POLYMER SCIENCE (MS, PHD)

Jointly offered by the College of Agriculture, Health, and Natural Resources, College of Liberal Arts and Sciences, College of Engineering, School of Pharmacy, and UConn Health.

The Institute of Materials Science Polymer Program serves as the sole center in the State of Connecticut for graduate research and education programs focusing on polymer science and engineering. The program is a nationally and internationally recognized center of excellence for interdisciplinary research and education in the fields of polymer science and engineering. The program is dedicated to meeting the educational needs of its graduate and professional students; providing lifelong learning opportunities in the study of polymeric materials; to assisting Connecticut industry in developing polymer technology; and to expanding and disseminating the global knowledge base regarding polymeric materials.

Master of Science Program

Other than the GRE General Test scores, there are no special requirements for admission to the master's program beyond those of the Graduate School. Selection of Plan A (thesis) or Plan B (non-thesis) is made after consultation with the Advisory Committee. For Plan A, the student must successfully complete no fewer than 21 credit hours and no fewer than nine additional credits of Master's Thesis Research by taking GRAD 5950 Master's Thesis Research or GRAD 5960 Full-Time Master's Research, as well as the writing an oral defense of a thesis. For Plan B, the student must successfully complete no fewer than 30 credits of advanced course work and a comprehensive final examination, but no thesis is required.

Doctor of Philosophy Program

Admission to the doctoral program is based upon a careful assessment of the student's potential for creative research in polymer science. There are no special requirements for the doctoral program beyond those of the Graduate School, other than the GRE General Test scores.

Requirements

No fewer than 30 credit hours of advanced coursework, including:

Course	Title	Credits
POLY 5351	Polymer Physics	3
POLY 5352	Polymer Properties	3
POLY 5380	Polymer Synthesis	3
POLY 5381	Polymer Physical Chemistry	3
POLY 5382	Polymer Characterization I	3
POLY 5384	Polymer Characterization II	3
POLY 6001	Seminar in Polymer Science and Engineering	1
GRAD 6950	Doctoral Dissertation Research (at least 15 additional credits)	15

The General Exam, which consists of two parts: a written portion and an oral portion. The written portion is a comprehensive cumulative four-part exam. The oral portion is the writing and oral defense of a dissertation proposal. The Doctoral Dissertation, which consists of two parts: a written dissertation, and an oral defense of the dissertation before a committee of faculty and the general public. The Polymer Science Program does not have a foreign language or related area requirement.