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 76 credits, including:

Code	Title	Credit Hours
Program Core Courses		49
Mathematics and Science Courses		9
General Studies course		18
Total Credit Hours		**76**

Code	Title	Credit Hours
Chemical Engineering Core Courses		
Required Credits: 49		
CHE 2113	Applied Chemistry	3
CHE 2123	Analytical Chemistry	3
CHE 2133	Organic Chemistry	3
CHE 2202	Introduction to Chemical Process Industries	2
CHE 2213	Chemical Engineering Principles	3
CHE 2253	Materials and Corrosion	3
CHE 2413	Oil and Gas Processing Technologies	3
CHE 2422	Separation Process Principles	2
CHE 2453	Fluid Mechanics	3
CHE 2903	Sophomore Design Project	3
CHE 3313	Chemical Engineering Thermodynamics	3
CHE 3403	Chemical Heat Transfer	3
EGN 1001	Engineering Workshop	1
EGN 1133	Design Thinking in Technology	3
EGN 2712	Applied Programing for Engineers	2
EGN 2806	Work Placement I	6
ELE 2153	Electrical Eng Fundamentals	3
Mathematics and Science Required Courses		
Required Credits: 9		
CHM 1103	Engineering Chemistry	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3
General Studies		
Required Credits: 18		
English, Arabic or other Languages		
Required Credits: 6		
LSC 1103 and AES 1013		
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	76
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		
Semester 1		**Credit Hours**
EGN 1133	Design Thinking in Technology	3
LSC 1103	Professional Communication and Reporting	3
LSS 1003	Life and Future Skills	3
MTH 1203	Calculus I	3
PHY 1103	Physics I	3
	Credit Hours	**15**
Semester 2		
AES 1013	Arabic Communications	3
CHM 1103	Engineering Chemistry	3
EGN 1001	Engineering Workshop	1
ICT 2013	Computational Thinking and Coding	3
MTH 1113	Statistics for Engineering	3
PHY 1203	Physics II	3
	Credit Hours	**16**
Summer		
CHE 2202	Introduction to Chemical Process Industries	2
ELE 2153	Electrical Eng Fundamentals	3
	Credit Hours	**5**
Year 2		
Semester 3		
EGN 2712	Applied Programing for Engineers	2
CHE 2123	Analytical Chemistry	3
CHE 2213	Chemical Engineering Principles	3
CHE 2253	Materials and Corrosion	3
CHE 2453	Fluid Mechanics	3
CHE 2113	Applied Chemistry	3
	Credit Hours	**17**
Semester 4		
CHE 2133	Organic Chemistry	3
CHE 2413	Oil and Gas Processing Technologies	3
CHE 2422	Separation Process Principles	2
CHE 2903	Sophomore Design Project	3
CHE 3313	Chemical Engineering Thermodynamics	3
CHE 3403	Chemical Heat Transfer	3
	Credit Hours	**17**
Summer		
EGN 2806	Work Placement I	6
	Credit Hours	**6**
	Total Credit Hours	**76**