POLYMER SCIENCE, PHD

Doctor of Philosophy in Polymer Science

An interdisciplinary program leading to the Doctor of Philosophy in Polymer Science is administered by the Department of Polymer Science. Graduates from the four main disciplines (chemistry, physics, biomaterials, and engineering) are guided into the appropriate courses of study and research in that field under the supervision of a faculty member. Students may be admitted directly to the Ph.D. program upon screening of their qualifications and recommendation by the Admission Committee.

In addition to satisfying the general requirements of the Graduate School, a student working toward the Doctor of Philosophy in Polymer Science must meet the following requirements:

- Complete a course of study prescribed by the student’s advisory committee based on the committee’s judgment of the student’s background and on the result of any special examinations it might impose. This course will consist of a minimum of, but usually more than, 38 credits in graduate courses, or their equivalent, plus sufficient Ph.D. research credits to make a total of 84 credits (exclusive of Master of Science thesis credit).
- Attendance and participation in seminar-type discussions scheduled by the department.
- At least 18 credits of graduate course work and all dissertation credits must be completed at the University.

There is a university minimum residence time requiring one year, although graduate students starting with a B.S. or B.A. typically spend four years in residence.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>9871:601</td>
<td>Polymer Chemistry</td>
<td>4</td>
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<td>9871:607</td>
<td>Seminar in Polymer Science I</td>
<td>1</td>
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<td>9871:613</td>
<td>Polymer Science Laboratory</td>
<td>3</td>
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<td>9871:631</td>
<td>Polymer Physics I</td>
<td>4</td>
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<td>9871:632</td>
<td>Polymer Physics II</td>
<td>4</td>
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<td>9871:674</td>
<td>Polymer Characterization</td>
<td>2</td>
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<tr>
<td>9871:685</td>
<td>Introduction to Biomacromolecules</td>
<td>2</td>
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Electives
Select eighteen credits appropriate to the student’s area of interest. 18

Doctoral Dissertation
Select forty six credits 46

Total Hours 84

Cumulative Examinations
Pass six cumulative examinations which are given once a month for eight months of the year (none in June, July, August, or December). Candidates must begin taking cumulative exams after completion of their second semester. Thereafter, students are required to take all of the exams until they pass six. (A maximum of 24 total cumulative examinations may be taken)

Formal Seminar and Research Presentation
Present a public discussion referred to as a departmental "formal seminar," which reviews the literature pertinent to the research problem and then a "research presentation," which presents the student data.

Seminars
Attendance at and participation in seminar-type discussions scheduled by the department is required.

Foreign Language Requirement
Satisfy the foreign language requirement for the doctoral degree by meeting the requirements of Plan C. This is satisfied with computer proficiency, which is met by completing 9871:613 Polymer Science Laboratory as part of the core curriculum.

Dissertation and Oral Defense
Pass an oral defense upon completion of a written research dissertation.