



Bachelor of Applied Science in Textile Science NQF Level: 7

SAQA ID: 111358

Qualification Code: BASTXI

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) NSC DEGREE ENTRY		SENIOR CERTIFICATE (SC) (PRE 2009) Senior Certificate (SC) with Matric Exemption			NATIONAL CERTIFICATE (VOCATIONAL) (NCV) (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:

- 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 2021 fees have been indicated.

Please Note: DUT cannot be held liable for the fees in this brochure as the 2022 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	2021 Fees
Semester One I				
Cornerstone 101	CSTN101	5	12	R3260.00
Chemistry I	CHEM101	5	12	R3770.00
Physics I	PHYS101	5	16	R4720.00
Textile Industry I	TEIN101	5	12	R4530.00
Information & Comm Tech Literacy & Skills	ICTL101	5	8	R2040.00
Total				R18320.00
Semester Two				
Weaving Preparation Theory I	WPTH101	6	16	R5780.00
Mathematics I	MATC101	5	16	R5030.00
Textile Material Science I	TMSC101	6	12	R4530.00
Yarn Spinning Theory I	YSTH101	6	16	R5780.00
Total				R21120.00
TOTAL CREDITS SEMESTER 1&2			120	
Second Year Curriculum				
Semester One				
Values in the Workplace (IGE)	VWKP101	5	8	R2170.00
Product Engineering II	PROE201	6	16	R4820.00
Weaving Principles II	WERP201	6	16	R4820.00

Knitting Principles II	KNPR201	6	12	R3770.00
Textile Colouration Principles II	TCPR201	6	16	R4820.00
Total				R20400.00
Semester Two				
Applied Science for Sustainable Dev (FGE)	ASSD101	6	12	R3020.00
Textile Research Techniques	TERT201	7	12	R3770.00
Introduction to Technopreneurship	ITCH101	5	8	R1890.00
Applied Science and Wellness	ASWL101	5	12	R3260.00
Textile Testing Principles II	TETP201	6	12	R3770.00
Total				R15710.00
TOTAL CREDITS SEMESTER 1&2			124	
Third Year Curriculum				
Semester One				
Industrial Management III	INMA301	7	12	R3770.00
Textile Testing Principles III	TTPR301	7	12	R3180.00
Non-Woven Principles III	NWPR301	7	16	R4820.00
Finishing Theory III	FITH301	7	12	R3770.00
Role of Applied Science in Society	APSS101	6	12	R3020.00
Total				R18560.00
Semester Two				
Production Organisation Research Project	PORP301	7	16	R4820.00
Student to select either dry or wet option only.				
Dry Option:				
Weaving Principles III	WEPR301	7	16	R4820.00
Product Engineering III	PROE301	7	16	R4820.00
Yarn Spinning Theory III	YSTH301	7	12	R3770.00
Wet Option:				
Colouration Theory III	COTH301	7	16	R4820.00
Chemistry & Colour Physics III	CHCP301	7	16	R4820.00
Polymer Science III	POSC301	7	12	R3770.00
Total				R31640.00
TOTAL CREDITS SEMESTER 1&2			124	

Diploma in Textile Technology

NQF Level: 6

SAQA ID: 98918

Qualification Code: DITXTI

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

Description of the Programme

The three-year qualification in Textile Technology 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.

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

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 the diploma would be able to display 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 technologists in the field of fibre processing and fabric manufacture. A Textile Technologist may work in a textile mill or factory, a laboratory or for a retailer.

Personal Qualities Required

Textile Technology 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 production, fabric development, marketing, and quality control departments, in a range of textile and associated companies. 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.

Entry Requirements (Diploma in Textile Technology)

NATIONAL SENIOR CERTIFICATE (NSC) (01 January 2009) NSC DIPLOMA ENTRY		SENIOR CERTIFICATE (SC) (PRE 2009) SENIOR CERTIFICATE (SC)			NATIONAL CERTIFICATE VOCATIONAL (NCV) (NCV) LEVEL 4	
Compulsory Subjects	NSC Rating Code	Compulsory Subjects	HG	SG	NCV level 4 with statutory requirements for a diploma entrance with the following subjects:	Mark
English	4	English	E	D	English	50%
Mathematics	4/3*	Mathematics	E*	E/D*	Mathematics	60%
Physical Science	3/4*	Physical Science	E*	E/D*	Physical Science	60%

***Notwithstanding the minimum NSC points above, Maths + Science must total a minimum of 7 NSC points. Similarly, either Maths or Physical Science should be at SG D (or HG E).**

Additional Entry Requirements:
Applicants will also write the DUT SATAP English Literacy test, and SATAP Math and Science assessments to determine potential. Applicants obtaining less than 50% on this assessment with no special consideration (i.e., mature age application, industry experience and letter from employer) may be conditionally accepted.

OR

Admission Requirement based upon Work Experience, Age and Maturity

For admission to entry level diploma and certificate studies:

A person may, subject to such requirements as the Senate may determine, be admitted to the Institution even if such a person is not in a possession of a National Senior Certificate, Senior Certificate, or an equivalent certificate, 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 at the discretion of the respective Head of Department 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) and/or an appropriate subject or programme specific written assessment designed and marked by the relevant Department; and
- The relevant Faculty Board shall be satisfied that the person's standard of communication skills, ability to study successfully and/or work experience are such that the person, in the opinion of the relevant Faculty Board, should be able to complete the proposed instructional programme successfully. If required, the communication skills and study skills should be tested; and
- 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 inclusive of the date of scheduling writing a requisite eligibility assessment

Tuition Fees

To assist you with your planning, the **2021** fees have been indicated.²

Please Note: DUT cannot be held liable for the fees in this brochure as the **2022** fees are not yet final.

Diploma in Textile Technology

First Year Curriculum				
Name of the Module	Subject Code	HEQSF Level	SAQA Credits	2021 Fees
Semester One				
Cornerstone 101	CSTN101	5	12	R3260.00
Chemistry I	CHSY101	5	12	R3770.00
Physics I	PYSC101	5	16	R4770.00
Survey of the Textile Industry I	SVTX101	5	16	R5250.00
Information & Comm Tech Literacy & Skills	ICTL101	5	8	R2040.00
Total				R19090.00
Semester Two				
Weaving Preparation	WVPR101	6	12	R4150.00
Mathematics I	MMAT101	5	16	R4420.00
Textile Materials	TXMT101	6	12	R4150.00
Yarn Technology II	YRNT201	6	16	R5250.00
Total				R17970.00
TOTAL CREDITS SEMESTER 1&2			120	
Second Year Curriculum				
Semester One				
Product Engineering I	PRDE101	6	16	R5250.00
Weaving Technology II	WVTC201	6	16	R5250.00
Knitting Technology	KNTT101	6	12	R4150.00
Colouration Technology II	CLRT201	6	16	R5250.00
Total				R19900.00

Semester Two				
Community Engagement & Development	ASCEI01	6	12	R3260.00
Textile Practice Research Project	TPRP101	6	28	R7790.00
Introduction to Technopreneurship	ITCHI01	5	8	R1890.00
Applied Science and Wellness	ASWLI01	5	12	R3260.00
Total				R16200.00
TOTAL CREDITS SEMESTER I&2			120	
Third Year Curriculum				
Semester One				
Production Organisation	PDTO101	6	8	R2010.00
Product Engineering II	PRDE201	6	12	R4150.00
Non-Woven Technology	NWVT101	6	12	R4150.00
Finishing Technology	FNST101	6	12	R4150.00
Values in the Workplace	VWKP101	5	8	R2170.00
Role of Applied Science in Society	RASS101	6	12	R3020.00
Total				R23800.00
Semester Two				
Industrial Studies	IDST101	6	12	R4150.00
Testing and Statistics	TSST101	6	16	R5530.00
Student to select either dry or wet option only:				
Dry Option:				
Weaving Technology III	WVTC301	7	16	R5250.00
Yarn Technology III	YRNT301	7	12	R4150.00
Wet Option:				
Colouration Technology III	CLRT301	7	16	R5250.00
Chemistry & Colour Physics	CCLP101	7	12	R4150.00
Total				R28480.00
TOTAL CREDITS SEMESTER I&2			120	

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: Diploma - DUDTT3

Bachelor - DUDATT

Closing Date for applications: 30 September 2021

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.