## **CHEMISTRY (PH.D.)**

## **Admission Requirements**

Admission to this program is contingent upon admission to the Graduate School (http://bulletins.wayne.edu/graduate/general-information/admission/). All applications for admission to the doctoral program in chemistry and all adjustments in the program subsequent to admission must have the approval of the Graduate Officer of the Department of Chemistry.

A minimum undergraduate grade point average of 3.0 in chemistry and cognate science is required except by special permission of the Departmental Committee on Graduate Study. An applicant having a master's degree from another institution must show a grade point average of at least 3.0 ('B').

Transfer from the Master's Program to the Ph.D. Program: In order to transfer to the Ph.D. program, a student must accumulate a minimum of nine credits in chemistry course work numbered 6040-8690 with a grade point average of at least 3.25. An applicant having a lower average must earn the master's degree with a superior academic record before acceptance as a doctoral applicant.

## **Program Requirements**

Questions regarding requirements should be addressed to the Academic Services Officer. The Doctor of Philosophy degree requires sixty credits beyond the baccalaureate degree which must include the following:

- A minimum of six courses (eighteen credits) in graduate course work
  of which at least nine credits must be in chemistry courses at the
  7000 level or above; not less than six credits shall be from outside
  the major division of specialization. Additional courses beyond
  the required six may be specified by the student's Ph.D. advisor or
  committee to address deficiencies or to develop expertise in one or
  more specific research areas.
- Credit by Examination: Well-prepared students may receive up to nine credits by passing the final examinations in 6000- or 7000-level courses. These may be in either the major or minor fields.
- 3. Four credits of graduate seminar.

Code	Title	Credits
CHM 8800	Seminar in Analytical Chemistry	1
CHM 8810	Seminar in Organic Chemistry	1
CHM 8820	Seminar in Inorganic Chemistry	1
CHM 8830	Seminar in Physical Chemistry	1
CHM 8840	Seminar in Biochemistry	1

- 4. One credit in CHM 8850 Frontiers in Chemistry.
- 5. One credit in CHM 6740 Laboratory Safety.
- Zero credit in GS 0900 Essential Research Practices: Responsible Conduct of Research.
- 7. Two credits in CHM 7770 Proposals in Chemical Research.
- Sixteen credits of elective credit. Students can fulfill these elective credits by taking additional coursework or completing independent research in CHM 8700.
- Eighteen credits in Ph.D. research involving independent research under the direction of a faculty member in the Department. The thirty credit dissertation registration requirement is fulfilled by registering for the courses:

Code	Title	Credits
CHM 9991	Doctoral Candidate Status I: Dissertation	3-9
	Research and Direction	

CHM 9992 Doctoral Candidate Status II: Dissertation 1-18
Research and Direction

Doctoral Dissertation Research and Direction I, and II in consecutive academic year semesters.

10. Submission of a satisfactory research dissertation.

Academic Scholarship: All course work must be completed in accordance with the regulations of the Graduate School (http://bulletins.wayne.edu/graduate/general-information/academic-regulations/) and the College of Liberal Arts and Sciences (http://bulletins.wayne.edu/graduate/college-liberal-arts-sciences/academic-regulations/).

Candidacy: In order to become a candidate for the Ph.D. degree, an applicant must successfully complete both a written and oral qualifying examination. The written examination consists of an independent research proposal. The oral examination includes the major field and covers minor and cognate fields as well. Any additional requirements set by the Graduate School or the department must be completed. Copies of such requirements may be obtained from the Chairperson of the Departmental Committee on Graduate Study.