INDUSTRIAL ENGINEERING TECHNOLOGY (DINET): DIPLOMA

Diploma in Industrial Engineering Technology (DINET)

Program Mission

Working in partnership with industry, the Diploma in Industrial 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 Industrial Engineering program at HCT is to produce graduates who will:

1. Integrate their attained knowledge and skills with their job expertise to identify and solve problems, and to optimize the interactions among elements of the systems within their area of practice to enhance safety, quality and productivity.

2. Practice their roles in serving their organizations and community with firm commitment to social values and professional ethics.

3. Continue to improve their personal and professional abilities through self and administrated learning and training related to their job functions for continual professional growth.

4. Serve as future team leaders with effective professional communication and technical skills and contribute actively to achieving Abu Dhabi Vision 2030.

Program Learning Outcomes

Upon graduation, a HCT graduate in Diploma in Industrial Engineering Technology should demonstrate:

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 the Industrial 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 Industrial 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 Industrial Engineering Technology degree must successfully complete the following minimum requirements:

1. A minimum of 79 credits, as follows:

a. 37 credits of the program major including Work Placement for 8 weeks.

b. A minimum requirement of 15 credits in Math and Science courses.

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

2. A minimum CGPA of 2.00.

Code	Title	Credit Hours
Industrial Engineering Core Courses		
Required Credits: 37		
EGN 1133	Design Thinking in Technology	3
EGN 2101	Computer Aided Drafting	1
EGN 2233	Engineering Mechanic Fundamentals	3
EGN 2806	Work Placement I	6
IET 2003	Introduction to Industrial Engineering	3
IET 2103	Technology Innovation and Integration	3
IET 2213	Work Measurement and Ergonomics	3
IET 2223	Quality Control	3
IET 2233	Introduction to Maintenance Management	3
IET 2413	Manufacturing Technologies and Materials	3
IET 2421	Engineering Measurements Lab	1
IET 2902	Sophomore Design Project	2
LGE 2003	Logistics Principles and Supply Chain Management	3
Mathematics and Science Required Courses		
Required Credits: 15		
CHM 1103	Engineering Chemistry	3
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
PHY 1203	Physics II	3
General Studies		
Required Credits: 27		
English, Arabic or other Languages		
Required Credits: 9		
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: 6		

Description	Data
Total Required Credits	79
Maximum Duration of Study	3 years
Cost Recovery Program	No

Minimum Duration of Study	2 years
Program Code	DINET
Major Code	IET

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 1103	Pre Calculus	3
PHY 1103	Physics I	3
	Credit Hours	15
Semester 2		
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
Summer		
AES 1013	Arabic Communications I	3
CHM 1103	Engineering Chemistry	3
	Credit Hours	6
Year 2		
Semester 1		
AES 1003	Emirati Studies	3
EGN 2101	Computer Aided Drafting	1
EGN 2233	Engineering Mechanic Fundamentals	3
IET 2003	Introduction to Industrial Engineering	3
IET 2413	Manufacturing Technologies and Materials	3
MTH 2103	Calculus II	3
	Credit Hours	16
Semester 2		
ICT 2013	Computational Thinking and Coding	3
IET 2103	Technology Innovation and Integration	3
IET 2233	Introduction to Maintenance Management	3
IET 2421	Engineering Measurements Lab	1
IET 2902	Sophomore Design Project	2
LGE 2003	Logistics Principles and Supply Chain Management	3
	Credit Hours	15
Summer		
EGN 2806	Work Placement I *	6
IET 2213	Work Measurement and Ergonomics	3
IET 2223	Quality Control	3
	Credit Hours	12
	Total Credit Hours	79

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