HONOURS BACHELOR OF SCIENCE TRANSLATIONAL AND MOLECULAR MEDICINE AND MSC

The Bachelor of Science with Honours in Translational and Molecular Medicine (TMM) is a unique collaborative effort between the Faculty of Medicine's researchers and its affiliated institutes. The program integrates theoretical and practical courses with elearning, offering students an enriching educational environment and exposing them to innovative research throughout their studies. TMM offers the largest number of advanced laboratories for an undergraduate program in Canada. Students are taught by both basic scientists and clinicians, providing them with the skillsets required to perform cutting-edge biomedical research.

Three program options are available: Honours in Translational and Molecular Medicine, Integrated Honours BSc/MSc in Biochemistry, Cellular and Molecular Medicine, Microbiology and Immunology or Neuroscience, and the Integrated BSc/PhD program in the same disciplines.

Admission Requirements

For the Integrated Honours BSc/MSc, all the requirements for admission for the Honours BSc in Translational and Molecular Medicine must be met along with minimum admission average of 8.0 (CGPA) and an admission interview.

Program Requirements

The French immersion stream is available with this program.

Basis of admission: two full years of study in a BSc. (60 units)

Compulsory Courses		
TMM 3009	Biomedical Research Laboratory	9 Units
TMM 3101	Molecular Biology and Inherited Disorders	3 Units
TMM 3102	Proteins: Structure, Function and Disease	3 Units
TMM 3103	Metabolic Pathways of Human Diseases	3 Units
TMM 3104	Cellular Basis of Disease	3 Units
TMM 3300	Selected Topics in Translational and Molecular Medicine	3 Units
TMM 4906	Life in a Lab I	1.5 Units
TMM 4907	Life in a Lab II	1.5 Units
TMM 4950	Science Communication	3 Units
TMM 5900	Research Project	12 Units
MED 8166	Professionalism and Professional Skills	
3 course units from:		3 Units
PHS 3341	Physiology of Sensation, Regulation Mechanisms, Movement and Reproduction	
PHS 3342	Physiological Regulation of Intake, Distribution, Protection and Elimination	
TMM 3105	Introduction to Immunology	
TMM 3106	Introduction to Neurobiology	
TMM 3107	Introduction to Genomics	
TMM 3108	Introduction to Medical Bioinformatics	
TMM 3300	Selected Topics in Translational and Molecular Medicine	
TMM 3301	Introduction to Inquiry Based Research	
TMM 3302	Current Topics in Precision Medicine	
TMM 3902	Current Topics in Translational Medicine	
Compulsory course for the microbiology program		
MIC 5100	Pathogen Interactions and Host	3 Units
Compulsory course for the neuroscience program		
3 course units from:		3 Units
NSC 5102	Cellular and Molecular Neuroscience	
NSC 5104	Systems Neuroscience	
Seminar		
3 units of seminar courses from the list depending on the discipline of the Master's Degree		3 Units
BCH 5366	MSc Seminar	
CMM 8324S	Seminars I	
MIC 5366	MSc Seminar	
NSC 8324S	Seminar for MSc Students	
Thesis		
THM 7999	Master's Thesis	
Optional Courses		
6 optional course units in biochemistry (BCH), cellular and molecular medicine (CMM), medicine (MED), microbiology and immunology (MIC) or neuroscience (NSC) at from the 5000, 6000, 7000 or 8000 level		6 Units
Elective Courses		
6 elective course units from another faculty [1]		6 Units

Note(s)

[1] PHI 2396 is strongly recommended.