

MS POLYMERS AND COATINGS SCIENCE

Program Learning Objectives

1. Integrate knowledge of the diverse range of chemistry sub-disciplines as well as non-chemistry disciplines such as fluid flow, mechanics, and science of appearance, and apply it in their profession.
2. Use traditional and nontraditional thinking to define a problem, identify potential alternatives, gather appropriate knowledge and information to formulate and articulate a solution.
3. Think critically and be able to evaluate, design, and conduct research in the polymers and coatings field.
4. Effectively communicate as professionals in both individual and team-based environments.
5. Join polymer and coating related industries or advanced graduate programs and be immediately productive. Demonstrate dedication, loyalty and passion toward the chosen professional career.

Required Courses

CHEM 544	Polymer Physical Chemistry and Analysis	3
CHEM 545	Polymer Synthesis and Mechanisms	3
CHEM 547	Polymer Characterization and Analysis Laboratory	2
CHEM 548	Polymer Synthesis Laboratory	2
CHEM 550	Coatings Formulation Principles	3
CHEM 551	Coatings Formulation Laboratory	2
CHEM 590	Graduate Seminar in Polymers and Coatings (1, 1, 1)	3
Select from the following:		9
CHEM 598	Graduate Project (3, 3, 3)	
CHEM 599	Graduate Thesis (3, 3, 3)	

Approved Electives

18 units of advisor-approved electives (at least 3 units must be from 500 level). See department for list. 18

Total units **45**

A complete project report or thesis must be submitted to the graduate committee. Guidelines on how to prepare report or thesis are available from the graduate coordinator.