ChE 257
Polymer Composites Processing
Fall 2000

Instructor: Dr. Rakesh Gupta
Office: 421 ESB
Phone: 293-2111 ext. 2427
CRN: 85062
Class Time: 3:00-4:50 M W (class will not meet every week)
Room: 449 ESB

The objective of this course is to present the fundamental principles of thermosetting polymer matrix composites manufacturing and design.


**Course Outline**

- Advantages of Polymer Composites
- Chemistry of Matrix Polymers
- Reinforcing Fibers and Coupling Agents
- Prepregs and Sheet Molding Compounds
- Mechanics of Composite Materials
- Kinetics of Curing Reactions
- Hand Lay-up and Spray-up
- Bag Molding and Compression Molding
- Injection Molding and Resin Transfer Molding
- Pultrusion and Filament Winding

A background in fluid mechanics or transport phenomena is recommended.