7TH SEMESTER:

PROCESS EQUIPMENT DESIGN [CHE181701]

Course Outcomes:

1. Collect data from the literature, Handbook and Code book.
2. Analyse, interpret and design heat transfer equipment such as heat exchangers and condensers for a process incorporating safety aspects
3. Compute mass and energy balance equations for double effect evaporator and accordingly design it.
4. Design of pressure vessel and storage tank considering safety and environmental aspects.
5. Draw and identify chemical equipments required in a process plant.

CHE1817PE31 (BIOCHEMICAL ENGINEERING)

Course Outcomes:

1. Relate and illustrate structure and function of biomolecules and identify the application of bio-process in various fields
2. Develop enzyme kinetics involving single and multiple substrate and inhibition kinetics, interpret data, and quantify kinetic parameters
3. Evaluate various bio-reactor configurations, and interpret the transport processes involved in enzymatic reactions
4. Select feedstock, their pretreatment procedures and upgradation in the production of various fermentable products
5. Assess appropriate operations for downstream processing for recovery and purification of product

POLYMER SCIENCE ENGINEERING (CHE181702)

Course Outcomes:

1. Understand basics, formation techniques, classification and structure of polymers .
2. Focus on properties and testing methods and rheological behavior of polymers.
3. Select the required additive and categorize the various fabrication techniques based on end variety of products.
4. Discuss the application of polymers, synthetic rubbers and the advent of new materials like biodegradable polymers and nanocomposites
5. Interpret the concept of Reclaim, Reuse and Recycle for protection of environment and use for sustainable development.