

# SOIL SCIENCE, M.SC.

Soil Science

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**Academic Staff:** Please refer to the Soil Science staff listing (<https://umanitoba.ca/agricultural-food-sciences/soil-science/soil-science-faculty-and-staff/>).

## Soil Science Program Information

The Department of Soil Science offers graduate programs leading to the Master of Science and the Doctor of Philosophy degrees.

## Admission Information

### Admission to the Faculty of Graduate and Postdoctoral Studies

Application and Admission Procedures are found in the Academic Guide (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/application-admission-registration-policies/>).

Admission requirements for Master's students are found in the Master's Degrees General Regulations ([https://catalog.umanitoba.ca/graduate-studies/academic-guide/masters-degrees-general-regulations/#Admission\\_FGSMasters](https://catalog.umanitoba.ca/graduate-studies/academic-guide/masters-degrees-general-regulations/#Admission_FGSMasters)) section of the Guide.

### Soil Science M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. The adequacy of the background of an applicant will be evaluated by the Soil Science Graduate Studies Committee and the Department Head. Normally, a student should have a strong background in soil science and/or a strong background in the basic sciences related to the student's proposed area of study.

## Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Soil Science M.Sc. (<https://umanitoba.ca/explore/programs-of-study/soil-science-msc/>) program of study page.

## Degree Requirements

### Research and Thesis

The thesis route will include a thesis and a minimum of 12 credit hours of coursework. The minimum of 12 credit hours will consist of:

SOIL 7220, plus 9 additional credit hours, of which 3 credit hours must be from the Department of Soil Science at the 7000 level.

To meet graduation requirements, all students must have demonstrated, either in their current program or in previous studies:

1. Nine credit hours in fundamental and applied soil sciences at the senior undergraduate level or graduate level;  
and

2. Experimental design and statistical analysis - 3 credit hours at the senior undergraduate or graduate level;  
and
3. Communication skills – in addition to completing SOIL 7220, students normally will present papers at a scientific meeting.

**Expected Time to Graduate:** 2 to 2.5 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SOIL 7220	Principles of Scientific Research and Communication	3
Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>3</b>
<b>Year 2</b>		
Select courses (0-9 credit hours) as determined by advisory committee and student <sup>1</sup>		
GRAD 7000	Master's Thesis	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>3</b>

<sup>1</sup> Credit hours as determined by advisory committee and student.  
**Minimum total credit hours required: 12.**

Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

## Registration Information

Students should familiarize themselves with the Faculty of Graduate and Postdoctoral Studies 'GRAD' courses applicable to their program (<https://catalog.umanitoba.ca/graduate-studies/registration-information/>). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/advisory committee to determine courses. Courses must be listed on the departmental approval form and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

## Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

### Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate and Postdoctoral Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

## **Bona Fide Academic Requirements (BFAR)**

Bona Fide Academic Requirements (BFAR) (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#BFAR>) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#GRAD7500>) and Mandatory Research Integrity Online Course (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#GRAD7300>).

Students must also meet additional BFAR requirements (<https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program>) that may be specified for their program.

## **General Regulations**

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+;
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).