AGRO-ENVIRONMENTAL SCIENCES MAJOR (B.SC.(AG.ENV.SC.)) (42 CREDITS)

Offered by: Plant Science (Faculty of Agricultural and Environmental Sciences)

Degree: Bachelor of Science (Agricultural and Environmental Sciences)

Program credit weight: 42

Program Description

This Major is focused on the idea that agricultural landscapes are managed ecosystems, and that humans engaged in agriculture must maintain the highest possible environmental standards while providing food and other bioproducts to the marketplace. The Major core focuses on the basic and applied biology of cultivated plants, domestic animals, arable soils, and the economics of agriculture. Students then choose one or two specializations in these or connected disciplines that reflect their interests and career goals.

The program has a strong field component that includes hands-on laboratories, visits to agricultural enterprises, and opportunities for internships. Classes and laboratories exploit the unique setting and facilities of the Macdonald Campus and Farm, which is a fully functioning farm in an urban setting that exemplifies many of the issues at the forefront of modern agricultural production. Graduates of this program are eligible to become members of the Ordre des agronomes du Québec (OAQ).

For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

Program Prerequisites

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this Course Catalogue for prerequisites and minimum credit requirements.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Required Courses (36 credits)

Expand allContract all

Course	Title	Credits
AEBI 210	Organisms 1.	3
AEMA 310	Statistical Methods 1.	3
AGEC 200	Principles of Microeconomics.	3
AGEC 231	Economic Systems of Agriculture.	3
AGRI 215	Agro-Ecosystems Field Course.	3
ANSC 250	Introduction to Livestock Management	3

BREE 329	Precision Agriculture.	3
ENVB 210	The Biophysical Environment.	3
LSCI 204	Genetics.	3
LSCI 211	Biochemistry 1.	3
LSCI 230	Introductory Microbiology.	3
SOIL 315	Soil Nutrient Management.	3

Complementary Courses (6 credits)

6 credits of complementary courses selected as follows:

One of:

Expand allContract all

Course	Title	Credits
PLNT 302	Forage Crops and Pastures.	3
PLNT 200	Introduction to Crop Science	3

One of:

Expand allContract all

Course	Title	Credits
ANSC 451		3
PLNT 300		

Specialization

Choose at least one specialization of 18-24 credits.

Specializations designed to be taken with the Agro-Environmental Sciences Major:

- Animal Production
- · Ecological Agriculture
- · Plant Production
- Professional Agrology
- Soil and Water Resources

Membership to the OAQ requires students successfully complete one of the above specializations in addition to the Professional Agrology Specialization.

Electives

To meet the minimum credit requirement for the degree.