



CAREER INFORMATION 2023

BACHELOR OF APPLIED SCIENCES IN FOOD SCIENCE & TECHNOLOGY



01 JAN - 31 DEC 2023



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 |

Entry Requirements (BAS in Food Science and Technology)

| NATIONAL SENIOR CERTIFICATE (NSC) (01 January 2009) | | SENIOR CERTIFICATE (SC) (PRE 2009) | | | NATIONAL CERTIFICATE (VOCATIONAL) (NCV) | |
|--|-----------------|---|----|----|--|------|
| NSC DEGREE ENTRY 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% |

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 2022 fees have been indicated.

Please Note: DUT cannot be held liable for the fees in this brochure as the 2023 fees are not yet final.

| First Year Curriculum | | | | |
|---|--------------|-------------|--------------|------------------|
| Name of the Module | Subject Code | HEQSF Level | SAQA Credits | 2022 Fees |
| Semester One | | | | |
| Chemistry I | CSRY101 | 5 | 16 | R4870.00 |
| Biology I | BIOL101 | 5 | 16 | R4870.00 |
| Mathematics | MMTS101 | 5 | 12 | R3410.00 |
| Cornerstone 101 | CSTN101 | 5 | 12 | R3410.00 |
| Total | | | | R16560.00 |
| Semester Two | | | | |
| Bacteriology II | BCTY201 | 6 | 16 | R4870.00 |
| Biochemistry II | BCHS201 | 6 | 16 | R4870.00 |
| Physics | PHYS104 | 6 | 12 | R3410.00 |
| Mycology II | MYCL201 | 6 | 12 | R3410.00 |
| Total | | | | R16560.00 |
| TOTAL CREDITS SEMESTER I & 2 | | | 120 | |

Second Year Curriculum

| Semester One | | | | |
|--|---------|---|------------|------------------|
| Food Science and Technology I | FSTC10I | 6 | 12 | R3410.00 |
| Food Chemistry II | FDCH20I | 6 | 12 | R3410.00 |
| Food Microbiology III | FMCB30I | 6 | 16 | R4870.00 |
| Food Quality Management | FQMN10I | 6 | 8 | R2440.00 |
| Human Nutrition | HNTR10I | 7 | 8 | R2440.00 |
| Total | | | | R16570.00 |
| Semester Two | | | | |
| Food Science and Technology II | FSTC20I | 7 | 16 | R4870.00 |
| Molecular Biology III | MOLB30I | 7 | 16 | R4870.00 |
| Food Legislation | FDLG102 | 6 | 8 | R2440.00 |
| Food Process Engineering | FPEN10I | 7 | 8 | R2440.00 |
| Me My World My Universe (FGE 2) | MWMU10I | 6 | 12 | R2140.00 |
| Role of Applied Science in Society (IGE 2) | RASS10I | 6 | 8 | R3160.00 |
| Total | | | | R19920.00 |
| TOTAL CREDITS SEMESTER I&2 | | | 120 | |
| Third Year Curriculum | | | | |
| Semester One | | | | |
| Food Science and Technology III | FSTC30I | 7 | 16 | R4870.00 |
| Research Project I | RESPI0I | 7 | 8 | R2440.00 |
| Food Chemistry III | FDCH30I | 7 | 16 | R4870.00 |
| Food Product Development | FDPD10I | 7 | 12 | R3660.00 |
| Food and Beverage Packaging | FBPK10I | 7 | 12 | R3660.00 |
| Values in the Workplace (IGE 3) | VWKP10I | 6 | 8 | R2270.00 |
| Total | | | | R21770.00 |
| Semester Two | | | | |
| Research Project 2 | RESP20I | 7 | 16 | R4870.00 |
| Industry Management | INDMI0I | 7 | 8 | R2440.00 |
| Food Safety and Toxicology | FSTX10I | 7 | 12 | R3410.00 |
| Food Biotechnology | FDBT10I | 7 | 12 | R3410.00 |
| Applied Sciences for Sustainable Development (FGE 3) | ASSD10I | 6 | 12 | R3160.00 |
| Total | | | | R17290.00 |
| TOTAL CREDITS SEMESTER I&2 | | | 132 | |

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 2022

For Further Information

Department of Biotechnology and Food Technology

Durban University of Technology

P O Box 1334

DURBAN

4000

Tel: (031) 373 6769

Fax: (031) 373 3758

Email: phillipp@dut.ac.za

Financial Aid

For Financial Aid application for a DUT programme please apply online at 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 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.