

CHEMICAL ENGINEERING TECHNOLOGY: DIPLOMA

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

Diploma in Chemical Engineering Technology

Students must successfully complete a minimum of 78 credits, including:

Code	Title	Credit Hours
	Program Core Courses	42
	Mathematics and Science Courses	12
	General Studies course	24
	Total Credit Hours	78

Code	Title	Credit Hours
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Chemical Engineering Core Courses

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

Mathematics and Science Required Courses

Required Credits: 12		
CHM 1103	Engineering Chemistry	3
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3

General Studies

Required Credits: 24		
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English, Arabic or other Languages

Required Credits: 9		
LSC 1103, AES 1013 and AES 1033		

Humanities or Art

Required Credits: 3		
AES 1003		

Information Technology and Mathematics

Required Credits: 6		
ICT 2013 and MTH 1113		

The Natural Sciences

Required Credits: 3		
PHY 1103		

The Social or Behavioral Sciences

Required Credits: 3		
LSS 1003		

Description	Data
Total Required Credits	78
Maximum Duration of Study	3 years
Minimum Duration of Study	2 years
Cost Recovery Program	No
Program Code	DCHET
Major Code	CHE

Ideal Study Plan

Recommended Sequence of Study

Year 1		Credit Hours
Semester 1		
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
Semester 2		
AES 1013	Arabic Communications I	3
AES 1033	Islamic Culture	3
CHM 1103	Engineering Chemistry	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3
Credit Hours		18
Summer		
ELE 2153	Electrical Eng Fundamentals	3
MTE 2403	Thermofluid Systems	3
Credit Hours		6
Year 2		
Semester 3		
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
EGN 3012	Project Management	2
Credit Hours		16
Semester 4		
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
Summer		
EGN 2806	Work Placement I	6
Credit Hours		6
Total Credit Hours		78