

# CHEMICAL ENGINEERING TECHNOLOGY (DCHET):DIPLOMA

Diploma in Chemical Engineering Technology (DCHET)

## Program Mission

Working in partnership with industry, the Diploma in Chemical Engineering Technology program provides quality education that prepares highly skilled technicians capable of serving the community and fulfilling personal ambitions with excellence. Graduates may choose to continue into the additional two years of the program to become innovative engineers.

## Program Goal

The Program Educational Objectives of the Diploma in Chemical Engineering Technology program are to:

1. Provide chemical engineering professionals with the technical knowledge and skills required by the industry to perform to industry standards.
2. Prepare graduates for a successful career with strong communication and teamwork skills, work ethics in the practice of engineering profession.
3. Prepare graduates with strong commitment to lifelong learning, continuing education, and professional growth.

## Program Learning Outcomes

The Program Learning Outcomes of the Diploma in Chemical Engineering Technology program are to:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to Chemical Engineering Technology.
2. An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the Chemical Engineering Technology.
3. An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results.
5. An ability to function effectively as a member of a technical team.

## Requirements

### Completion Requirements

Students seeking the Diploma in Chemical Engineering Technology degree must successfully complete the following minimum requirements:

1. A minimum of 81 credits, as follows:

- A minimum requirement of 42 credits of the program major, including Work Placement for 8 weeks.
- A minimum requirement of 12 credits in Math and Science courses.

- A minimum requirement of 27 credits in General Studies according to the General Studies breakdown.

2. A minimum CGPA of 2.00.

Code	Title	Credit Hours
<b>Chemical Engineering Core Courses</b>		
Required Credits: 42		
CHE 2113	Applied Chemistry	3
CHE 2123	Analytical Chemistry	3
CHE 2133	Organic Chemistry	3
CHE 2202	Chemical Engineering Principles I	2
CHE 2213	Chemical Engineering Principles II	3
CHE 2253	Materials and Corrosion	3
CHE 2413	Oil and Gas Processing Technologies	3
CHE 2422	Petroleum Chemistry Testing	2
CHE 2903	Sophomore Design Project	3
EGN 1133	Design Thinking in Technology	3
EGN 2806	Work Placement I	6
EGN 3012	Project Management	2
ELE 2153	Electrical Eng Fundamentals	3
MTE 2403	Thermofluid Systems	3
<b>Mathematics and Science Required Courses</b>		
Required Credits: 12		
CHM 1103	Engineering Chemistry	3
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3
<b>General Studies</b>		
Required Credits: 27		
<b>English, Arabic or other Languages</b>		
Required Credits: 9		
<b>Humanities or Art</b>		
Required Credits: 3		
AES 1003		
<b>Information Technology and Mathematics</b>		
Required Credits: 6		
ICT 2013 and MTH 1113		
<b>The Natural Sciences</b>		
Required Credits: 3		
PHY 1103		
<b>The Social or Behavioral Sciences</b>		
Required Credits: 6		
<b>Description</b>		
Total Required Credits	81	
Maximum Duration of Study	3 years	
Cost Recovery Program	No	
Minimum Duration of Study	2 years	
Program Code	DCHET	
Major Code	CHE	

## Ideal Study Plan

### Recommended Sequence of Study

Year 1		Credit Hours
<b>Semester 1</b>		
EGN 1133	Design Thinking in Technology	3
LSC 1103	Professional Communication and Reporting	3
LSS 1003	Life and Future Skills	3
MTH 1103	Pre Calculus	3
PHY 1103	Physics I	3
Credit Hours		15
<b>Semester 2</b>		
LSC 2103	Academic Reading and Writing II	3
LSS 1123	Basic Research Methods	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3
Credit Hours		15
<b>Summer</b>		
AES 1013	Arabic Communications I	3
CHM 1103	Engineering Chemistry	3
Credit Hours		6
<b>Year 2</b>		
<b>Semester 1</b>		
AES 1003	Emirati Studies	3
CHE 2113	Applied Chemistry	3
CHE 2123	Analytical Chemistry	3
CHE 2202	Chemical Engineering Principles I	2
CHE 2253	Materials and Corrosion	3
ELE 2153	Electrical Eng Fundamentals	3
Credit Hours		17
<b>Semester 2</b>		
CHE 2133	Organic Chemistry	3
CHE 2213	Chemical Engineering Principles II	3
CHE 2413	Oil and Gas Processing Technologies	3
CHE 2422	Petroleum Chemistry Testing	2
CHE 2903	Sophomore Design Project	3
ICT 2013	Computational Thinking and Coding	3
Credit Hours		17
<b>Summer</b>		
EGN 2806	Work Placement I *	6
EGN 3012	Project Management	2
MTE 2403	Thermofluid Systems	3
Credit Hours		11
Total Credit Hours		81

\*Work Placement I shall start after year 2 Summer Semester is completed.