



**MUTAH UNIVERSITY**  
**Faculty of Engineering**  
**Department of Chemical Engineering**



**Chemical Industries Engineering**

**Course syllabus**

Course Code	Course Name	Credits	Contact Hours
0404567	Chemical Industries Engineering	3	Office hours

**INSTRUCTOR/COORDINATOR**

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<b>Website</b>	

**TEXTBOOK**

- 1- Chemical technology, by I. Mukhlyonov.
- 2- Shreve's chemical process industry, by G. Austin.

**Other Supplemental Materials**

- 1- Perry's chemical engineering handbook, by R. Perry, and D. Green.

**SPECIFIC COURSE INFORMATION**

**A. Brief Description of the Content of the Course (Catalog Description)**

This course is an introduction to chemical industry, such as basic chemicals and its product. Obtain general knowledge about chemical processes and unit and how they are linked and used in any industry to obtain the products used in actual life. This course covers different elective industries such cement industry, potash industry, phosphate industry, sulfuric and phosphoric acid industry, coal production, paper industry, petrochemicals, and soap and detergent.

**B. Pre-requisites (P) or Co-requisites (C)**

(P) 0404459

**C. Course Type (Required or Elective)**

Required

## SPECIFIC GOALS

### A. Specific Outcomes of Instruction

1. General knowledge about different units used in industry. (SOL 1, 2)
2. How chemical products are produced. (SOL 1, 2)
3. Try to produce a product of the student choice through a project. (SOL 1, 2, 4, 7)
  - The student would be able to link the process he/she used in producing their product with actual industrial case. (SOL 1, 2, 4, 7)

### B. Student Outcomes Addressed by the Course

1	2	3	4	5	6	7				
x	x		x			x				

## BRIEF LIST OF TOPICS TO BE COVERED

List of Topics	No. of Weeks	Contact Hours
Introduction	2	3 hrs per week
Raw materials and energy in chemical industries	2	3 hrs per week
Coal production process	3	3 hrs per week
Pulp and paper industry	3	3 hrs per week
Soap and detergents	3	3 hrs per week
Cement industry	3	3 hrs per week
Total	16	

## METHODS OF ASSESSMENT

No.	Method of assessment	Week and Date	%
1	First exam	5 <sup>th</sup> week	20
2	Second exam	10 <sup>th</sup> week	20
3	Project / assignments		10
4	Final exam	End of Semester	50
		Total	100