

Health: Science, Technology and Policy

- **M.Sc. Health: Science, Technology and Policy**
- **Graduate Diplomas in Health: Science, Technology and Policy**

M.Sc. Health: Science, Technology and Policy

About the Program

The master's program aims to provide students with the skills and training required to work at the interface between research and policy in the health sector. The program is designed to provide students with the interdisciplinary training and skills necessary for them to be highly marketable within decision-making contexts in the health and/or policy sectors. The emphasis on skill acquisition and a problem-based approach, in combination with the collaborative nature of the research component, are unique and distinctive features of the master's program that will train students to work effectively in cross-disciplinary teams.

Academic Regulations

Please 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 Requirements

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.

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.

Program Requirements

Full-time candidates in the master's program are expected to complete their degree requirements within 5 terms (20 months) of first registration for full-time study.

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

1. 2.5 credits in:	2.5
HLTH 5100 [0.5]	Fundamentals of Research Methods
HLTH 5201 [0.5]	Fundamentals of Policy I: Policy Analysis
HLTH 5300 [0.5]	Knowledge Mobilization
HLTH 5400 [1.0]	Interdisciplinary problems in Health
2. 2.0 credits in:	2.0
HLTH 5501 [2.0]	Collaborative Group Research Project
3. 1.5 credits from:	1.5
a. HLTH 5202 (recommended for students who do not have a strong health 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 [0.5]	Special Topics in Biostatistics and Epidemiology
HLTH 5701 [0.5]	Special Topics in Health Policy and Administration
HLTH 5702 [0.5]	Special Topics: Social and Behavioural
HLTH 5703 [0.5]	Special Topics in Environmental Health
HLTH 5704 [0.5]	Special Topics in the Science of Disease
HLTH 5705 [0.5]	Special Topics: Engineering, Design and Computer Science
c. 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
COMM 5206 [0.5]	Communication, Culture, and 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**

Graduate Diplomas in Health: Science, Technology and Policy

About the Program

The Type 2 and Type 3 Graduate Diplomas are designed to serve professional development needs. The Type 2 Diploma is for graduate students in other programs who seek to strengthen or broaden their conceptual and technical skills in particular areas of the broadly interdisciplinary field of health. The Type 3 diploma is for individuals currently employed, or with the goal of gaining employment, in the health sector, and who are not currently registered in a Carleton graduate program.

Academic 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 Requirements

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 HSTP program.

Program Requirements

Each of the Diplomas comprises 2.0 credits. The composition of the required and elective courses varies by specialization, as outlined below. 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)

Graduate Diplomas in Health: Science, Technology and Policy (Type 2 Diploma) (2.0 credits)

1. 1.5 credits in:	1.5
HLTH 5100 [0.5]	Fundamentals of Research Methods
HLTH 5201 [0.5]	Fundamentals of Policy I: Policy Analysis
HLTH 5300 [0.5]	Knowledge Mobilization
2. 0.5 credit in electives from:	0.5
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 [0.5]	Special Topics in Biostatistics and Epidemiology
HLTH 5701 [0.5]	Special Topics in Health Policy and Administration
HLTH 5702 [0.5]	Special Topics: Social and Behavioural
HLTH 5703 [0.5]	Special Topics in Environmental Health
HLTH 5704 [0.5]	Special Topics in the Science of Disease
HLTH 5705 [0.5]	Special Topics: Engineering, Design and Computer Science
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.	

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)

Graduate Diplomas in Health: Science, Technology and Policy (Type 3 Diploma) (2.0 credits)

1. 0.5 credit in: 0.5

HLTH 5300 [0.5] Knowledge Mobilization

2. 1.5 credits in: 1.5

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 [0.5] Special Topics in Biostatistics and Epidemiology

HLTH 5701 [0.5] Special Topics in Health Policy and Administration

HLTH 5702 [0.5] Special Topics: Social and Behavioural

HLTH 5703 [0.5] Special Topics in Environmental Health

HLTH 5704 [0.5] Special Topics in the Science of Disease

HLTH 5705 [0.5] Special Topics: Engineering, Design and Computer Science

Total Credits 2.0

HLTH 5100 [0.5 credit]

Fundamentals of Research Methods

Experimental design, statistical analysis and interpretation of results in health science research, principles and methods of epidemiology, fundamentals of research ethics.

Prerequisite(s): university-level statistics.

HLTH 5201 [0.5 credit]

Fundamentals of Policy I: Policy Analysis

Policy analysis and policy processes with an emphasis on the stages of the policy process, as well as the influences of institutions, ideas and interests.

HLTH 5202 [0.5 credit]

Fundamentals of Policy II: The Health Sector

Canadian health policies and programs with emphasis on the economics, politics and public administration of the healthcare sector.

HLTH 5300 [0.5 credit]

Knowledge Mobilization

This course focuses on knowledge mobilization, translation, transfer and exchange in the formulation of policy and the development of the skills required to maximize the impact of scientific findings through real world programs and policies and communication skills for diverse audiences.

Prerequisite(s): HLTH 5100, HLTH 5200.

HLTH 5400 [1.0 credit]

Interdisciplinary problems in Health

Development of an understanding of the scope and interdisciplinary nature of issues that impact the health of Canadians is the focus of this course.

Prerequisite(s): to be taken concurrently with HLTH 5100, HLTH 5200 and HLTH 5300.

HLTH 5501 [2.0 credits]

Collaborative Group Research Project

Student teams, supervised by a cross-disciplinary team of faculty, will collaborate on a project that addresses a real-world health concern.

Prerequisite(s): HLTH 5400.

HLTH 5600 [0.25 credit]

Special Topics in Biostatistics and Epidemiology

Selected topics in biostatistics and epidemiology, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5601 [0.25 credit]

Special Topics in Health Policy and Administration

Selected topics in health policy and administration, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5602 [0.25 credit]

Special Topics: Social and Behavioural

Selected topics in the social and behavioural sciences, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5603 [0.25 credit]

Special Topics in Environmental Health

Selected topics in environmental health, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5604 [0.25 credit]**Special Topics in the Science of Disease**

Selected topics in the science of disease, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5605 [0.25 credit]**Special Topics: Engineering, Design and Computer Science**

Selected topics in applications of engineering, design or computer science in health, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5700 [0.5 credit]**Special Topics in Biostatistics and Epidemiology**

Selected topics in biostatistics and epidemiology, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5701 [0.5 credit]**Special Topics in Health Policy and Administration**

Selected topics in health policy and administration, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5702 [0.5 credit]**Special Topics: Social and Behavioural**

Selected topics in the social and behavioural sciences, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5703 [0.5 credit]**Special Topics in Environmental Health**

Selected topics in environmental health, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5704 [0.5 credit]**Special Topics in the Science of Disease**

Selected topics in the science of disease, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5705 [0.5 credit]**Special Topics: Engineering, Design and Computer Science**

Selected topics in applications of engineering, design or computer science in health, focusing on areas of specific relevance to the health sector, not available in regular program offerings. These courses are designed to provide depth of expertise and/or specific skills relevant to the workplace.

HLTH 5800 [0.5 credit]**Directed Studies in Health: Science, Technology and Policy**

One-to-one instruction in selected aspects of specialized Health: Science and Technology subjects not covered by other graduate courses. Students may not take this course from their project supervisor(s), and are limited to one directed studies course per program.

Prerequisite(s): permission of the director of Health: Science, Technology and Policy.

Summer session: some of the courses listed in this Calendar are offered during the summer. Hours and scheduling for summer session courses will differ significantly from those reported in the fall/winter Calendar. To determine the scheduling and hours for summer session classes, consult the class schedule at central.carleton.ca

Not all courses listed are offered in a given year. For an up-to-date statement of course offerings for the current session and to determine the term of offering, consult the class schedule at central.carleton.ca