Jordan University of Science and Technology

Faculty of Engineering

Chemical Engineering Department

CHE102 Introduction To Chemical Engineering - JNQF Level: 7
First Semester 2024-2025

Course Catalog
1 Credit Hours. The scope of Chemical Engineering, chemical processes, problem solving and team work, ethical considerations (academic integrity and professional ethics), units and dimensions, data analysis, manipulation and representation, applications of spreadsheets, introduction to material balances
Teaching Method: On Campus

Text Book	
Title	"Elementary Principles of Chemical Processes".
Author(s)	Richard M. Felder, Ronald W. Rousseau and Lisa G. Bullard
Edition	4th Edition
Short Name	Text Book
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Reference-1	"Elementary Principles of Chemical Processes".	Richard M. Felder & Ronald W. Rousseau	3rd Edition	
Reference-2	Introduction to Chemical Engineering: Tools for Today and Tomorrow.	Solen, K.A. and Harb J.N.	5th Edition	
Reference-3	Basic Principles and Calculations in Chemical Engineering.	David M. Himmelblau & James B. R.	7th Edition	

Class Schedule & Room

Section 1:
Lecture Time: Tue : 13:30 - 14:30
Room: U

Prerequisites		
Line Number	**Course Name**	**Prerequisite Type**
2001000	NE100 Introduction In Engineering	Prerequisite / Study
821015	HSS101CHEM General Chemistry (I)	Prerequisite / Study
911010	CHEM101 General Chemistry (I)	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Weeks 1, 2	Introduction to Chemical Engineering	**Chapter-1** From **Text Book**
Week 3	The Role of Chemical Processing	**Chapter-1** From **Text Book**
Weeks 4, 5, 6, 7, 8, 9	Introduction to Engineering Calculations	**Chapter-2** From **Text Book**
Weeks 10, 11, 12, 13, 14, 15	Describing Physical Quantities	**Chapter-3** From **Text Book**

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Employ basic skills needed in engineering calculations such as: unit systems and conversions, data plotting, linearization, and fitting, and the use of significant figures in expressing results. [75SO1] [1L7K1]	75%	
Describe the function of chemical process and the role chemical engineering, and the distinction between chemical engineering and chemistry. [25SO2] [1L7K1]	25%	

Relationship to Program Student Outcomes (Out of 100%)						
SO1	SO2	SO3	SO4	SO5	SO6	SO7
75	25					

Relationship to NQF Outcomes (Out of 100%)
L7K1
100

Evaluation

Assessment Tool	Weight
Midterm	40%
Homework and Quizes	10%
Fina Exam	50%

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