehicle
- » Work in outdoor settings in varied terrain
- » Ability to quickly problem solve and deal with stakeholder conflicts and complaints in a professional manner
- » Have physical strength and stamina as well as the mobility and motor skills to undertake the required tasks
- » Operate equipment as required

### A career in this field is a good fit if you would enjoy...

- ✓ Managing land and water resources, and ensuring their long-term sustainability
- ✓ Appreciate working outdoors in a variety of terrains and regions
- ✓ Learning how to incorporate sustainable land and water management practices across a variety of landscapes
- ✓ Collecting, organizing, and analyzing data to solve problems
- ✓ Interpreting and applying various acts, regulations, policies, and procedures
- ✓ Potential to work in a variety of urban and rural communities and different ecological settings

## CAREER OPPORTUNITIES

Compliance (conservation) • land use planning • water quality and quantity management • environmental consulting • wildlife management • environmental health and safety • watershed districts

## ADMISSION REQUIREMENTS

- » A complete Manitoba Grade 12 or equivalent
- » English 40G/40S or equivalent
- » Pre-calculus or Applied Mathematics 40S or equivalent

Applicants who have Mathematics 40G, Mathematics 301 or Consumer/Essential Mathematics 40S will be required to write a mathematics assessment test to assess their eligibility for admission.

# BE CONFIDENT IN YOUR CAREER PATH

Confidence in the career path you choose to embark on is key, and selecting the right program for you is the first step. At Assiniboine, we offer an opportunity to explore and experience a program before applying.

## SPEND A DAY WITH US

Our Spend a Day program runs from November to March for most programs. When you spend a day at Assiniboine, we partner you with a current student in the program of your choice and you will have the opportunity to:

- » Participate in classroom activities
- » Experience college life
- » Explore all of our helpful services for students
- » Meet current college students and instructors
- » Enjoy a free lunch on us!

## ATTEND AN ONLINE INFO SESSION

Our free, live online information sessions give you the inside scoop on our college, the program you're interested in and life at Assiniboine. Register in advance and from the comfort of your own home, log in to learn what Assiniboine has to offer.

## STILL NOT SURE?

Contact our recruitment team to arrange a campus tour or an appointment to discuss your career options.

Scan the QR code or visit [assiniboine.net/experienceACC](https://assiniboine.net/experienceACC) to register or connect with our recruitment team!

