The minimum course requirements for the M.A.Sc. program are four term-length graduate courses or their equivalent. One term length senior (400-series) undergraduate course, OR one combined undergraduate/graduate course (also known as a double numbered 400/800 course) may be accepted as the equivalent of a graduate course from any discipline for an M.A.Sc. student provided that a) the course is approved by the student's supervisor and b) the student has not received credit for a similar course in their Bachelor's program.

In Chemistry, the M.A.Sc. program includes a thesis (CHEM-899) based on independent research and six module lecture courses (each equivalent to one-half of a term course) or the equivalent of three term lecture courses beyond the Bachelor's degree, plus CHEM 801 Safety in the Laboratory, CHEM 802 Chemistry Seminar Program and CHEM 803 Principles of Scientific Communication. Unless permission is obtained from the supervisor and coordinator of graduate studies at least four modules (excluding CHEM 801, CHEM 802, CHEM 803) must be from among those offered by the Department of Chemistry.

Students must pass departmental safety and Workplace Hazardous Materials Information System (WHMIS) training at the earliest possible opportunity.