	Chemical Eng -Syllabus
1	**Chemical Reaction Engineering:** (a) Kinetics & Interpretation of batch reactor data (b) Design of reactors for single & multiple reactors (c) Non Isothemal reactions (d) Heterogeneous catalytic & non – catalytic reactions (e) Non – ideal reactors
2	**Heat Transfer:** (a) Conduction (b) Convection (c) Radiation (d) Heat Transfer Equipment. (e) Evaporator
3	**Mass Transfer:** (a) Diffusion & Mass Transfer Theories (b) Distillation (c) Gas – Liquid Operations (i) Gas Absorption (ii) Humidification & Dehumidification. (d) Gas – Sold Operation: Adsorption. (e) Liquid – Liquid Operation: Extraction (f) Liquid – Solid Operations (i) Leaching & (ii) Crystallization
4	Momentum Transfer & Mechanical Operations
5	**Polymer Synthesis:**(a) Chain Polymerization (b) Step – Growth Polymerization (c) Condensation Polymerization
6	**Polymer Technology:** (a) Polymer Melt Processing to end use products
7	**Polymer Testing:** (a) Physical & Mechanical Properties Testing (b) Optical & Electric Properties Testing (c) Analytical Testing (d) Instruments for Polymer Testing
8	**Thermodynamics:** (a) Thermodynamic Laws (b) P –V – T relationship (c) Thermodynamics of Flow Processes (d) Thermodynamic Cycles (e) Solution Thermodynamics (f) Phase Equilibria & Chemical Equilibria