The Chemistry Major At Holy Cross

https://www.holycross.edu/academics/programs/chemistry

This document is meant to provide additional information regarding sequencing of courses for the Chemistry Major. Most up to date information can be found by navigating to our department webpage and by referring to the College course catalog.

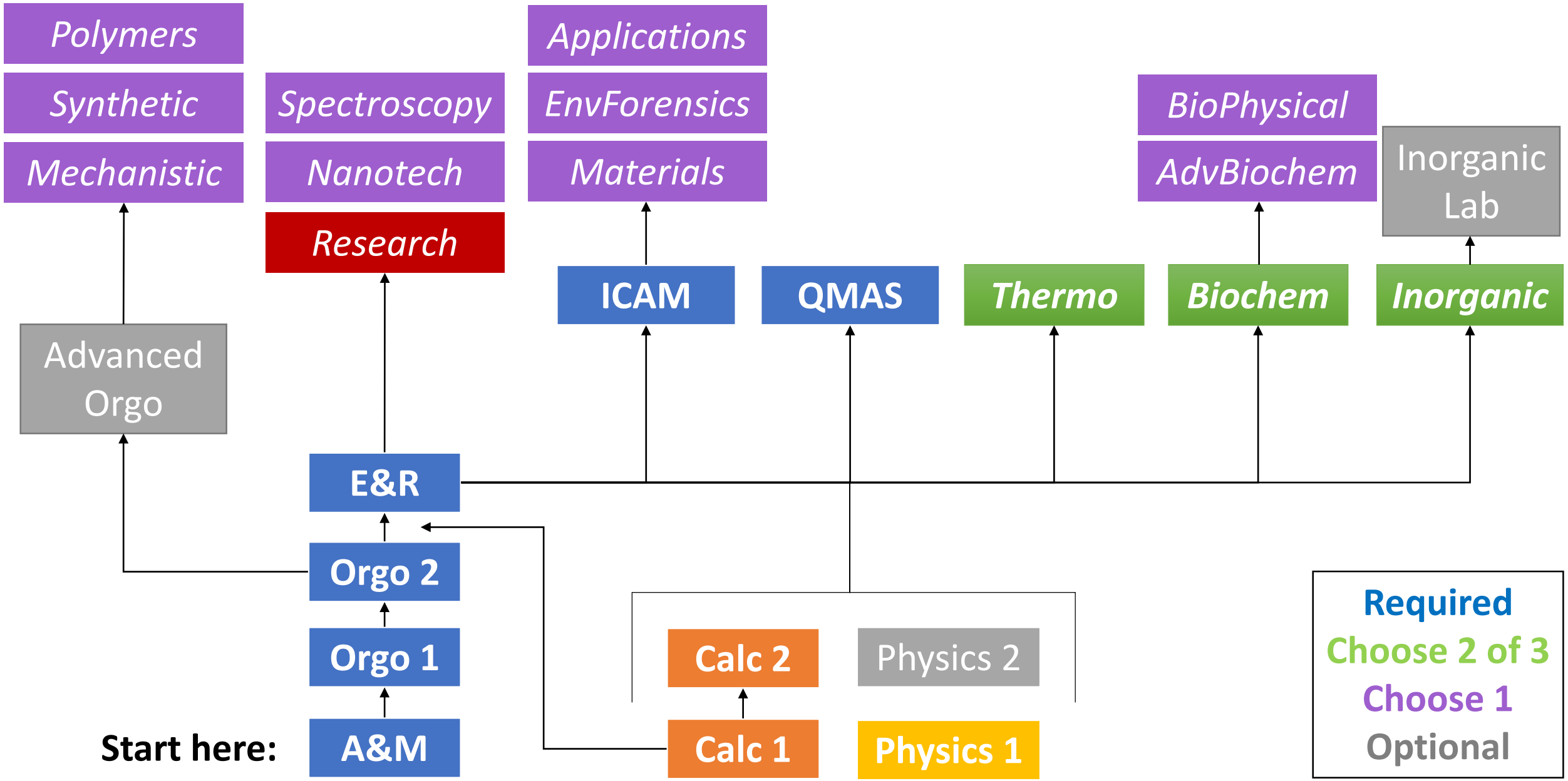
Students who want to major in Chemistry typically begin with Atoms & Molecules (A&M) in their first semester. Students then take Organic Chemistry 1 & 2 in sequence, followed by Equilibrium & Reactivity (E&R).

The 300 level courses can be taken in any order. Typically, students take Instrumental Chemistry (ICAM) and Quantum Mechanics (QMAS) in their third year.

As they are pre-requisites for many upper level courses, it is best to complete Calculus in the first year and Physics in the second year.

Created March 2022

The Holy Cross Chemistry Major Flow Chart



Chemistry Major Example Schedules

These schedules indicate various ways students can navigate the chemistry major.
Please note that there is flexibility in the sequence of the upper level courses.

These first schedules show our typical pathway, as well as a pathway for folks on a premed/prehealth track.

Chemistry Major Sequence - Typical

Year	Fall	Spring
1	A&M Calc 1	Orgo 1 Calc 2
2	Orgo 2 Physics 1	E&R Advanced Orgo Physics 2
3	ICAM Biochem or Thermo	QMAS
4	Biochem or Thermo	Inorganic with lab Elective

Chemistry Major Sequence - PreMed

Year	Fall	Spring
1	A&M Calc 1	Orgo 1 Calc 2
2	Orgo 2 Bio 1	E&R Bio 2 Advanced Orgo
3	ICAM Physics 1	QMAS Physics 2
4	Biochem and/or Thermo	Inorganic with lab Elective

These schedules show variations for students who may start the introductory sequence after the first semester.

Chemistry Major Sequence – Start in Spring or Sophomore Year

Year	Fall	Spring
1	Calc 1	A&M
2	E&R Physics 1	Orgo 1 Calc 2
3	Orgo 2 ICAM	QMAS
4	Biochem and/or Thermo	Inorganic Elective

Year	Fall	Spring
1	Calc 1	Calc 2
2	A&M Physics 1	Orgo 1 E&R
3	Orgo 2 ICAM	QMAS
4	Biochem and/or Thermo	Inorganic Elective

Year	Fall	Spring
1	Calc 1	Calc 2
2	A&M Physics 1	Orgo 1 Physics 2
3	Orgo 2 E&R	Biochem and/or Inorganic
4	ICAM Biochem or Thermo	QMAS Elective

These schedules show options for students who wish to study abroad.

Chemistry Major Sequence – Study Abroad

Year	Fall	Spring
1	A&M Calc 1	Orgo 1 Calc 2
2	Orgo 2 Physics 1	E&R Advanced Orgo
3	*Elective*	*Thermo or Inorganic*
4	ICAM Biochem or Thermo	Inorganic QMAS

Year	Fall	Spring
1	A&M Calc 2	Orgo 1 E&R
2	Orgo 2 Physics 1	Biochemistry Advanced Orgo
3		
4	ICAM Elective	QMAS Inorganic

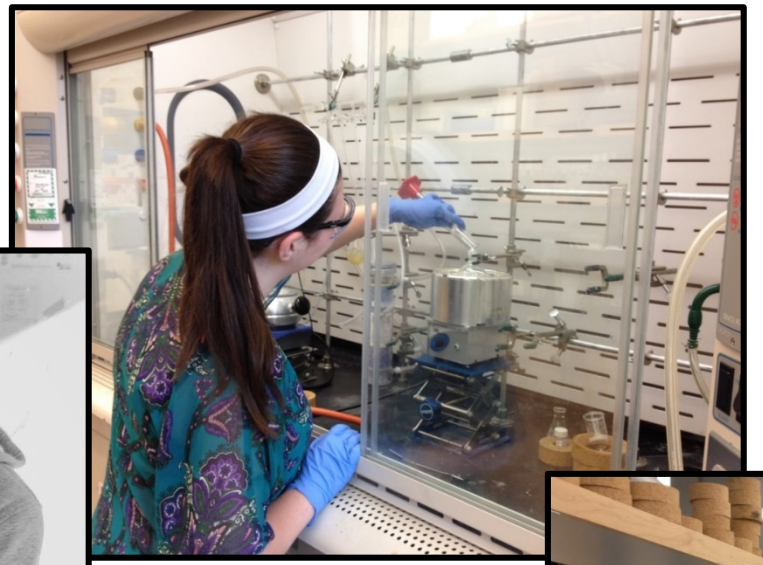
This schedule shows how students could receive certification of their degree from the American Chemical Society (ACS).

Chemistry Major Sequence – ACS Certification

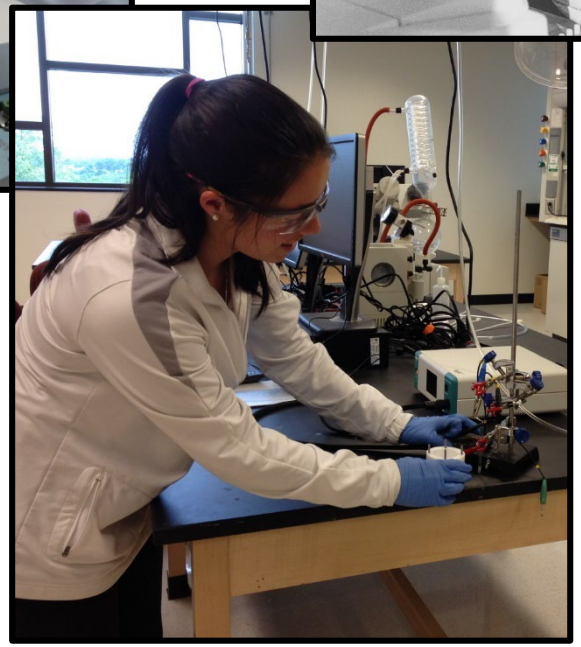
Year	Fall	Spring
1	A&M Calc 1	Orgo 1 Calc 2
2	Orgo 2 Physics 1	E&R Advanced Orgo Physics 2
3	ICAM Biochem	QMAS
4	Thermo Research	Inorganic with lab Elective Research with report

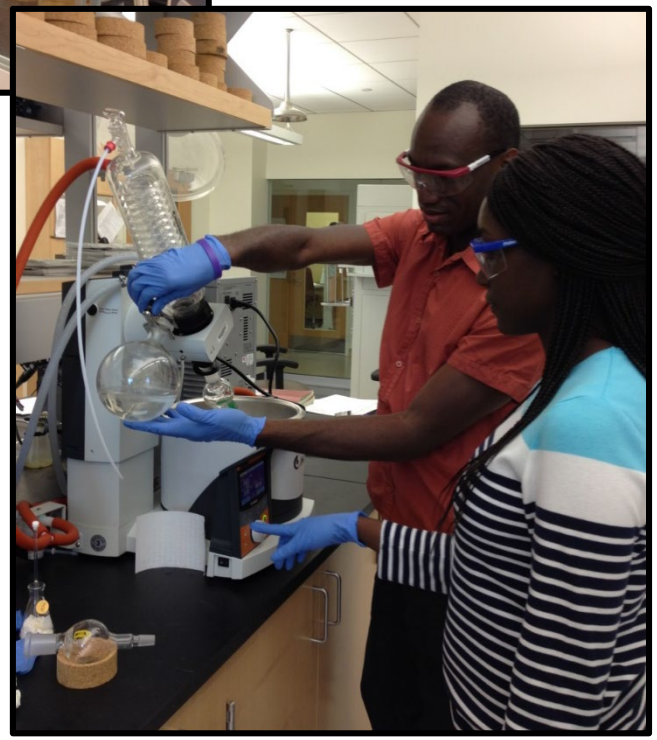
https://www.holycross.edu/academics/programs/chemistry/requirements

Chemistry Research



Work one on one with Holy Cross professors in their research lab on campus





For credit and not for credit options typically beginning in the junior year

Look for an application information session in late January for research the following summer or academic year

https://www.holycross.edu/academics/programs/chemistry/research