

# CIVIL ENGINEERING TECHNOLOGY: DIPLOMA

## Program Mission

Working in partnership with industry, the Diploma in Civil 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 Civil Engineering Technology Program are to provide graduates:

1. With the technical knowledge and skills required by the industry to professionally develop, operate, and maintain projects in areas of the built environment and global infrastructures.
2. Equipped for lifelong learning, professional development, and adhering to international Code of Ethics.
3. Capable to engage in sustainable activities through community and work-based opportunities.
4. With team building and communication skills.

## Program Learning Outcomes

The Program Learning Outcomes of the Diploma in Civil Engineering Technology Program are to provide graduates:

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 Civil 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 Civil 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 Civil Engineering Technology

Students must successfully complete a minimum of 76 credits, including:

Code	Title	Credit Hours
	Program Core Courses	37
	Mathematics and Science Courses	15
	General Studies course	24
	<b>Total Credit Hours</b>	<b>76</b>

Code	Title	Credit Hours
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### Civil Engineering Core Courses

Required Credits: 37

CVE 2001	Applied Drafting and CAD: Civil	1
CVE 2013	CAD tools in Civil Engineering	3
CVE 2103	Site Surveying	3
CVE 2113	Quantity Surveying and Estimating	3
CVE 2203	Engineering Mechanics	3
CVE 2213	Strength of Materials	3
CVE 2303	Soil Mechanics	3
CVE 2403	Fluid Mechanics and Hydraulics	3
CVE 2603	Construction Materials	3
CVE 2903	Sophomore Design Project	3
EGN 1133	Design Thinking in Technology	3
EGN 2806	Work Placement I	6

### 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: 24

### English, Arabic or other Languages

Required Credits: 9

LSC 1103, AES 1013 and AES 1033

### Humanities or Arts

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	76
Maximum Duration of Study	3 years
Minimum Duration of Study	2 years
Cost Recovery Program	No
Program Code	DCVET
Major Code	CVE

# 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>		
AES 1033	Islamic Culture	3
AES 1013	Arabic Communications I	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3
	Credit Hours	15
<b>Summer</b>		
CHM 1103	Engineering Chemistry	3
MTH 2103	Calculus II	3
	Credit Hours	6
<b>Year 2</b>		
<b>Semester 3</b>		
AES 1003	Emirati Studies	3
CVE 2001	Applied Drafting and CAD: Civil	1
CVE 2203	Engineering Mechanics	3
CVE 2603	Construction Materials	3
CVE 2103	Site Surveying	3
ICT 2013	Computational Thinking and Coding	3
	Credit Hours	16
<b>Semester 4</b>		
CVE 2013	CAD tools in Civil Engineering	3
CVE 2113	Quantity Surveying and Estimating	3
CVE 2213	Strength of Materials	3
CVE 2303	Soil Mechanics	3
CVE 2403	Fluid Mechanics and Hydraulics	3
CVE 2903	Sophomore Design Project	3
	Credit Hours	18
<b>Summer</b>		
EGN 2806	Work Placement I	6
	Credit Hours	6
	Total Credit Hours	76