Health Sciences

Program Requirements
M.Sc. Health Sciences (5.0 credits)

Requirements:
1. 1.0 credit in:
   - HLTH 5901 [0.5] Advanced Topics in Interdisciplinary Health Sciences
   - HLTH 5902 [0.5] Seminars in Interdisciplinary Health Sciences for MSc

2. Completion of:
   - HLTH 5905 [0.0] Final Research Seminar Presentation for MSc

3. 4.0 credits in:
   - HLTH 5909 [4.0] MSc Thesis

4. Twice-yearly meetings with the thesis Graduate Advisory Committee, with students meeting a level of progress as determined by the Committee.

Total Credits 5.0

Note: the final research seminar presentation must be completed within one month of the thesis defence.

M.Sc. Health: Science, Technology and Policy (6.0 credits)

In consultation with the Graduate Advisor and potential project supervisor, students must carefully decide whether they wish to do a group or individual project. Whilst every effort will be made to accommodate this choice, there may not be a sufficient number of individual projects to go around, or some projects may be better suited for one type (group/individual) or the other. Students must be continually registered in the project (group/individual) for the duration of their degree program (5 terms). Students will not normally be able to change from the group to the individual project or vice-versa once a student has committed to one or the other.

Requirements:
1. 3.0 credits in:
   - HLTH 5100 [0.5] Fundamentals of Research Methods
   - HLTH 5150 [0.5] Statistics for Health Sciences
   - HLTH 5201 [0.5] Fundamentals of Policy I: Policy Analysis
   - HLTH 5300 [0.5] Knowledge Translation
   - HLTH 5350 [0.5] New Health Technologies
   - HLTH 5401 [0.5] Interdisciplinary Problems in Health

2. 1.0 credits in:
   - HLTH 5502 [1.0] Interdisciplinary Health Research Project - Group
   - or HLTH 5503 [1.0] Interdisciplinary Health Research Project - Individual

3. 2.0 credits from:
   a. HLTH selected topic elective courses focusing on areas of specific relevance to the health sector
      - HLTH 5151 [0.5] Principles of Epidemiology
      - HLTH 5202 [0.5] Fundamentals of Policy II: The Health Sector
   b. Courses offered by other graduate programs, selected with the guidance and permission of the supervisor of graduate studies and with the permission of the specific program and requiring the prior completion of prerequisites. Examples include:
      - PSYC 5209 [0.5] Psychology of Health and Illness
      - PHIL 5000 [0.5] Special Topic in Philosophy
      - SOCI 5209 [0.5] Sociology of Science and Technology
      - BIOM 5100 [0.5] Biomedical Instrumentation
      - COMS 5206 [0.5] Communication, Culture, Regulation
      - INAF 5705 [0.5] Global Social Policy
      - INAF 5706 [0.5] Global Health Policy
      - PADM 5221 [0.5] Health Policy in Canada
      - PADM 5222 [0.5] Economics and Health Policy
      - PADM 5229 [0.5] The Health of Populations
      - PADM 5817 [0.5] Health Policy in Developing Countries
      - SOWK 5102 [0.5] Political Economy of Health
      - SOWK 5302 [0.5] Mental Health
      - STAT 5600 [0.5] Mathematical Statistics I
      - STAT 5501 [0.5] Mathematical Statistics II
      - STAT 5602 [0.5] Analysis of Categorical Data
      - COMP 5308 [0.5] Topics in Medical Computing
      - PHYS 5204 [0.5] Physics of Medical Imaging
      - CHEM 5708 [0.5] Principles of Toxicology
      - CHEM 5709 [0.5] Chemical Toxicology
      - BIOL 5407 [0.5] Biostatistics I
      - BIOL 5515 [0.5] Bioinformatics
      - BIOL 5516 [0.5] Applied Bioinformatics
      - BIOL 6406 [0.5] Genetic Toxicology
      - NEUR 5201 [0.5] Statistics for Neuroscience I
      - NEUR 5202 [0.5] Statistics for Neuroscience II

Total Credits 6.0
M.Sc. Health Sciences
with Specialization in Data Science (5.5 credits)

Requirements (5.5 credits)

1. 1.0 credits in: 
   - HLTH 5901 [0.5] Advanced Topics in Interdisciplinary Health Sciences
   - HLTH 5902 [0.5] Seminars in Interdisciplinary Health Sciences for MSc

2. 0.5 credits in: 
   - DATA 5000 [0.5] Data Science Seminar

3. Completion of: 
   - HLTH 5905 [0.0] Final Research Seminar Presentation for MSc

4. 4.0 credits in: 
   - HLTH 5909 [4.0] MSc Thesis

5. Twice-yearly meetings with the thesis Graduate Advisory Committee, with students meeting a level of progress as determined by the Committee.

Total Credits 5.5

Note: The final research seminar presentation must be completed within one month of the thesis defence.

Graduate Diploma in Health: Science, Technology and Policy (2.0 credits)

The Diplomas are designed to be completed in one year. However, as it is understood that most students in the Diploma programs will either be working or full-time students in another graduate program, students may take the program on either a part-time or full-time basis.

Type 2 Diploma
For graduate students currently enrolled in other Carleton graduate programs.

Requirements:

1. 1.5 credits in: 
   - HLTH 5100 [0.5] Fundamentals of Research Methods
   - HLTH 5201 [0.5] Fundamentals of Policy I: Policy Analysis
   - HLTH 5300 [0.5] Knowledge Translation

2. 0.5 credit in electives from: 
   - a. HLTH selected topic elective courses focusing on areas of specific relevance to the health sector:
     - HLTH 5600 [0.25] Special Topics in Biostatistics and Epidemiology
     - HLTH 5601 [0.25] Special Topics in Health Policy and Administration
     - HLTH 5602 [0.25] Special Topics: Social and Behavioural
     - HLTH 5603 [0.25] Special Topics in Environmental Health
     - HLTH 5604 [0.25] Special Topics in the Science of Disease
     - HLTH 5605 [0.25] Special Topics: Engineering, Design and Computer Science
     - HLTH 5700 [0.25] Special Topics in Biostatistics and Epidemiology
     - HLTH 5701 [0.25] Special Topics in Health Policy and Administration

Total Credits 2.0

Type 3 Diploma
For individuals currently employed, or with the goal of employment in the health sector, who are not currently registered in another Carleton graduate program.

Requirements:

1. 0.5 credit in: 
   - HLTH 5300 [0.5] Knowledge Translation

2. 1.5 credits in: 
   - a. HLTH 5201 (recommended for students who do not have a strong policy background)
   - b. HLTH selected topic elective courses focusing on areas of specific relevance to the health sector:
     - HLTH 5600 [0.25] Special Topics in Biostatistics and Epidemiology
     - HLTH 5601 [0.25] Special Topics in Health Policy and Administration
     - HLTH 5602 [0.25] Special Topics: Social and Behavioural
     - HLTH 5603 [0.25] Special Topics in Environmental Health
     - HLTH 5604 [0.25] Special Topics in the Science of Disease
     - HLTH 5605 [0.25] Special Topics: Engineering, Design and Computer Science
     - HLTH 5700 [0.25] Special Topics in Biostatistics and Epidemiology
     - HLTH 5701 [0.25] Special Topics in Health Policy and Administration
     - HLTH 5702 [0.25] Special Topics: Social and Behavioural
     - HLTH 5703 [0.25] Special Topics in Environmental Health
     - HLTH 5704 [0.25] Special Topics in the Science of Disease
     - HLTH 5705 [0.25] Special Topics: Engineering, Design and Computer Science

Total Credits 2.0

Ph.D. Health Sciences (10.0 credits)

Requirements:

1. 1.5 credits in: 
   - HLTH 5901 [0.5] Advanced Topics in Interdisciplinary Health Sciences
   - HLTH 6902 [0.5] Seminars in Interdisciplinary Health Sciences
   - HLTH 6903 [0.5] Grant Proposals and Ethics
2. Completion of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 6904</td>
<td>Mid-Program Defence</td>
<td>0.0</td>
</tr>
<tr>
<td>HLTH 6905</td>
<td>Final Research Seminar Presentation</td>
<td>0.0</td>
</tr>
</tbody>
</table>

3. 8.5 credits in:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 6909</td>
<td>PhD Thesis</td>
<td>8.5</td>
</tr>
</tbody>
</table>

4. Twice-yearly meetings with thesis Graduate Advisory Committee, with students reaching a level of satisfaction as determined by the Committee.

Total Credits 10.0

Note: If the student fails to satisfy the requirements of HLTH 6904, he/she will be withdrawn from the program. The final research seminar presentation must be completed within one month of the thesis defence.

Regulations
See the General Regulations section of this Calendar.

M.Sc. Health: Science, Technology and Policy
Full-time candidates in the master's program are expected to complete their degree requirements within five terms (20 months) of first registration for full-time study.

Regulations
See the General Regulations section of this Calendar.

Admission
Applicants for the master's program will normally hold an Honours undergraduate degree or equivalent professional degree. Normally, an average of B+ or higher is required for admission. At least one university-level course in statistics is also required for admission. Applicants judged to be generally acceptable but deficient in some aspect of preparation may be asked to complete course-work in addition to the program requirements. In addition to transcripts and letters of reference, application packages will include a statement of interest explaining how the applicant's career goals are aligned with the program and a statement of expertise, including previous research and/or work experience. The admissions committee will also consider the requirement for an appropriate balance of academic backgrounds to provide the disciplinary expertise required for the group projects, which are designed to represent a mixed-discipline workplace in the health sector.

Students whose first language is not English, or who have not completed a previous degree at an English speaking university, must demonstrate an adequate command of English. Please refer to section 3.6 of the general regulations in the Graduate Calendar.

Admission
The normal requirement for admission into the Ph.D. program is an M.Sc. degree in a relevant field. Students who are in the Health Sciences M.Sc. program may be admitted to the Ph.D. program if they show outstanding academic performance and demonstrate significant promise for advanced research, upon recommendation of the student's Graduate Advisory Committee and approval by the Graduate Advisor.

Students may receive advanced standing with transfer of credit for up to 1.5 credits. Advanced standing will be considered only for core courses. It will be determined on an individual basis in consultation with the M.Sc Supervisor and the Faculty of Graduate and Postdoctoral Affairs and pursuant to Section 6.1 of the General Regulations section of this Calendar. In general, a grade of B+ or higher is necessary in the equivalent courses in order to receive advanced standing.

Note: students in the Diploma programs are not eligible to receive university funding.

Regulations
See the General Regulations section of this Calendar.

All candidates are required to obtain a grade of B or higher in each course in the program.

Regulations
See the General Regulations section of this Calendar.

All candidates are required to obtain a grade of B- or higher in each course in the program.

Admission
Applicants must have a bachelor's degree (or equivalent). Normally, an average of B+ or higher is required for admission. A university level course in statistics is also required for admission.

Students whose first language is not English, or who have not completed a previous degree at an English speaking university, must demonstrate an adequate command of English. Please refer to section 3.6 of the general regulations in the Graduate Calendar.

Note: students in the Diploma programs are not eligible to receive university funding through the program.