

MICROBIOLOGY AND MOLECULAR BIOTECHNOLOGY MAJOR (B.SC. (AG.ENV.SC.)) (24 CREDITS)

BTEC 555	Structural Bioinformatics.	3
FDSC 442	Food Microbiology.	3
MIMM 324	Fundamental Virology.	3
PLNT 304	Biology of Fungi.	3

Offered by: Natural Resource Sciences (Faculty of Agricultural and Environmental Sciences)

Degree: Bachelor of Science (Agricultural and Environmental Sciences)

Program credit weight: 24

Program Description

Students following this specialization receive education and training in fundamental principles and applied aspects of microbiology. Complementary courses allow students to focus on basic microbial sciences or applied areas such as biotechnology. Successful graduates may work in university, government and industrial research laboratories, in the pharmaceutical, fermentation and food industries, and with an appropriate CGPA proceed to post-graduate studies or professional biomedical schools.

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

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 (18 credits)

Expand allContract all

Course	Title	Credits
BTEC 306	Experiments in Biotechnology.	3
MICR 331	Microbial Ecology.	3
MICR 338	Bacterial Molecular Genetics.	3
MICR 341	Mechanisms of Pathogenicity.	3
MICR 450	Environmental Microbiology.	3
PARA 424	Fundamental Parasitology.	3

Complementary Courses and Suggested Electives (6 credits)

Expand allContract all

Course	Title	Credits
ANSC 350	Food-Borne Pathogens.	3
ANSC 420	Animal Biotechnology.	3
BINF 511	Bioinformatics for Genomics.	3
BTEC 501	Bioinformatics.	3
BTEC 535	Functional Genomics in Model Organisms.	3