

M.Sc. (non-thesis) Bioresource Engineering - Integrated Water Resources Management

Registration Guide 2021-22

Typical program sequence: (45 credits total)	FALL	WINTER	SUMMER
	13 credits	13 credits	19 credits
International students are obliged to register for a minimum of 12 credits per term (full-time status) to fulfill their study permit obligations. The exception is the last term of the program when they may be registered for fewer than 12 credits.	BREE 651 Seminar (1)	BREE 652 Seminar (1)	BREE 630 IWRM Internship (13)
	BREE 503 (3), BREE 510 (3)	BREE 655 (3), PARA 515 (3)	BREE 631 Research Project (6)
	6 credits electives	6 credits electives	

Presented below are the overall program requirements summarized according to course availability in Fall 2020 & Winter 2021. A course that is "not offered" means it is not being offered in that term. "Open" means the course is available for registration. "Temporarily closed" means the course is temporarily closed but should open in the near future. "TBA" means the scheduled has not yet been finalized in Minerva and should be monitored.

Required courses (33 credits)	FALL 2021	WINTER 2022	SUMMER 2022
BREE 503 (3) Water: Society, Law and Policy	Open		
BREE 510 (3) Watershed Systems Management	Open		
BREE 630 (13) IWRM Internship			Open
BREE 631 (6) Research Project			Open
BREE 651 (1) Departmental Seminar M.Sc. 1	Open		
BREE 652 (1) Departmental Seminar M.Sc. 2		Open	
BREE 655 (3) IWRM Research Visits		Open	
PARA 515 (3) Water, Health and Sanitation		Open	

Note on BREE 503: Course instructor Dr. Murray Clamen will hold a pre-meeting prior to the start of classes. An invitation will be sent by e-mail.

Note on BREE 510: The BREE 510 Tutorial section is not a session that needs to be attended. Please ignore any timetable "conflicts" that may arise because of the tutorial. You may register for other courses that take place during the same time as the tutorial.

Note on BREE 651 & 652: Attendance to SEMINAR section is mandatory. The CONFERENCE sections are not sessions that need to be attended more than three times per year; they are there for students to use to be able to practice their seminar. Please ignore any timetable "conflicts" that may arise because of the Conference. You may register for other courses that take place during the same time as the Conferences.

Note on registration for BREE 630 and 631 (summer term): You must register for these courses "simultaneously" on Minerva as they are co-requisites. If you try to add them separately you will get an pre-requisite error. Meetings will be held regarding the internship, in the fall term of your program.

Summer term registration opens in MARCH.

Elective Courses (12 credits):

In the list below are courses which have been approved as potential elective courses for your IWRM program. Most courses are 3-credit lectured courses but some, particularly in Engineering departments, may be four credits so be aware when you are adding up your credit count. Many are given by departments on the downtown campus. This list of courses is not exhaustive. Some courses may have a lab component. The availability varies every year as some are only offered bi-yearly. You are encouraged to explore the McGill course catalogue.

To explore other course possibilities, please browse through the course listings at <https://www.mcgill.ca/study/2021-2022/courses/search> or search within Minerva's registration menu (advanced filters) in related departments and verify permissions and pre-requisites. ALL COURSES MUST BE graduate-level, i.e. 500-level or higher.

Certain courses have a pre-requisite or require permission of the instructor in order to register. You can e-mail the instructor directly to request a permit to register for the course on Minerva, stating 1) the reason you would like to take the course, and 2) proof of any required pre-requisites. You also need to provide your name, McGill ID, and the name of the program you are in (M.Sc. (non-thesis), Integrated Water Resource Management) and the name of our Faculty (Agricultural and Environmental Sciences) in some cases, if the course is in another faculty. Contact information for faculty and staff can generally be found here: <https://www.mcgill.ca/directory/staff/>. You may also e-mail the instructor if a course is FULL to inquire if there are any extra spaces that could be made available.

Important note about choosing an appropriate elective: It is strongly recommended you e-mail the course instructor to confirm that you have the appropriate background for a course. You should confirm the course requirements before registering for a course. Be sure you have an adequate background to succeed in that particular course. **McGill Graduate Grading Policy:** The minimum passing grade for a graduate student is B- (65%). **McGill Graduate Failure Policy:** After a second course failure a student will be withdrawn from the university.

APPROVED ELECTIVE COURSES			
This is a list of courses that DO NOT CONFLICT with the IWRM core schedule (as of May 2021 timetable posted in Minerva). Please check with Dr. Wittebol for any other courses which may in fact be approved but are not shown here due to conflict with this year's IWRM core schedule.			
Program Advisor approval required for any course NOT on this list.	FALL 2021	WINTER 2022	Note
BREE 518 (3) Ecological Engineering	not offered	Open	
BREE 529 (3) GIS for Natural Resource Management	Open	not offered	
BREE 533 (3) Water Quality Management	Open	not offered	
BREE 608 (3) Special Problems in Bioresource Engineering*	Open	Open	Independent project or approved 400-level course - FORM REQUIRED
CHEE 591 (3) Environmental Bioremediation	Open	not offered	
CIVE 550 (3) Water Resources Management	not offered	Open	
CIVE 555 (3) Environmental Data Analysis	not offered	Open	
CIVE 572 (3) Computational Hydraulics	Open	not offered	
CIVE 574 (3) Fluids Mechanics of Water Pollution	Open	not offered	
CIVE 584 (3) Mechanics of Groundwater Flow	not offered	Open	
CIVE 677 (4) Water - Energy Sustainability	not offered	Open	
ECON 511 (3) Energy, Economy, and Environment	not offered	Open	
ENVB 506 (3) Quantitative Methods: Ecology	not offered	Open	
ENVB 529 (3) GIS for Natural Resource Management	Open	not offered	
ENVB 530 (3) Advanced GIS for Natural Resource Management	not offered	Open	
EPIB 601 (4) Fundamentals of Epidemiology	Open	not offered	
ESYS 500 (3) Earth System Applications	Open	not offered	
GEOG 503 (3) Advanced Topics in Health Geography	Open	not offered	contact instructor
GEOG 505 (3) Global Biogeochemistry	not offered	Open	
GEOG 509 (3) Qualitative Methods	Open	not offered	
NRSC 670 (3) Principles of Environmental Health Sciences 1	Open	not offered	contact instructor
NRSC 671 (3) Principles of Environmental Health Sciences 2	not offered	Open	pre-req. NRSC 670
NUTR 501 (3) Nutrition in Developing Countries	Open	not offered	
POLI 612 (3) Research Methods in Political Science	Open	not offered	contact instructor
POLI 633 Southeast Asian Politics	Open	not offered	
POLI 671 (3) International Relations Theory	not offered	Open	
PPHS 511 (3) Fundamentals of Global Health	Open	not offered	
PPHS 624 (3) Public Health Ethics and Policy	Open	not offered	
SEAD 520 (3) Life Cycle-Based Environmental Footprinting	not offered	Open	Engineering background required. **
SEAD 530 (3) Economics for Sustainability in Engineering and Design.	not offered	Open	Engineering background required. **
SEAD 540 (3) Industrial Ecology and Systems	Open	not offered	Engineering background required. **
SEAD 550 (3) Decision-Making for Sustainability in Engineering and Design	Open	not offered	Engineering background required. **
SOCI 504 (3) Quantitative Methods 1	Open	not offered	
* Contact your Dr. Wittebol and Prof. Adamowski for more information on how to register for this course. **Email laura.wittebol@mcgill for confirmation of approval, then forward to tised@mcgill.ca.			
**If you cannot find an elective there is the possibility to take a 400-level undergraduate course as a graduate-level course, but special permissions are required; please contact Laura Wittebol if you would like more information on this.			
Examples of 400-level courses previously taken as graduate-level:			
AGRI 411 Global Issues on Development, Food, and Agriculture	BREE 420 Engineering for Sustainability		
AGRI 435 Soil & Water Quality Management	ENVB 415 Ecosystem Management		
ELECTIVE COURSES FROM OUTSIDE MCGILL UNIVERSITY			
Courses at other Quebec or Canadian universities are permitted for your program upon consultation with your Program Advisor. They must be graduate-level courses and must go toward your program requirements. To request registration for a course at another Quebec university, you must use the on-line Inter-University Transfer system. For the procedure to take courses in Canadian universities outside Quebec, please consult your Program Advisor. An inter-university course is NOT RECOMMENDED in the final term of your program, as there can be delays in receiving grades from the other university that can delay your graduation. The maximum number of credits you may register for outside McGill during this MSc (non-thesis) program is 7.			
Link to Inter-university transfer request procedure:	https://www.mcgill.ca/transferecredit/iut		
Examples from Concordia University (previously approved):			
ENVS 603 (3) - Water Resource Management	HENV 650 (3) Political Economy and the City		
ENVS 604 (3) - Environmental Law and Policy	HENV 670 (3) Environmental Governance		
ENVS 652 (3) Data Collection and Analysis for EA	CIVI 6611 (4) Environmental Engineering		
ENVS 653 (3) GIS for Environmental Assessment	CIVI 6651 (4) Water Pollution and Control		
ENVS 605 (3) Environmental Standards	CIVI 6621 (4) Engineering Aspects Biological Treatment Water and Air		
ENVS 653 (3) Geographical Information Systems for Env. Assessment	GEOG 610 (3) Impact Assessment		
GEOG 607 (3) Indigenous Peoples and the Environment	GEOG 670 (3) Environmental Management		
GEOG 620 (3) Advanced Topics in Geography (if topic = GIS)			
Link to Concordia's course calendar:	Link to Concordia Catalogue Search tool:		
https://www.concordia.ca/academics/graduate/calendar/current.html	https://campus.concordia.ca/psc/pscspdr/EMPLOYEE/HRMS/c/CU_EXT.CU_CLASS_SEARCH.GBL?&		
Other participating Quebec universities include Université de Montréal, École polytechnique, and Université du Québec à Montréal, etc.			