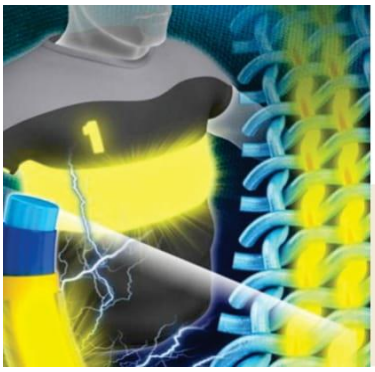

CAREER INFORMATION 2023

BACHELOR OF APPLIED SCIENCE IN TEXTILE SCIENCE

DUT DURBAN UNIVERSITY OF TECHNOLOGY INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE

FACULTY OF APPLIED SCIENCES

DEPARTMENT OF CLOTHING & TEXTILE STUDIES

01 JAN - 31 DEC 2023

## Bachelor of Applied Science in Textile Science
**NQF Level: 7**

**SAQA ID: 111358**

**Qualification Code: BASTX1**

**Location: Steve Biko Campus (S5 & S6 Level 4)**

### Description of the Programme
The three-year qualification in Textile Science is designed to prepare individuals for a wide range of specialist career opportunities in textile industries such as manufacture of textile fibres, yarns, fabrics, and the colouration and finishing thereof, as well as major fashion retail stores, government sectors and research institutions. This is based on a foundation in mathematics, chemistry and physics.

During the first two years of study, students learn a broad range of manufacturing routes including the manufacture of the main fibre types, the principle yarn manufacturing processes, and the knitting, nonwoven, and woven fabric manufacturing routes, the chemistry and processing associated with the principle dyeing, printing, and finishing stages of manufacture.

In the final year students specialize in either the 'wet' or the 'dry' side of the industry.
The Dry side covers a range of specialized manufacturing processes, including the principle yarn manufacturing methods and woven fabric manufacturing routes and product engineering.

The Wet side covers the chemistry and processing associated with the dyeing, printing, and finishing stages of manufacture, as well as colour physics and polymer chemistry.

In addition, this qualification includes other important areas of knowledge, such as textile testing, product development, and some management content.

The program is designed to prepare students with a broad range of textile knowledge, to provide entrance into the extremely diverse local textile manufacturing operations. Graduates of this qualification would be able to display scientific knowledge and technical qualities appropriate to the manufacturing environment and demonstrate environmental responsibilities.

### Working Conditions
The textile industry includes some state-of-the-art local manufacturing units with challenging opportunities for textile scientists in the fields of fibre processing and fabric manufacture. A Textile Science graduate may work in a textile mill or factory, a laboratory or for a retailer.

### Personal Qualities Required
Textile Science involves teamwork; therefore, one needs to be able to work and co-operate with colleagues.
A scientific background is important as well as an aptitude for design work. It is necessary to have a working knowledge and understanding of the basics of textiles and clothing.

### Career opportunities
Excellent opportunities exist in various divisions within textile manufacturing and associated companies such as planning production, fabric development, marketing, and quality control departments as well as major fashion retail stores and government sectors. Promotion routes after further study and work experience may in due course lead to senior appointments in production and marketing areas of the manufacturing industry, Clothing industry, Salesperson and Advisor.

### 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 Textile Science)

| NATIONAL SENIOR CERTIFICATE (NSC) (01 January 2009) | | SENIOR CERTIFICATE (SC) (PRE 2009) | | | NATIONAL CERTIFICATE (VOCATIONAL) (NCV) | |
|---|---|---|---|---|---|---|
| NSC DEGREE ENTRY | | Senior Certificate (SC) with Matric Exemption | | | (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 | 60% |
| Physical Science | 4 | Physical Science | D | B | Physical Science | 60% |
| **Additional Entry Requirements:** Applicants will also go through an interview process to determine their admission success and potential. | | | | | | |

**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:

a) 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

b) A conditional certificate of exemption from the Matriculation Board (when in possession of the Senior Certificate (SC)); OR has met

c) 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.

**d)** 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.

## Bachelor of Applied Science in Textile Science

| First Year Curriculum | | | | |
|---|---|---|---|---|
| **Name of the Module** | **Subject Code** | **HEQSF Level** | **SAQA Credits** | **2022 Fees** |
| **Semester One1** | | | | |
| Cornerstone 101 | CSTN101 | 5 | 12 | R3410.00 |
| Chemistry I | CHEM101 | 5 | 12 | R3950.00 |
| Physics I | PHYS101 | 5 | 16 | R4940.00 |
| Textile Industry I | TEIN101 | 5 | 12 | R4740.00 |
| Information & Comm Tech Literacy & Skills | ICTL101 | 5 | 8 | R2140.00 |
| **Total** | | | | **R19180.00** |
| **Semester Two** | | | | |
| Weaving Preparation Theory I | WPTH101 | 6 | 16 | R6050.00 |
| Mathematics I | MATC101 | 5 | 16 | R5270.00 |
| Textile Material Science I | TMSC101 | 6 | 12 | R4740.00 |
| Yarn Spinning Theory I | YSTH101 | 6 | 16 | R6050.00 |
| **Total** | | | | **R22110.00** |
| **TOTAL CREDITS SEMESTER 1&2** | | | **120** | |
| **Second Year Curriculum** | | | | |
| **Semester One** | | | | |
| Values in the Workplace (IGE) | VWKP101 | 5 | 8 | R2270.00 |
| Product Engineering II | PROE201 | 6 | 16 | R5050.00 |
| Weaving Principles II | WERP201 | 6 | 16 | R5050.00 |

| | | | | |
|---|---|---|---|---|
| Knitting Principles II | KNPR201 | 6 | 12 | R3950.00 |
| Textile Colouration Principles II | TCPR201 | 6 | 16 | R5050.00 |
| **Total** | | | | **R21370.00** |
| **Semester Two** | | | | |
| Applied Science for Sustainable Dev (FGE) | ASSD101 | 6 | 12 | - |
| Textile Research Techniques | TERT201 | 7 | 12 | R3950.00 |
| Introduction to Technopreneurship | ITCH101 | 5 | 8 | R1980.00 |
| Applied Science and Wellness | ASWL101 | 5 | 12 | R3410.00 |
| Textile Testing Principles II | TETP201 | 6 | 12 | R3950.00 |
| **Total** | | | | |
| **TOTAL CREDITS SEMESTER 1&2** | | | **124** | |
| **Third Year Curriculum** | | | | |
| **Semester One** | | | | |
| Industrial Management III | INMA301 | 7 | 12 | R3950.00 |
| Textile Testing Principles III | TTPR301 | 7 | 12 | R3330.00 |
| Non-Woven Principles III | NWPR301 | 7 | 16 | R5050.00 |
| Finishing Theory III | FITH301 | 7 | 12 | R3950.00 |
| Role of Applied Science in Society | APSS101 | 6 | 12 | - |
| **Total** | | | | |
| **Semester Two** | | | | |
| Production Organisation Research Project | PORP301 | 7 | 16 | R5050.00 |
| **Student to select either dry or wet option only.** | | | | |
| **Dry Option:** | | | | |
| Weaving Principles III | WEPR301 | 7 | 16 | R5050.00 |
| Product Engineering III | PROE301 | 7 | 16 | R5050.00 |
| Yarn Spinning Theory III | YSTH301 | 7 | 12 | R3950.00 |
| **Wet Option:** | | | | |
| Colouration Theory III | COTH301 | 7 | 16 | R5050.00 |
| Chemistry & Colour Physics III | CHCP301 | 7 | 16 | R5050.00 |
| Polymer Science III | POSC301 | 7 | 12 | R3950.00 |
| **Total** | | | | **R33150.00** |
| **TOTAL CREDITS SEMESTER 1&2** | | | **124** | |

## 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: Bachelor: DUDATT

## Closing Date for applications: **30 September 2022**

## For Further Information

Contact the Department of Clothing and Textile Studies
Durban University of Technology
P O Box 1334
DURBAN
4000

Tel: (031) 373 2148 / (031) 3732003
Fax: (031) 373 2876
Email: afassihi@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.

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