

## Doctor of Philosophy (Ph.D.) Chemistry

### Degree Program

**Coursework:** A minimum of 60 hours is required, including research hours. Incoming doctoral students must demonstrate proficiency in organic, inorganic, physical, and analytical chemistry within one year of initial enrollment. Coursework beyond the master's degree includes 21 hours prior to dissertation.

**Qualifying Examination:** The format of the qualifying examination depends upon the student's area of emphasis but generally consists of either comprehensive written and/or oral examinations, usually administered near the end of the 4th semester, or a series of cumulative examinations given eight times a year. In the latter case, a student must pass a minimum of two cumulative examinations per year and eight cumulative examinations before the end of the 6th semester. At least six of these cumulative examinations must be in the student's area of specialization.

**Dissertation:** All students must defend orally a written dissertation proposal to their dissertation committee. A dissertation embodying the results of original research must be accepted by the Department of Chemistry and Biochemistry and the Graduate School.

**Other Requirements:** At least one semester of teaching is required. After the third year in the program, students must give an annual seminar, the first of which may be the defense of the doctoral dissertation proposal.

### Emphasis Areas and Program Website

Biochemistry, Inorganic, Organic or Physical Chemistry

<http://umsl.edu/go/Chem-PhD>

### Application Requirements

1. Application <http://umsl.edu/go/Apply-Now>
2. Three letters of recommendation from previous professors
3. Official transcripts from all universities attended
  - a. Applicants must have at least a baccalaureate degree with above-average performance in all areas of chemistry as well as physics and mathematics, or other evidence of high aptitude for graduate work in chemistry.
4. Entrance examinations
  - a. Graduate Record Examination scores are optional but may be recommended in some cases. (<http://www.gre.org/ttindex.html>).
  - b. International students are required to document English proficiency by providing scores from an internationally accepted standardized examination before a decision is made on admission.
5. Grade Point Average:
  - a. Minimum of 3.0 on 4.0 scale overall.

### **Application Deadline**

Domestic applicants: Fall Semester: July 1 Winter/Spring admission: December 1

International applicants: Fall Semester: February 21 Spring admission: September 1

### **Application Fee**

\$50 for domestic applicants; \$40 for international applicants

### **Assistantships**

Graduate Assistantships, for those entering the Ph.D. program in either August or January, are presently funded \$21,000. In addition, a number of competitive research fellowships are available to the most highly qualified students. A tuition scholarship for graduate coursework is provided by the Graduate School. Applications for assistantships are sent to the Director of Graduate Studies.

### **Graduate Program Director**

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