Department of Industrial Chemistry

Faculty of Science

IC (209)341 Petrochemical Industry 3(3/3-0/0)

Abbreviation

Prerequisite CHEM 203 and CHEM 207 and IC 201

This course is opened for MAJOR ELECTIVE COURSE

Course Description

Raw materials, petroleum distillation and petrochemical processes, natural gas separation, chemical production from non-hydrocarbon substances, chemical production from hydrocarbon substances, olefin production, chemical production from benzene, toluene and xylene, and petroleum distillation system design.

Objective

Students will be able to understand basic principles of petrochemical industries.

Course Content		Lecture Hours
1. Introduction		1
2. Raw materials		5
3. Petroleum distillation and petrochemical processes		6
4. Natural gas separation		5
5. Chemical production from non-hydrocarbon substances		4
6. Chemical production from hydrocarbon substances		8
7. Olefin production		4
8. Chemical production from benzene, toluene and xylene		2
9. Petroleum distillation system design		10
9.1 Compressor		
9.2 Reboiler		
9.3 Steam generator		
	Total	45