

Bachelor of the Built Environment in Geomatics (BBE Geomatics)

Location: Steve Biko Campus (S6 Level 3)

Description of the Programme

The purpose of the programme is for students to assimilate the necessary knowledge, understanding, abilities and skills in geomatics. This combined with a period of post qualification mentored work experience will enable them to become competent practicing engineering surveying technologists, able to apply geomatics judgment, work independently and responsibly. To provide students with the preparation required for careers in geomatics, the ability to make a contribution to the economy and national development, the educational base required for registration with the South African Geomatics Council (SAGC) as an engineering surveying technologist and entry to NQF level 8 programmes, i.e. honours and masters programmes. To contribute to the critical mass of engineering surveyors educated specifically for the world of work and research, and who also play a pivotal role in the infrastructure development of our country.

The duration of this programme is 3 years of full-time study.

The programme will prepare students for further post graduate studies and research.

Career opportunities

Employment opportunities within the private sector are: Land Surveying firms, Engineering Surveying firms, Mining companies, Hydrographic companies, surveying engineering consultants and contractors. Opportunities also exist in the public sector, with municipalities: quasi-government and government departments such as: Eskom, Transnet, Department of Transport, Water Affairs, and Department of Rural Development and Land Affairs.

Entry Requirements

School leaving applicants who wish to enrol for the programme must apply through the CAO system by no later than 30 September of the previous year. The number of students enrolled in the program is determined by the University and departmental growth policies and a ranking system is used to determine the number of candidates as required.

The minimum entry requirement is the National Senior Certificate or the National Certificate (Vocational) with appropriate subject combinations and levels of achievement as defined in the *Government Gazette*, Vol. 751, No. 32131 of 11 July 2008, and in the *Government Gazette*, Vol. 533, No. 32743, November 2009.

In addition to the above, the following is required for admission

Compulsory Subjects	NSC	SC		NCV Level 4
	Rating	HG	SG	
English	4	E	C	60%
Mathematics	4	E	C	70%
Physical Science	4	E	C	70%
Life Orientation				60%
				+ 2 vocational subs

The subject NSC Mathematical Literacy will not be accepted as a substitute for the subject NSC Mathematics.

The exit certificate of the candidate must qualify the candidate for degree study at an institution of higher learning.

Applicants will be ranked according to the sum of their scores for Mathematics and Physical Science, subject to a minimum combined score of 120%.

Prospective applicants may also present an NQF level 6 Diploma in Engineering for entry into the degree programme. A possibility of transfer of credits for cognitive previous studies would be considered dependent on the discipline nature of the Diploma being presented.

Admission Requirement based upon Work Experience, Age and Maturity

For admission to entry level degree studies:

A person may, subject to such requirements as the Senate may determine, be admitted if such a person is in possession of a National Senior Certificate, Senior Certificate or an equivalent certificate, but lacks the minimum requirements for admission to the degree 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 assessed by a Senate-approved admission test; and the person has obtained
- A conditional certificate of exemption from the Matriculation Board (when in possession of the Senior Certificate (SC)); OR has met

- The requirements for Senate discretionary admission (when in possession of the NSC or equivalent), where Senate is satisfied the applicant has shown sufficient academic ability to ensure success, and that the person's standard of communication skills, and/or work experience are such that the person, in the opinion of the Senate, should be able to complete the proposed instructional programme successfully.
- 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.

This Department only considers First – Fourth choice CAO applicants.

First Year Curriculum

Engineering Mathematics IA	(EMTA101)
Cornerstone 101	(CSTN101)
Sociology of Work 101	(SCLW101)
Geomatics IA	(GMTA101)
Drawing IA	(DRWN101)
Engineering Physics IA	(EPHA101)

Semester Two

Engineering Mathematics IB	(EMTB101)
Geomatics IB	(GMTB101)
Survey Drawing IB	(SVDRI01)
Environmental Science IB	(EVSCI01)
Technical Literacy	(TCLT101)
Engineering Physics IB	(EPHB101)

Second Year Curriculum Semester One

Engineering Mathematics 2A	(EMTM201)
Photogrammetry 2A	(PHGR201)
Settlement History 101	(STHS102)
Basic Engineering Management 2A	(BEMN201)
Control Surveying 2A	(CTSU201)
Geographic Information Systems 2A	(GISS201)

Semester Two

Legal Principles 2B	(LPPL201)
Engineering Surveying 2B	(ENSV201)
Map Projections and Coordinate Systems 2B	(MPSC201)
Digital Photogrammetry and Remote Sensing 2B	(DPRS201)
Statistics 2B	(STST201)

Third Year Curriculum

First Semester

Geodesy 3A	(GDSY301)
Cadastral Surveying 3A	(CDSV301)
Theory of Errors and Network Adjustment 3A	(TENA301)
Geographic Information System 3A	(GISS301)
Computer Applications 3A	(CPTA301)
Town and Regional Planning: Layout & Design 3A	(TRLD301)

Second Semester

Project Management	(PMAN301)
The Global Environment	(GENV101)
Survey Project 3B	(SVPJ301)

Closing date for applications: 30 September 2018

CAO Code: DU-D-BBE

For Further Information

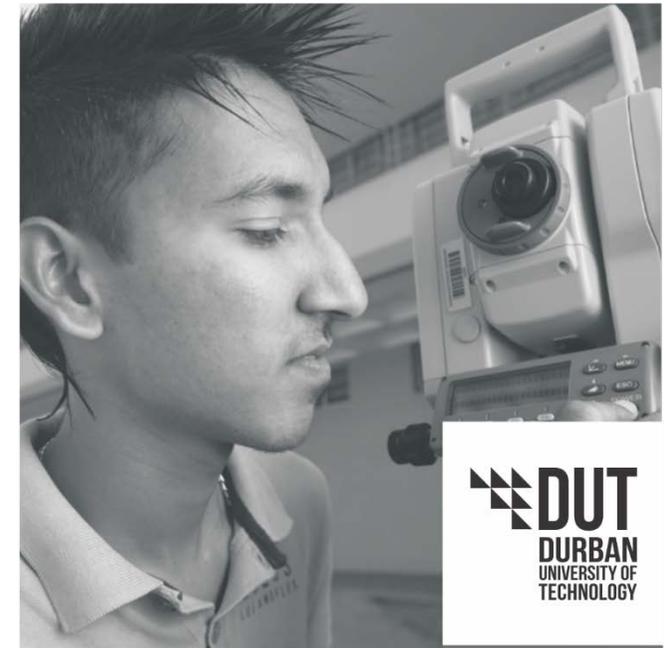
Department of Civil Engineering and Geomatics
Durban University of Technology
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DURBAN 4000
Tel: (031) 3732224
Email: pauline@dut.ac.za

Application Forms

Contact the **Central Applications Office (C.A.O)**
(C.A.O. code: DU-D-BBE)

Address letters to:

Central Applications Office
Private Bag X06
Dalbridge 4014
Tel: (031) 2684444
Fax: (031) 2684422
Apply Online: <http://www.cao.ac.za>



CAREER INFORMATION

BACHELOR OF THE BUILT ENVIRONMENT IN

GEOMATICS

1 JANUARY-31 DECEMBER 2019

FACULTY OF
ENGINEERING
& THE BUILT
ENVIRONMENT

DEPARTMENT OF
CIVIL
ENGINEERING
& GEOMATICS

2019

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