FACULTY PROGRAM ENVIRONMENT - ECONOMICS AND THE EARTH'S ENVIRONMENT (B.A.) (54 CREDITS)

Offered by: Bieler School of Environment (Faculty of Science)
Degree: Bachelor of Arts
Program credit weight: 54

Program Description

Understanding Earth's geologic processes provides us with the knowledge to mitigate many of our society's environmental impacts due to resource extraction and waste disposal. This knowledge is not always enough, as economics often plays a controlling role in how we use and abuse our environment.

This domain educates students in the fundamentals of economics and Earth sciences. The fundamentals of economics are provided, as is their application to the effects of economic choices on Earth's environment. Examples of these applications include the economic effects of public policy toward resource industries and methods of waste disposal, and the potential effects of global warming on the global economy. Students also learn of minerals, rocks, soils, and waters that define much of Earth's environment and how these materials interact with each other and with the atmosphere. Courses in specific subdisciplines of Earth sciences combined with courses presenting a global vision of how the Earth and its environment operate provide the student with the necessary knowledge of geologic processes. Examples of this knowledge include the effects of mineral and energy extraction on the environment and how industrial waste interacts with solids and liquids in the environment. The Earth science and economics studies merge in the final year when the students apply what they have learned in the domain to current environmental issues.

Degree Requirements — B.A. students

To be eligible for a B.A. degree, a student must fulfil all Faculty and program requirements as indicated in Degree Requirements for the Faculty of Arts.

We recommend that students consult an Arts OASIS advisor for degree planning.

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.

Program Prerequisites or Corequisites

To graduate from the Faculty Program in Environment, students are required to complete these courses by the end of their U1 year. These courses can be taken using the Satisfactory/Unsatisfactory option. See: http://www.mcgill.ca/study/university_regulations_and_resources/undergra... for details.

Numeracy

3 credits of the following, or equivalent (e.g., CEGEP objective OOUN):

Expand allContract all

Course	Title	Credits
MATH 139	Calculus 1 with Precalculus.	4
MATH 140	Calculus 1.	3

Basic Science

3 credits of the following, or equivalent (e.g., CEGEP objectives Chemistry OOUL):

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Course	Title	Credits
AECH 110	General Chemistry 1.	4
CHEM 110	General Chemistry 1.	4

Other Suggested First Year (U1) Courses

For suggestions on courses to take in your first year (U1), you can consult the "Bieler School of Environment Student Handbook" available on the website (http://www.mcgill.ca/environment), or contact Ms. Kathy Roulet, the Program Adviser (kathy.roulet@mcgill.ca).

Program Requirements

Note: Students are required to take a maximum of 34 credits at the 200 level and a minimum of 12 credits at the 400 level or higher in this program. This includes core and required courses, but does not include the program pre-requisites or co-requisites listed above.

Location Note: When planning your schedule and registering for courses, you should verify where each course is offered because courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue.

Core: Required Courses (18 credits)

Location Note: Core required courses for this program are taught at both McGill's Downtown campus and at the Macdonald campus in Sainte-Anne-de-Bellevue. You should register in Section 001 of an ENVR course that you plan to take on the Downtown campus, and in Section 051 of an ENVR course that you plan to take on the Macdonald campus.

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Course	Title	Credits
ENVR 200	The Global Environment.	3
ENVR 201	Society, Environment and Sustainability.	3
ENVR 202	The Evolving Earth.	3
ENVR 203	Knowledge, Ethics and Environment.	3
ENVR 301	Environmental Research Design.	3
ENVR 400	Environmental Thought.	3

Core: Complementary Course – Senior Research Project (3 credits)

Only 3 credits will be applied to the program: extra credits will count as electives.

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Course	Title	Credits
AEBI 427	Barbados Interdisciplinary Project.	6
ENVR 401	Environmental Research.	3
ENVR 451	Research in Panama.	6
FSCI 444	Barbados Research Project.	6

Domain: Required Courses (15 credits)

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Course	Title	Credits
ECON 230D1	Microeconomic Theory.	3
ECON 230D2	Microeconomic Theory.	3
ECON 405	Natural Resource Economics.	3
EPSC 210	Introductory Mineralogy.	3
EPSC 240	Geology in the Field.	3

Domain: Complementary Courses (18 credits)

18 credits are selected from various categories as follows:

Statistics (3 credits)

One of the following Statistics courses or equivalent:

Note: Credit given for Statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Arts.

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Course	Title	Credits
AEMA 310	Statistical Methods 1.	3
GEOG 202	Statistics and Spatial Analysis.	3
MATH 203	Principles of Statistics 1.	3

Economics

6 credits from:

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Course	Title	Credits
AGEC 333	Resource Economics.	3
ECON 209	Macroeconomic Analysis and Applications.	3
ECON 326	Ecological Economics.	3
ECON 347	Economics of Climate Change.	3
ECON 416	Topics in Economic Development 2.	3
ECON 511	Energy, Economy and Environment.	3

Advanced Courses (9 credits)

9 credits chosen from two areas:

Area 1: Development/Environmental Management

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Course	Title	Credits
AEBI 423	Sustainable Land Use.	3
AGRI 550	Sustained Tropical Agriculture.	3
ANTH 451	Research in Society and Development in Africa.[1]	3
BIOL 451	Research in Ecology and Development in Africa.[1]	3
ECON 305	Industrial Organization.	3
ECON 313	Economic Development 1.	3
ECON 314	Economic Development 2.	3
ECON 408	Public Sector Economics 1.	3
ECON 409	Public Sector Economics 2.	3
ENVB 437	Assessing Environmental Impact.	3
ENVB 529	GIS for Natural Resource Management.[1]	3
ENVR 421	Montreal: Environmental History and Sustainability.	3
ENVR 422	Montreal Urban Sustainability Analysis.	3
GEOG 201	Introductory Geo-Information Science.[1]	3
GEOG 302	Environmental Management 1.	3
GEOG 340	Sustainability in the Caribbean.	3
GEOG 404	Environmental Management 2.	3
GEOG 451	Research in Society and Development in Africa.[1]	3
GEOG 498	Humans in Tropical Environments.	3
HIST 510	Environmental History of Latin America (Field).	3
MIME 320	Extraction of Energy Resources.	3
NRSC 451	Research in Ecology and Development in Africa.[1]	3

[1] Note: You can take ENVB 529 GIS for Natural Resource Management. or GEOG 201 Introductory Geo-Information Science. but not both; you can take BIOL 451 Research in Ecology and Development in Africa. or NRSC 451 Research in Ecology and Development in Africa. but not both; you can take ANTH 451 Research in Society and Development in Africa. or GEOG 451 Research in Society and Development in Africa. but not both.

Area 2: Environmental Resources

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Course	Title	Credits
ATOC 341	Caribbean Climate and Weather.	3
BIOL 308	Ecological Dynamics.[1]	3
BIOL 343	Biodiversity in the Caribean.	3
BREE 217	Hydrology and Water Resources.[1]	3
ENVB 305	Population and Community Ecology.[1]	3
ESPC 325		
EPSC 355	Sedimentary Geology.	3
EPSC 549	Hydrogeology.	3
GEOG 305	Soils and Environment.	3

GEOG 322	Environmental Hydrology.[1]	3
SOIL 300	Geosystems.	3

[1] Note: You can take BREE 217 Hydrology and Water Resources. or GEOG 322 Environmental Hydrology. but not both; you can take BIOL 308 Ecological Dynamics. or ENVB 305 Population and Community Ecology. but not both.