

5-Year PhD Program (MSc to PhD Transfer; Direct Entry PhD)

Stream	1st Year	2nd Year	3rd year	4th Year – achieved PhD Candidacy	5th year
Analytical	1-2 grad courses	*1-2 grad courses *1 st <i>research-based</i> seminar	*Normally, complete 4 th grad course *Normally, achieve 30 ASP points *6 months after completing courses; pass comprehensive departmental oral exam (DOE)	*2 nd <i>research-based</i> seminar	ABD – All But Dissertation
Environmental	1-2 grad courses	*1-2 grad courses *1 st seminar (<i>Research proposal, on a topic other than the primary research topic</i>)	*Complete 4 th grad course *Pass comprehensive departmental oral exam (DOE)		ABD – All But Dissertation *2 nd seminar FOE (<i>original research</i>)
Inorganic	1-2 grad courses	*1-2 grad courses *1 st seminar (<i>research</i>)	*Complete 4 th grad course *2 nd seminar (<i>original research proposal</i>) *6 months after completing courses; pass comprehensive departmental oral exam	*3 rd seminar (<i>research</i>)	ABD – All But Dissertation
Biological	1-2 grad courses	*1-2 grad courses *1 st seminar (<i>literature-based</i>) *Pass 7 cumulative exams, ideally	*Complete 4 th grad course *Pass comprehensive departmental oral exam	*2 nd seminar (<i>research-based</i>)	ABD – All But Dissertation
Organic	2 grad courses	*2 grad courses *1 st seminar (<i>literature-based</i>)	*complete courses <i>if necessary</i> *Pass 7 cumulative exams by end of 1st term *Pass comprehensive departmental oral exam in 2nd term	*2nd seminar (<i>research</i>)	ABD – All But Dissertation
Experimental (Physical Chemistry & Chemical Physics)	1-2 grad courses	*1-2 grad courses *1 st seminar (presentation on <i>original research</i>) *Consult with supervisor regarding timing of comprehensive oral exam.	*Complete 4 th grad course	*Pass comprehensive departmental oral exam *2 nd seminar (presentation on the <i>original research</i>)	ABD – All But Dissertation

Theoretical (Chemical Physics & Physical Chemistry)	1-3 grad courses	*1-3 grad courses *1 st seminar original research	*Complete 6 th grad course	*Pass comprehensive departmental oral exam (consult with supervisor in your 2nd year with regards to timing) *2 nd seminar original research)	ABD – All But Dissertation
Polymers & Materials	*1-2 grad courses *1 st seminar (<i>literature talk</i>)	*1-2 grad courses *2 nd seminar (<i>presentations on the original research</i>)	*Complete 4 th grad course	*Pass comprehensive departmental oral exam *3 rd seminar (<i>presentations on the original research</i>)	ABD – All But Dissertation
Interdisciplinary	*1-2 grad courses *seminar requirement will depend on the chosen stream	*1-2 grad courses *Complete final course credit requirement *seminar requirement will depend on the chosen stream *Consult with supervisor regarding timing of comprehensive oral exam.	*Complete 4 th grad course *seminar requirement will depend on the stream chosen	*Pass comprehensive departmental oral exam *seminar requirement will depend on the chosen stream	ABD – All But Dissertation *seminar requirement will depend on the chosen stream

Students may achieve PhD candidacy between third and fourth years.