

# CIVIL ENGINEERING TECHNOLOGY (DCVET) : DIPLOMA

## Diploma in Civil Engineering Technology

### 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

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

1. A minimum of 79 credits, as follows:
  - 37 credits of the program major, including Work Placement for 8 weeks
  - A minimum of 15 credits in Math and Science courses.

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

2. A minimum CGPA of 2.00.

Code	Title	Credit Hours
<b>Civil Engineering Core Courses</b>		
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
<b>Mathematics and Science Required Courses</b>		
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
<b>General Studies</b>		
Required Credits: 27		
<b>English, Arabic or other Languages</b>		
Required Credits: 9		
<b>Humanities or Arts</b>		
Required Credits: 3		
<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>	<b>Data</b>	
Total Required Credits	79	
Maximum Duration of Study	3 years	
Cost Recovery Program	No	
Minimum Duration of Study	2 years	
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>		
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
CVE 2001	Applied Drafting and CAD: Civil	1
CVE 2203	Engineering Mechanics	3
CVE 2403	Fluid Mechanics and Hydraulics	3
CVE 2603	Construction Materials	3
MTH 2103	Calculus II	3
Credit Hours		16
<b>Semester 2</b>		
CVE 2103	Site Surveying	3
CVE 2213	Strength of Materials	3
CVE 2303	Soil Mechanics	3
CVE 2903	Sophomore Design Project	3
ICT 2013	Computational Thinking and Coding	3
Credit Hours		15
<b>Summer</b>		
CVE 2013	CAD tools in Civil Engineering	3
CVE 2113	Quantity Surveying and Estimating	3
EGN 2806	Work Placement I *	6
Credit Hours		12
Total Credit Hours		79

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