CHEMISTRY, PH.D.

Degree Requirements

For students entering the Ph.D. program directly from a B.Sc., a minimum of 15 credit hours of course work at the 7000 level, including CHEM 7900, are required.

For students entering the Ph.D. program with a recognized M.Sc. degree, students must complete CHEM 7900 if they have not already done so at an earlier stage, and an additional 6 credit hours of course work at the 7000 level.

Additional courses (undergraduate or graduate level) may be recommended by the advisory committee to make up for specific deficiencies in preparation of a specific student for a specific research topic. These courses will be designated as "O" on the PhD Program of Study Form. Fees will be assessed but they will not count towards the total degree credit hours.

Attendance at departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

Colloquium: A weekly colloquium is given by members of staff or external invited lecturers. All graduate students and fourth-year Honours students are expected to attend the colloquia.

Expected Time to Graduate: 4-5 years (from 4 year B.Sc.); 3 years (from M.Sc.).

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ACS Placement Test [1]		0
CHEM 7900	Seminar in Current Research Issues in Chemistry [2]	3
COURSE 7XXX	Two to four additional courses at the 7000 level [3]	6-12
GRAD 8000	Doctoral Thesis [4]	0
Department Seminars/Colloquia [5]		0
	Hours	**9-15**
Year 2		
GRAD 8010	Doctoral Candidacy Examination [6]	0
Department Seminars/Colloquia [5]		0
	Hours	**0**
Year 3		
Colloquium (departmental) seminar [7]		0
Department Seminars/Colloquia [5]		0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis [8]	0
Department Seminars/Colloquia [5]		0
	Hours	**0**
	Total Hours	**9-15**

[1] Administered by the department, this placement test written in the chosen sub-discipline (e.g., Analytical, Biochemistry, Inorganic…) will help orient the student's course selection.

[2] Does not need to be re-taken if completed in the MSc stream.

[3]
- **For direct entry or transfer from U of M Chemistry MSc stream holding a recognized MSc degree:** Two additional courses at the 7000 level
- **For direct entry or transfer without a recognized MSc degree:** Four additional courses at the 7000 level

[4] Submitted to the advisory committee before the end of the student's first year in the graduate program.

[5] Attendance at all departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

[6] The candidacy examination will normally be held near the end of the student's second year in the graduate program.

[7] Before the end of the third year, a candidate must present a 45 – 50 minute seminar to the Department on the background to and results of their own research. Scheduled by the Department Seminar Coordinator.

[8] The oral thesis defence should take place near the end of the student's fourth year in the program.