

## Diploma in Engineering Technology in Civil Engineering

**Location:** Indumiso Site, Midlands Campus (Pietermaritzburg)

### Description of the Programme

Most Civil Engineering Technicians and Technologists are employed in industry in one of the two traditional areas, namely Building Industry or the Civil Engineering Industry, and may be involved in planning, designing or constructing. Within each of these areas, Technicians and Engineers may be employed either in Consulting offices, for a local authority or for a contractor. The Construction industry as a whole, plans, designs, constructs and maintains what is sometimes referred to as the built environment. This is not only houses, schools and multi-storey structures, but also roads, airports, tunnels, dams, water supplies, sewerage works, service reticulation, the list is endless.

In the traditional building industry the buildings were designed by an architect and built by a contractor. However, an increasing number of today's buildings rely on accurate assessment of the structure by a Consulting Engineering team.

The Technician and Technologist would be key personnel, who would have tended to specialise in structural Engineering. The majority of qualified Civil Engineering staff however are engaged on all the other items that make up the built environment in the Civil Engineering Industry.

A specialisation in Water Engineering could bring an involvement in the design of water supply schemes, dams or irrigation projects. Alternatively, specialisation could be in the field of tunnels, bridges, transportation, mining or one of the many other aspects of engineering.

The construction industry offers thousands of unique and challenging positions in the new South Africa and throughout the world, and the opening to these is through a qualification as an Engineer, Technologist or Technician.

The main difference between the Professional Engineer and the Professional Technologist is that a Technologist tends to become more specialised in a particular field of Engineering, whereas an Engineer has been educated on a broader spectrum of subjects. Both the Professional Engineer and Professional Technologist may set up their own professional practice. The 2<sup>nd</sup> year Diploma in Engineering Technology: Civil Engineering is run on a semester basis

The course has national recognition and the overall concept and modules studied comply with the minimum standards as set by the Engineering Council of South Africa

At the Durban University of Technology, the modules syllabus has been adopted after consultation with representatives of the profession and the construction industry. In this way, students can be assured of the relevance of the course to their future employment.

### Career opportunities

Most Civil Engineering Technicians and Technologists are employed in Industry, namely Building industry or Civil engineering industry and may be involved in planning, designing or constructing.

### Entry Requirements

DEPARTMENTAL NSC REQUIREMENTS		DEPARTMENTAL SENIOR CERTIFICATE REQUIREMENTS		
<b>Compulsory Subjects</b> A minimum of 28 points will be considered.	<b>NSC Rating Code</b>	A Senior Certificate with a pass in English or equivalent qualification. Applicants with 35		
English (home) <b>OR</b> English (1st additional)	4 4	<b>Compulsory Subjects</b>	<b>HG</b>	<b>SG</b>
Maths	4	Maths	E	C
Physical Science	4	Physical Science	E	C

**The Department will only consider 1st and 2nd choice C.A.O applicant students for the Civil Engineering programme.**

RATING CODE	RATING	MARKS %
7	Outstanding achievement	80-100
6	Meritorious achievement	70-79
5	Substantial achievement	60-69
4	Adequate achievement	50-59
3	Moderate achievement	40-49
2	Elementary achievement	30-39
1	Not Achieved	0 - 29

Table 1

Symbol	A	B	C	D	E	F
Senior Certificate Higher Grade	8	7	6	5	4	3
Senior Certificate Standard Grade	6	5	4	3	2	1
NSC rating code	7	6	5	4	3	2

National Certificate (Vocational) Level 4

The following Fundamental subjects:

English, Life Orientation and Mathematics at 60%

**And**

The following Vocational subjects: Physical Sciences at 60%  
And two other vocational subjects at 60% from list below:  
Construction Planning, Construction Supervision, Materials, Carpentry and Roof Work, Concrete Structures, Masonry and Roads

**OR**

National Technical Certificate (N4) with passes at 50% in four (4) relevant subjects including Mathematics and Engineering Science or an equivalent SAQA NQF Level 4 Qualification, as well as compliance with English Language requirements as stated in the general results

### Admission Requirement based upon Work Experience, Age and Maturity

For admission to entry level diploma and certificate studies: A person may, subject to such requirements as the Senate may determine, be admitted to the Institution even if such a person is not in a possession of a National Senior Certificate, Senior Certificate or an equivalent certificate, provided that:

- The person shall have reached the age of 23 in the first year of registration and shall have at least:
  - Three years' appropriate work experience; and/or
  - Capacity for the proposed instructional programme, which shall be tested at the discretion of the respective Head of Department; and
- The relevant Faculty Board shall be satisfied that the person's standard of communication skills, ability to study successfully and/or work experience are such that the person, in the opinion of the relevant Faculty Board, should be able to complete the proposed instructional programme successfully. If required, the communication skills and study skills should be tested; and
- The person's application for admission in terms of work experience, age and maturity is approved prior to registration.

**Applicants intending to gain admission through work experience, age and maturity must submit their applications at least four months before commencement of the academic year.**

**NB:** These minimum admission requirements are subject to more restrictive departmental admission requirements where applicable.

### First Year Curriculum

#### Semester One

Computer Applications (Module 1)	CMAA101
Computer Applications (Module 2)	CMAB101
Cornerstone	CSTN101
Drawing Applications	DRAP101
Drawing Equipment	DEQM101
Intro to Construction Materials	ICMT101
Law for life	LWLF101
Mathematics A	MMTA101
Physics A	PSCA101

#### Semester Two

Civil Engineering Methods	CEMT101
Civil Mechanics A	CIVM101
Drawing (intro to CAD)	DICD101
Mathematics B	MMTB101
Physics B	PSCB101
Surveying for Civil Engineering	CVCE201
Technical Literacy	TLIT101

#### Semester Three

Contract Management	CNTM201
Intro to Water Engineering A	IWEA201
Mathematics C	MMTC101
Physics C	PSCC101
Soil Mechanics A	SLMA201
Structural Mechanics	STME201
Transport Technology A	TRNA201

#### Semester Four

Contract Administration	CTAD201
Design Project	DSGP201
Intro to Structural Design	INSD201
Intro to Water Engineering B	IWEB201
Soil Mechanics B	SLMB201
Structural Analysis	STRA201
Structural Detailing 3	STDT201
Transport Technology B	TRNB201

Closing date for applications: 30 September 2018

**CAO Codes:** DUIDNC (Indumiso Campus, PMB)

Students who do not automatically meet the entrance requirements for the Diploma in Engineering Technology in Civil Engineering, will be offered a place on the Engineering Access Programme which is an articulation route into the diploma programme – further details in this regard are available from the department on request.

### For Further Information

Department of Civil Engineering Durban University of Technology  
P O Box 1334  
DURBAN 4000  
Telephone: (033) 845 9000  
Email: nicky@dut.ac.za

### Application Forms

Contact the **Central Applications Office (C.A.O)** CAO code: DUIDNC (Indumiso) Address letters to:  
Central Applications Office Private Bag X06  
Walbridge 4014  
Tel: (031) 2684444  
Fax: (031) 2684422  
Apply Online: <http://www.cao.ac.za>



## CAREER INFORMATION

DIPLOMA IN ENGINEERING TECHNOLOGY IN

# CIVIL ENGINEERING

1 JANUARY - 31 DECEMBER 2019

FACULTY OF  
ENGINEERING  
& THE BUILT  
ENVIRONMENT

DEPARTMENT OF  
**CIVIL  
ENGINEERING**

# 2019

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