

FOUNDATION PROGRAM (30 CREDITS)

Offered by: Science

Degree: Bachelor of Science

Program credit weight: 30

Program Description

Students who need 97-120 credits to complete their degree requirements will normally be registered in the Science Foundation Program until they complete their first year. They must consult an adviser in the Science Office for Undergraduate Student Advising (SOUSA) to obtain advice and approval of their course selection.

Full details are available on the SOUSA website at <http://www.mcgill.ca/science/student/newstudents/u0>. Academic advising is also available by email. The address is newstudentadvising.science@mcgill.ca.

Students normally complete 30 credits which must include at least seven courses from the list of Approved Freshman/Foundation Year Science Courses, selected as follows:

General Math and Science Breadth

Six of the Freshman/Foundation Year courses to satisfy one of the following:

Option 1) 2 courses from MATH and 4 courses from BIOL, CHEM or PHYS;
or

Option 2) 3 courses from MATH and 3 courses from BIOL, CHEM or PHYS.

Science Complementary

The seventh course is chosen from the list of Approved Freshman/Foundation Year Science Courses.

Notes:

1. Students who have not studied all of Biology, Chemistry, and Physics at the grade 12 level or equivalent are strongly advised to include at least one course in the missing discipline in their Freshman/Foundation Year.
2. Many students will complete more than seven courses from the Approved Freshman/Foundation Year Science Courses list, particularly those who wish to leave several options open for their choice of major.
3. Students entering the Freshman/Foundation Year should be aware of the department specific requirements when selecting their courses. Detailed advising information is available at <http://www.mcgill.ca/science/student/newstudents/u0/bscfreshman/specific>.
4. The maximum number of courses per term, required, complementary, and elective, is five.

5. Some medical and dental schools have specific freshman course requirements. Check the admission requirements of the school(s) to which you intend to apply.

Degree Requirements — B.Sc.

This program is offered as part of a Bachelor of Science (B.Sc.) degree.

To graduate, students must satisfy both their program requirements and their degree requirements.

- The program requirements (i.e., the specific courses that make up this program) are listed under the Course Tab (above).
- The degree requirements—including the mandatory Foundation program, appropriate degree structure, and any additional components—are outlined on the Degree Requirements page.

Students are responsible for ensuring that this program fits within the overall structure of their degree and that all degree requirements are met. Consult the Degree Planning Guide on the SOUSA website for additional guidance.

List of Approved Freshman/Foundation Year Science Courses

Select the approved courses according to the instructions above.

Expand allContract all

Course	Title	Credits
ATOC 100	Extreme-Weather and Climate-Change Physics.	0-3
BIOL 111	Principles: Organismal Biology.	3
BIOL 112	Cell and Molecular Biology.	3
CHEM 110	General Chemistry 1.	4
CHEM 120	General Chemistry 2. ¹	4
COMP 202	Foundations of Programming.	3
ESYS 104	The Earth System.	3
GEOG 205	Global Change: Past, Present and Future.	3
MATH 133	Linear Algebra and Geometry.	3
PSYC 100	Introduction to Psychology.	3

¹ CHEM 120 General Chemistry 2. is not open to students who have taken CHEM 115.

First calculus course, one of:

Expand allContract all

Course	Title	Credits
MATH 139	Calculus 1 with Precalculus.	4
MATH 140	Calculus 1.	3
MATH 150	Calculus A.	4

Second calculus course, one of:

Expand allContract all

Course	Title	Credits
MATH 141	Calculus 2.	4
MATH 151	Calculus B.	4

First physics course, one of:

Expand allContract all

Course	Title	Credits
PHYS 101	Introductory Physics - Mechanics.	4
PHYS 131	Mechanics and Waves.	4

Second physics course, one of:

Expand allContract all

Course	Title	Credits
PHYS 102	Introductory Physics - Electromagnetism.	4
PHYS 142	Electromagnetism and Optics.	4

Electives

Students wishing to take elective courses may choose them from introductory courses offered by departments in the Faculties of Science or of Arts. A list of recommended courses is found at <http://www.mcgill.ca/science/student/newstudents/u0/bscfreshman/suggeste...> Certain courses offered by other faculties may also be taken, but some restrictions apply. Consult the SOUSA website at <http://www.mcgill.ca/science/student/continuingstudents/bsc/outside/> for more information about taking courses from other faculties.