<table>
<thead>
<tr>
<th>Year</th>
<th>Core</th>
<th>Additional</th>
<th>Electives</th>
</tr>
</thead>
</table>
| I    | 3 Units from:  
- Math 1A03  
- Math 1L33  
- Math 1M03  
| 9 Units from:  
- Science Level 1  
- Course List:  
| 12 units from Level 1 electives  
- |  
|  | 3 Units from:  
- Envir Sc 1C03  
| | |  
|  | 3 Units from:  
- Geog 1HA3  
- Geog 1HB3  
| | |  
| II   | 6 units from:  
- Envir Sc 2B03  
- Envir Sc 2C03  
- Envir Sc 2E03  
- Envir Sc 2W03  
| 3 units from:  
- Geog 2H3  
- Geog 2L3  
- Geog 2U3  
| 9-15 units; if not completed:  
- |  
|  | 6 units from:  
- Geog 2E13  
- Geog 2G13  
| 6 units from Level II Envir Sc:  
- |  
|  | 3 units from:  
- Geo 3ME3  
- Geo 3MF3  
| 3 units from:  
- Earth Sc 3RD3  
- Geo 3MA3  
| 9 units  
- |  
| III  | 6 units from Level III Envir Sc:  
- |  
|  | 6 units from Level III Geog:  
- |  
| IV   | 6 units from Level IV Envir Sc:  
- |  
|  | 6 units from Level IV Geog:  
- |  

Please note: No more than 48 units may be Level I courses

Please note that the Level 1 Science Course List excludes the following courses:

- BIOLOGY 1P03  
- CHEM 1R03  
- MATH 1F03  
- MATH 1K03  
- STATS 1L01

<table>
<thead>
<tr>
<th>Level II</th>
<th>Level III</th>
<th>Level IV</th>
<th>Level IV</th>
</tr>
</thead>
</table>
| EARTH SC 2K03  
| ENVIR SC 2B03  
| ENVIR SC 2C03  
| ENVIR SC 2E03  
| ENVIR SC 2W03  
| GEOG 2E13  
| GEOG 2H3  
| GEOG 2L3  
| GEOG 2R3C/2OC3  
| GEOG 2R4M3  
| GEOG 2R3U3  
| GEOG 2R3W3  
| GEOG 2T3C  
| GEOG 2T3S  
| GEOG 2U3  
| EARTH SC 3K03  
| ENVIR SC 3B03  
| ENVIR SC 3C03  
| ENVIR SC 3G03  
| ENVIR SC 3H03  
| ENVIR SC 3I03  
| ENVIR SC 3J03  
| ENVIR SC 3L03  
| ENVIR SC 3M03  
| ENVIR SC 3N03  
| ENVIR SC 3O03  
| ENVIR SC 3P03  
| ENVIR SC 3Q03  
| ENVIR SC 3R03  
| ENVIR SC 3S03  
| ENVIR SC 3T03  
| ENVIR SC 3U03  
| ENVIR SC 3V03  
| ENVIR SC 3W03  
| ENVIR SC 3X03  | 
| ENVIR SC 3Y03  | 
| ENVIR SC 3Z03  | 
| ENVIR SC 4B03  | 
| ENVIR SC 4C03  | 
| ENVIR SC 4D03  | 
| ENVIR SC 4E03  | 
| ENVIR SC 4F03  | 
| ENVIR SC 4G03  | 
| ENVIR SC 4H03  | 
| ENVIR SC 4I03  | 
| ENVIR SC 4J03  | 
| ENVIR SC 4K03  | 
| ENVIR SC 4L03  | 
| ENVIR SC 4M03  | 
| ENVIR SC 4N03  | 
| ENVIR SC 4O03  | 
| ENVIR SC 4P03  | 
| ENVIR SC 4Q03  | 
| ENVIR SC 4R03  | 
| ENVIR SC 4S03  | 
| ENVIR SC 4T03  | 
| ENVIR SC 4U03  | 
| ENVIR SC 4V03  | 
| ENVIR SC 4W03  | 
| ENVIR SC 4X03  | 
| ENVIR SC 4Y03  | 
| ENVIR SC 4Z03  | 
| GEOG 3E3  
| GEOG 3E4  
| GEOG 3E5  
| GEOG 3E6  
| GEOG 3E7  
| GEOG 3E8  
| GEOG 3E9  
| GEOG 3F3  
| GEOG 3F4  
| GEOG 3F5  
| GEOG 3F6  
| GEOG 3F7  
| GEOG 3F8  
| GEOG 3F9  
| GEOG 3G3  
| GEOG 3G4  
| GEOG 3G5  
| GEOG 3G6  
| GEOG 3G7  
| GEOG 3G8  
| GEOG 3G9  
| GEOG 3H3  
| GEOG 3H4  
| GEOG 3H5  
| GEOG 3H6  
| GEOG 3H7  
| GEOG 3H8  
| GEOG 3H9  
| GEOG 3I3  
| GEOG 3I4  
| GEOG 3I5  
| GEOG 3I6  
| GEOG 3I7  
| GEOG 3I8  
| GEOG 3I9  
| GEOG 3J3  
| GEOG 3J4  
| GEOG 3J5  
| GEOG 3J6  
| GEOG 3J7  
| GEOG 3J8  
| GEOG 3J9  
| GEOG 3K3  
| GEOG 3K4  
| GEOG 3K5  
| GEOG 3K6  
| GEOG 3K7  
| GEOG 3K8  
| GEOG 3K9  
| GEOG 3L3  
| GEOG 3L4  
| GEOG 3L5  
| GEOG 3L6  
| GEOG 3L7  
| GEOG 3L8  
| GEOG 3L9  
| GEOG 3M3  
| GEOG 3M4  
| GEOG 3M5  
| GEOG 3M6  
| GEOG 3M7  
| GEOG 3M8  
| GEOG 3M9  
| GEOG 3N3  
| GEOG 3N4  
| GEOG 3N5  
| GEOG 3N6  
| GEOG 3N7  
| GEOG 3N8  
| GEOG 3N9  
| GEOG 3O3  
| GEOG 3O4  
| GEOG 3O5  
| GEOG 3P3  
| GEOG 3P4  
| GEOG 3P5  
| GEOG 3P6  
| GEOG 3P7  
| GEOG 3P8  
| GEOG 3P9  
| GEOG 3Q3  
| GEOG 3Q4  
| GEOG 3Q5  
| GEOG 3Q6  
| GEOG 3Q7  
| GEOG 3Q8  
| GEOG 3Q9  
| GEOG 3R3  
| GEOG 3R4  
| GEOG 3R5  
| GEOG 3R6  
| GEOG 3R7  
| GEOG 3R8  
| GEOG 3R9  
| GEOG 3S3  
| GEOG 3S4  
| GEOG 3S5  
| GEOG 3S6  
| GEOG 3S7  
| GEOG 3S8  
| GEOG 3S9  
| GEOG 3T3  
| GEOG 3T4  
| GEOG 3T5  
| GEOG 3T6  
| GEOG 3T7  
| GEOG 3T8  
| GEOG 3T9  
| GEOG 3U3  
| GEOG 3U4  
| GEOG 3U5  
| GEOG 3U6  
| GEOG 3U7  
| GEOG 3U8  
| GEOG 3U9  
| GEOG 3V3  
| GEOG 3V4  
| GEOG 3V5  
| GEOG 3V6  
| GEOG 3V7  
| GEOG 3V8  
| GEOG 3V9  
| GEOG 3W3  
| GEOG 3W4  
| GEOG 3W5  
| GEOG 3W6  
| GEOG 3W7  
| GEOG 3W8  
| GEOG 3W9  
| GEOG 3X3  
| GEOG 3X4  
| GEOG 3X5  
| GEOG 3X6  
| GEOG 3X7  
| GEOG 3X8  
| GEOG 3X9  
| GEOG 3Y3  
| GEOG 3Y4  
| GEOG 3Y5  
| GEOG 3Y6  
| GEOG 3Y7  
| GEOG 3Y8  
| GEOG 3Y9  
| GEOG 3Z3  
| GEOG 3Z4  
| GEOG 3Z5  
| GEOG 3Z6  
| GEOG 3Z7  
| GEOG 3Z8  
| GEOG 3Z9  |
Notes Applicable to all Honours Earth and Environmental Sciences Programs

Earth and Environmental Sciences at McMaster encompass five major themes: Aqueous Environmental Geochemistry, Earth Sciences, Environmental Hydrology and Climate, Environmental Policy, GIS and Spatial Analysis. It should be noted that each thematic area has its own sequence of courses and prerequisites (see the Course Listings section in the Undergraduate Calendar). Students may elect to take some or all of the upper level courses from different areas. In addition, there is a set of courses encompassing research design, field work, internships, and the senior thesis or review paper.

AQUEOUS ENVIRONMENTAL GEOCHEMISTRY
EARTH SC 2003, 2L03, 3CC3, 3L03, 3M03, 3O03, 4CC3, 4N03

EARTH SCIENCES
EARTH SC 2E03, 2FE3, 2K03, 2T03, 3E03, 3K03, 3SR3, 3Z03, 4G03, 4J03, 4P03, 4T03, 4V03

ENVIRONMENTAL HYDROLOGY AND CLIMATE
EARTH SC 2B03, 2C03, 2W03, 3B03, 3CC3, 3N03, 3U03, 3W03, 4BB3, 4C03, 4W03, 4WB3

ENVIRONMENTAL POLICY
EARTH SC 2EI3, 4EA3; ENVIR SC 3EE3, 4HH3; GEOG 3EC3, 4ET3

GEOGRAPHIC INFORMATION SYSTEMS (G.I.S) AND SPATIAL ANALYSIS
EARTH SC 2GI3, 3GI3, 3SR3, 3GV3, 4GA3; GEOG 4GS3, 4GT3

Students aiming to meet the academic requirements for professional registration of Geoscientists in Ontario can find additional information on these requirements on the website: http://www.science.mcmaster.ca/geo/undergraduate/index.html. Students are encouraged to consult with the academic advisor in the School of Geography and Earth Sciences to ensure proper selection of courses for professional registration.

ADMISSION NOTES
1. Two of ENVIR SC 1C03 and 1G03 must be completed by the end of Level II.
2. GEOG 1HA3 and 1HB3 must be completed by the end of Level II.

ADMISSION
Completion of any Level 1 program with a Grade Point Average of at least 5.0 including:
3 units from ENVIR SC 1C03, 1G03 with a grade of at least C+ (See Admission Note 1 above)
3 units from GEOG 1HA3, 1HB3 with a grade of at least C+ (See Admission Note 2 above)

NOTE: Students who have satisfied all above admission criteria and have a Grade Point Average between 4.5 and 4.9 will be admitted to the program, on Program Probation. Students may be on Program Probation only once. Eligibility to continue in the program will require a Grade Point Average of at least 5.0 at the next academic review.

See front for complete set of course requirements

PROGRAM NOTES
1. Students are strongly encouraged to check prerequisites for upper-level Geog or Earth Sc courses. Chemistry, Mathematics, and Physics prerequisites exist in upper-level Earth Sciences courses. The prerequisites should be considered when selecting your courses.
2. All students are strongly encouraged to meet with an academic advisor in the School of Geography and Earth Sciences to discuss which course is most appropriate between EARTH SC 3RD3 and GEOG 3MA3, based on their area of interest.
3. The field components of GEOG 3ME3 and 3MF3 are normally taken outside of the normal term. Details are announced in March. All students are strongly encouraged to meet with an academic advisor in the School of Geography and Earth Sciences to discuss which course is most appropriate, based on their field of interest.
4. Students are strongly encouraged to complete both Level 1 ENVIR SC courses (ENVIR SC 1C03, 1G03).
5. Students are strongly encouraged to take as an elective at Level II one of GEOG 2EI3, 2HI3, 2LE3, 2TC3, 2TS3,
6. Students are not required but may combine courses in Geography and Environmental Sciences into major themes matching their interests, including:
   - Human Health and the Environment
     ENVIR SC 2L03, 3M03, 3O03, 4EA3, 4WB3; GEOG 2HI3, 3HH3, 3HP3, 4HH3
   - Transportation and the Environment
     ENVIR SC 3GV3, 4GA3; GEOG 3LA3, 3LT3, 4LP3
   - Urban Systems and Sustainability
     ENVIR SC 2EI3, 3EE3; GEOG 2UJ3, 3ER3, 3UP3, 3UR3, 4UT3