

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 *CHM3000 *4-5 hours of professional development (PD) activities	*1-2 grad courses *1 st <i>research-based</i> seminar *4-5 hours of professional development (PD) activities	*Normally, complete 4 th grad course *Normally, achieve 30 ASP points *6 months after completing courses; pass comprehensive departmental oral exam (DOE) *4-5 hours of professional development (PD) activities	*2 nd <i>research-based</i> seminar *4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)	ABD – All But Dissertation *Complete at least 24 PD hours before scheduling final oral exam
Environmental	*1-2 grad courses *CHM3000 *4-5 hours of professional development (PD) activities	*1-2 grad courses *1 st seminar (<i>Research proposal, on a topic other than the primary research topic</i>) *4-5 hours of professional development (PD) activities	*Complete 4 th grad course *Pass comprehensive departmental oral exam (DOE) *4-5 hours of professional development (PD) activities	*4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)	ABD – All But Dissertation *2 nd seminar FOE (<i>original research</i>) *Complete at least 24 PD hours before scheduling final oral exam
Inorganic	*1-2 grad courses *CHM3000 *4-5 hours of professional development (PD) activities	*1-2 grad courses *1 st seminar (<i>research</i>) *4-5 hours of professional development (PD) activities	*Complete 4 th grad course *2 nd seminar (<i>original research proposal</i>) *6 months after completing courses; pass comprehensive departmental oral exam *4-5 hours of professional development (PD) activities	*3 rd seminar (<i>research</i>) *4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)	ABD – All But Dissertation *Complete at least 24 PD hours before scheduling final oral exam
Biological	*1-2 grad courses *CHM3000 *4-5 hours of professional development (PD) activities	*1-2 grad courses *1 st seminar (<i>literature-based</i>) *Pass 6 cumulative exams, ideally *4-5 hours of professional development (PD) activities	*Complete 4 th grad course *Pass comprehensive departmental oral exam *4-5 hours of professional development (PD) activities	*2 nd seminar (<i>research-based</i>) *4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)	ABD – All But Dissertation *Complete at least 24 PD hours before scheduling final oral exam

Organic	*2 grad courses *CHM3000 *4-5 hours of professional development (PD) activities	*2 grad courses *1st seminar (<i>literature-based</i>) *4-5 hours of professional development (PD) activities	*complete courses <i>if necessary</i> *Pass 6 cumulative exams by end of 1st term *Pass comprehensive departmental oral exam in 2nd term *4-5 hours of professional development (PD) activities	*2nd seminar (<i>research</i>) *4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)	ABD – All But Dissertation *Complete at least 24 PD hours before scheduling final oral exam
Experimental (Physical Chemistry & Chemical Physics)	*1-2 grad courses *CHM3000 *4-5 hours of professional development (PD) activities	*1-2 grad courses *1st seminar (presentation on <i>original research</i>) *Consult with supervisor regarding timing of comprehensive oral exam. *4-5 hours of professional development (PD) activities	*Complete 4 th grad course *4-5 hours of professional development (PD) activities	*Pass comprehensive departmental oral exam *2nd seminar (presentation on the <i>original research</i>) *4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)	ABD – All But Dissertation *Complete at least 24 PD hours before scheduling final oral exam
Theoretical (Chemical Physics & Physical Chemistry)	*1-3 grad courses *CHM3000 *4-5 hours of professional development (PD) activities	*1-3 grad courses *1st seminar original research *4-5 hours of professional development (PD) activities	*Complete 6 th grad course *4-5 hours of professional development (PD) activities	*Pass comprehensive departmental oral exam (consult with supervisor in your 2nd year with regards to timing) *2nd seminar original research) *4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)	ABD – All But Dissertation *Complete at least 24 PD hours before scheduling final oral exam
Polymers & Materials	*1-2 grad courses *1st seminar (<i>literature talk</i>) *CHM3000 *4-5 hours of professional development (PD) activities	*1-2 grad courses *2nd seminar (<i>presentations on the original research</i>) *4-5 hours of professional development (PD) activities	*Complete 4 th grad course *4-5 hours of professional development (PD) activities	*Pass comprehensive departmental oral exam *3rd seminar (<i>presentations on the original research</i>) *4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)	ABD – All But Dissertation *Complete at least 24 PD hours before scheduling final oral exam
Interdisciplinary	*1-2 grad courses *seminar requirement will	*1-2 grad courses *Complete final course credit requirement	*Complete 4 th grad course *seminar requirement will depend on the stream chosen	*Pass comprehensive departmental oral exam	ABD – All But Dissertation

	<p>depend on the chosen stream *CHM3000 *4-5 hours of professional development (PD) activities</p>	<p>*seminar requirement will depend on the chosen stream *Consult with supervisor regarding timing of comprehensive oral exam. *4-5 hours of professional development (PD) activities</p>	<p>*4-5 hours of professional development (PD) activities</p>	<p>*seminar requirement will depend on the chosen stream *4-5 hours of professional development activities (may achieve PhD candidacy with at least 19 total PD hours)</p>	<p>*seminar requirement will depend on the chosen stream *Complete at least 24 PD hours before scheduling final oral exam</p>
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Students may achieve PhD candidacy between third and fourth years.