



## BACHELOR OF APPLIED SCIENCE IN BIOTECHNOLOGY



FACULTY OF  
APPLIED  
SCIENCES

DEPARTMENT OF  
BIOTECHNOLOGY  
& FOOD  
SCIENCE

01 JAN - 31 DEC 2024

### Bachelor of Applied Science in Biotechnology

**NQF Level: 7**

**SAQA ID: 97809**

**Qualification Code: BSBTC I**

**Location: Steve Biko Campus (S9, Level 1)**

#### Description of the Programme

Biotechnology is the application of living organisms or the individual cellular components of these organisms for commercial purposes or environmental control. A person working in the field of biotechnology will have to have a working knowledge of such disciplines as biochemistry, microbiology, bioprocess engineering, genetics, molecular biology and mathematics.

The degree prepares applicants with focused knowledge, practical skills, attitudes and values necessary for the technological application of biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use in the biotechnology workplace whilst contributing to environmental sustainability.

The undergraduate courses are designed such that graduates are well equipped to venture into industry upon completion of the first three years.

#### Purpose of Programme

Persons achieving this qualification will be competent to apply theoretical and practical fundamental knowledge and skills in the fields of biotechnology, microbiology and biochemistry to the relevant biotechnology industries and research institutions. Graduates may apply for registration with the South African Council for Natural Scientific Professions as Certified Natural Scientists.

#### Career Opportunities

Graduates may seek employment in industrial and research laboratories such as Drug and pharmaceutical research, public funded laboratories, chemicals, environmental control, water and waste management, energy, food processing and bioprocessing industries.

#### Explanation of Points scale:

SENIOR CERTIFICATE (SC)		
SYMBOL	HIGHER GRADE	STANDARD GRADE
A	8	6
B	7	5
C	6	4
D	5	3
E	4	2
F	3	1

NATIONAL SENIOR CERTIFICATE (NSC)		
%	LEVEL	POINTS
90-100	7	8
80-89%	7	7
70-79%	6	6
60-69%	5	5
50-59%	4	4
40-49%	3	3
30-39%	2	2
20-29%	1	1

## MINIMUM ADMISSION REQUIREMENTS

### GENERAL ADMISSION REQUIREMENTS

A person will only be considered for registration for an instructional programme approved by the Institution's Senate if the person complies with:

- The minimum admission requirements stated in DUT general handbook (refer to DUT website for general handbook).
- Institutional faculty, departmental and/or instructional programme specific rules; and

### MINIMUM ADMISSION REQUIREMENTS IN TERMS OF THE HIGHER EDUCATION QUALIFICATIONS SUB-FRAMEWORK (HEQSF)

#### G7 rule: For Bachelor's Degree:

"a National Senior Certificate (NSC) as certified by the Council for General and Further Education and Training (Umalusi), with a minimum achievement rating of 3 for English and a minimum achievement rating of 4 in four NSC 20-credit subjects chosen from the NSC designated subject list"

#### Entry Requirements (BAS in Biotechnology)

NATIONAL SENIOR CERTIFICATE (NSC) (01 January 2009)		SENIOR CERTIFICATE (SC) (PRE 2009)			NATIONAL CERTIFICATE (VOCATIONAL) (NCV)	
NSC DEGREE ENTRY with 28 points or more (excluding Life Orientation) will be considered		Senior Certificate (SC) with Matric Exemption or equivalent Qualification. Applicants with 30 or more points will be considered.			National Certificate Vocational (NCV)	
Compulsory Subjects	NSC Rating Code	Compulsory Subjects	HG	SG	Compulsory Subjects	Mark
English	4	English	D	B	English	50%
Mathematics	4	Mathematics	D	B	Mathematics	50%
Physical Science	4	Physical Science	D	B	Physical Science	60%
Life Science	4	Biology	D	B	Life Science or Biology	60%
In addition: <b>ONE</b> recognized NSC 20 credit subject as per G7 rule (As stated above)	4					

#### OR

#### 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 assessment comprising of a DUT Standardised Assessment Test for Access and Placement (SATAP), Academic Literacies (AL) & English for Academic Purposes (EAP) (2,5 hours) and/or an appropriate subject or programme specific written assessment designed and marked by the relevant Department; 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 with 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 inclusive of the date of scheduling writing a requisite eligibility assessment.**

#### Tuition Fees

To assist you with your planning, the **2023** fees have been indicated.

**Please Note:** DUT cannot be held liable for the fees in this brochure as the **2024** fees are not yet final.

First Year Curriculum				
Name of the Module	Subject Code	HEQSF Level	SAQA Credits	2022 Fees
<b>Semester One</b>				
Chemistry I	CSRY101	5	16	R5100.00

Biology I	BIOL101	5	16	R5100.00
Mathematics	MMTS101	5	12	R3570.00
Cornerstone 101	CSTN101	5	12	R3580.00
<b>Total</b>				<b>R17350.00</b>
<b>Semester Two.</b>				
Bacteriology II	BCTY201	6	16	R5100.00
Biochemistry II	BCHS201	6	16	R5100.00
Physics	PHYS104	6	12	R3570.00
Mycology	MYCL101	6	12	R3570.00
Institutional General Education Elective I (IGE 1)		5	8	R2070.00
<b>Total</b>				<b>R19410.00</b>
<b>TOTAL CREDITS SEMESTER I&amp;2</b>			<b>120</b>	
<b>Second Year Curriculum</b>				
<b>Semester One</b>				
Food Microbiology II	FMIC101	6	16	R5100.00
Microbial Biochemistry III	MCRB301	6	16	R5100.00
Virology and Immunology II	VRIM201	6	16	R5100.00
Fermentation Science and Technology I I	FSCT201	7	16	R5100.00
Institutional General Education Elective II (IGE 2)		5	8	-
<b>Total</b>				
<b>Semester Two</b>				
Analytical Biochemistry III	ANBC301	7	16	R5100.00
Molecular Biology III	MCLB301	7	16	R5100.00
I Bacteriology III	BCTY301	7	16	R5100.00
Applied Science in Society (FGE 1)	APSS101	5	12	R3570.00
<b>Total</b>				<b>R18870.00</b>
<b>TOTAL CREDITS SEMESTER I&amp;2</b>			<b>132</b>	
<b>Third Year Curriculum</b>				
<b>Semester One</b>				
Industrial Biotechnology III	INDB301	7	16	
0Recombinant DNA Technology III	RDNT301	7	16	R5100.00
Plant Biotechnology III	PLTB301	6	8	R2300.00
Medical Biotechnology III	MDLB301	7	8	
Research Project I	RESP101	7	8	R2550.00
Faculty General Education Elective (FGE 2)		7	8	
<b>Total</b>				
<b>Semester Two</b>				
Research Project II	RESP201	7	16	R5100.00
Food Biotechnology	FDBT101	7	8	R3570.00
Bioremediation	BRMD101	7	8	R5100.00
Industry Management	INDM101	7	8	R2550.00
Institutional General Education Elective III (IGE 3)		6	12	R3300.00
<b>Total</b>				<b>R19620.00</b>
<b>TOTAL CREDITS SEMESTER I&amp;2</b>			<b>116</b>	

## Application

Applicants who wish to enrol for the programme must apply through the CAO system by no later than 30 September of the previous year.

## For Application Forms

Contact the Central Applications Office (C.A.O)

Address letters to:

Central Applications Office

Private Bag X06

Dalbridge

4014

Tel: (031) 2684444

Fax: (031) 2684422

**OR**

Apply online: <http://www.cao.ac.za>

**CAO Code: DU-D-BBT**

**Closing Date for applications:** 30 September 2023

## For Further Information

Contact the Department of Biotechnology and Food Science

Steve Biko Campus (S9, Level 1)

Durban University of Technology

P O Box 1334

DURBAN  
4000  
Tel: (031) 3735321  
Fax: (031) 3733758  
E-mail: philipp@dut.ac.za

### **Financial Aid**

For Financial Aid application for a DUT programme please apply online at [www.nsfas.org.za](http://www.nsfas.org.za) or call the NSFAS call centre on 0860 067 327.

For an explanation on how to fill out the application form, please go to [www.nsfas.org.za](http://www.nsfas.org.za) or contact the call centre on the number above.

**Please note** that completing a form does not guarantee Financial Aid. For further assistance, please consult the Department of Financial Aid and Scholarships on (031)373 2931/2557/2054.

***This is for information purposes only and is not binding on the Durban University of Technology***