



# BACHELOR OF APPLIED SCIENCE IN FOOD SCIENCE AND TECHNOLOGY



FACULTY OF  
APPLIED  
SCIENCES

DEPARTMENT OF  
BIOTECHNOLOGY  
& FOOD  
SCIENCE

01 JAN - 31 DEC 2024

## Bachelor of Applied Science in Food Science and Technology

**NQF Level: 7**

**SAQA ID: 101564**

**Qualification Code: BSFST I**

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

### Description of the Programme

The purpose of the programme is to focus on generation of knowledge and expertise in the emerging areas of food science and technology by developing state-of-the-art knowledge and skills to produce quality manpower needed within the field of food science for societal and industrial benefit. The Food Science and Technology program is driven by the development of theoretical knowledge base as well as the business needs of the food industry. It involves a flexible model where the course content would continuously evolve with the rapid changes occurring within the field of Food Science without compromising on the basis tools in the area.

In South Africa, the second largest industry is the food and beverage industry. The industry is highly diversified and embraces sectors such as dairy, meat, fish, poultry, cereals, confectionery, canned and frozen products, and a vast number of fast-moving consumer goods. Food scientists are responsible for maintaining and improving the quality of processed food. They strive to make better use of food science and to find more efficient food processing methods whilst maintaining the highest level of quality standards.

Students registering for the bachelor's degree can exit after completing a three-year programme. The undergraduate programmes are designed so that graduates are well equipped to venture into the 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 food technology, microbiology, food chemistry, food process engineering and food quality assurance.

### Personal Qualities Required

The food scientist must be practically inclined and be able to work accurately and methodically. He/she also needs to be willing to learn continually to keep up with modern developments. Teamwork is vitally important; therefore, the food scientist needs to be able to establish good relationships with fellow workers and be able to take responsibility and make independent decisions.

### Career opportunities

Food Scientists work predominantly in a laboratory or industrial environment and may be employed as quality inspectors, laboratory scientists, researchers, product development scientists, packaging scientists, auditors of food factories and suppliers. Food scientists may eventually specialize in one of the following areas: quality assurance /quality control; product research and development, production management and quality management.

Promotion opportunities to supervisory or management positions are possible, provided food industry professionals are prepared to work hard, possess leadership ability and are willing to study further. Some food scientists travel extensively to inspect factories and food suppliers. Over time and night- shift work is sometimes required by those involved in food production and quality control.

### 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 Food Science and Technology)

NATIONAL SENIOR CERTIFICATE (NSC) (01 January 2009)		SENIOR CERTIFICATE (SC) (PRE 2009)			NATIONAL CERTIFICATE (VOCATIONAL) (NCV)	
<b>NSC DEGREE ENTRY</b> Applicants with 28 points or more (excluding Life Orientation) will be considered		Senior Certificate (SC) with Matriculation Exemption or equivalent qualification. Applicants with 30 or more points will be considered			(NCV) Level 4	
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 of 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 II	MYCL201	6	12	R3570.00
<b>Total</b>				<b>R17340.00</b>
<b>TOTAL CREDITS SEMESTER 1&amp;2</b>			<b>120</b>	
Second Year Curriculum				
<b>Semester One</b>				
Food Science and Technology I	FSTC101	6	12	R3570.00
Food Chemistry II	FDCH201	6	12	R3570.00
Food Microbiology III	FMCB301	6	16	R5100.00
Food Quality Management	FQMN101	6	8	R2550.00
Human Nutrition	HNTR101	7	8	R2550.00
<b>Total</b>				<b>R17340.00</b>
<b>Semester Two</b>				
Food Science and Technology II	FSTC201	7	16	R5100.00
Molecular Biology III	MOLB301	7	16	R5100.00
Food Legislation	FDLG102	6	8	R2550.00
Food Process Engineering	FPEN101	7	8	R2550.00
Me My World My Universe (FGE 2)	MWMU101	6	12	R2230.00
Role of Applied Science in Society (IGE 2)	RASS101	6	8	R3300.00
<b>Total</b>				<b>R20830.00</b>
<b>TOTAL CREDITS SEMESTER 1&amp;2</b>			<b>120</b>	
Third Year Curriculum				
<b>Semester One</b>				
Food Science and Technology III	FSTC301	7	16	R5100.00
Research Project I	RESP101	7	8	R2550.00
Food Chemistry III	FDCH301	7	16	R5100.00
Food Product Development	FDPD101	7	12	R3820.00
Food and Beverage Packaging	FBPK101	7	12	R3820.00
Values in the Workplace (IGE 3)	VWKP101	6	8	R2380.00
<b>Total</b>				<b>R22770.00</b>
<b>Semester Two</b>				
Research Project 2	RESP201	7	16	R5100.00
Industry Management	INDM101	7	8	R2550.00
Food Safety and Toxicology	FSTX101	7	12	R3570.00
Food Biotechnology	FDBT101	7	12	R3570.00
Applied Sciences for Sustainable Development (FGE 3)	ASSD101	6	12	R3300.00
<b>Total</b>				<b>R18090.00</b>
<b>TOTAL CREDITS SEMESTER 1&amp;2</b>			<b>132</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.

### 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-BFS

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

### **For Further Information**

Department of Biotechnology and Food Science  
Durban University of Technology  
P O Box 1334  
DURBAN  
4000  
Tel: (031) 373 6769  
Fax: (031) 373 3758  
Email: ZinhleM6@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 leaflet is for information purposes only and is not binding on the Durban University of Technology***