

BACHELOR OF HEALTH SCIENCES IN CLINICAL TECHNOLOGY



FACULTY OF
HEALTH
SCIENCES

DEPARTMENT OF
BIOMEDICAL
& CLINICAL
TECHNOLOGY

01 JAN - 31 DEC 2024

Bachelor of Health Sciences in Clinical Technology

NQF Level: 8

SAQA ID: 96409

Qualification Code: BHCLTI

Location: (B Block 2nd Floor) ML Sultan Campus

Purpose of the programme

The purpose of this qualification is to develop a learner to possess the necessary knowledge, skills, attitudes and values to practice as a Clinical Technologist, as a part of a multi-disciplinary team, in one of the following specialist categories: Cardiology, Cardiovascular Perfusion, Critical Care, Nephrology, Neurology, Pulmonology or Reproductive Biology. The qualifying learner will be able to independently perform diagnostic, therapeutic, and corrective procedures on patients using specialised health technology and techniques for the treatment of patho-physiological conditions in a hospital-based or in a private practice setting. This qualification will enable the learner to engage in research and contribute to the creation of new knowledge within the field. Lastly, the qualification is designed to provide learners with specific clinical technology skills and competencies that are included in management and research.

Upon completion of this qualification, the student will be able to:

Apply scientific and technological knowledge to perform and monitor diagnostic, therapeutic and quality assurance procedures in the clinical environment for the management of patients in a field of specialisation in accordance with statutory and operational requirements.

Perform therapeutic, corrective and organ system support on patients using specialised health technology to facilitate management of the patient.

Conduct research in a field of clinical technology in compliance with legislated and ethical research requirements. Demonstrate entrepreneurship and management skills in the health care facility to ensure professional, legal and ethical service delivery

Learning and Teaching strategies

Our teaching, learning and assessment philosophies will be grounded in the following learning theories: cognitivist, constructivist, and situated-social learning, and constructive- development. Strategies for learning and teaching will include, but not be limited to, theory lectures, group work and discussions, oral presentations, practical demonstrations and simulations, self and active learning, assignments, case studies, portfolios and tutorials in order to ensure that there is constructive alignment with the teaching, learning and assessment constructs, to meet the Exit Level Outcomes (ELO). In order to achieve the ELO as described above, the programme will be delivered full-time at DUT, with exposure to the clinical environment from first year to fourth year.

Registration with the Professional Board for Radiography and Clinical Technology

Upon registration with Durban University of Technology for the programme: Bachelor of Health Sciences in Clinical Technology, it is mandatory that a student register as a Student Clinical Technologist with the Health Professions Council of South Africa as determined in the regulations set out in the Government Gazette (No. R1608 dated 24 July 1987).

Career opportunities

A Clinical Technologist can be employed in provincial and private hospitals in either Critical Care units, Lung Function units, Renal/Dialysis units, EEG and Sleep Laboratories, Cardio-thoracic surgery, Cardiac Catheterisation Laboratory & Cardiac Clinic or Assisted Reproductive Biology Laboratories.

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 (BHS in Clinical Technology)

NATIONAL SENIOR CERTIFICATE (NSC) (01 JANUARY 200*)		SENIOR CERTIFICATE (SC) (PRE 2009)			NATIONAL CERTIFICATE (VOCATIONAL) (NCV)	
NSC DEGREE ENTRY		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	70%
Mathematics	4	Mathematics	D	B	Mathematics	70%
Physical Science	4	Physical Science	D	B	Physical Science	70%
Life Science	4	Biology	D	B	Life Science OR	70%
And TWO 20 credits subjects (not more than one language)	3				Biology	70%

NB: NSC Mathematics Literacy will not be accepted as a substitute for the subject NSC Mathematics

Note: No points are allocated for 10 credit subjects (Life Orientation)

Additional Entry Requirements:

Applicants are required to have industrial knowledge and will have to undergo interviews.

Applicants are admitted based on academic merit, which is accessed by converting Matriculation Certificate/NSC symbols into a point score.

Application below that point score are not normally selected. This total from year to year, depending on the number and quality of application or changes in educational system of the country. Applicants satisfying the requirements may be required to appear before a Selection Committee and/or sit for an Aptitude Test.

First preference will be given to applicants who never studied previously at any other university. Applicants will undergo an interview. Matric results and ranking the programme as 1st or 2nd choice will also be used for ranking applicants for acceptance into the programme. Applicants with 25 points and more stand a greater chance of selection into the programme.

The NSC subject Technical Science will not be accepted as a substitute for the subject Physical Science.

Calculations of matriculation Point Score for Senior Certificate

The point score is calculated by matching each of the six best matriculation subject symbols with relevant value listed either under higher grade [HG] or standard grade [SG] and then adding the scores to give the total.

OR

ADMISSION REQUIREMENTS 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 the 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. An increase for next year to accommodate the inflation rate can be expected.

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

First Year Curriculum (BHS in Clinical Technology)				
Name of Module	Module Code	HEQSF Level	SAQA Credits	2023 Fees
Semester One				
Anatomy	AAMY101	5	16	R6600.00
Physics (Module 1)	PHIS111	5	8	R3030.00
Introduction to Clinical Technology	INCL101	5	16	R2230.00
Issues of Gender & Society in Health Care (E)	IGSH101	5	8	R5350.00
Physiology	PYSL101	5	16	R4130.00
Personal & Professional Development I	PPDV101	5	12	R2380.00
TOTAL				R23720.00
Semester Two				
Chemistry	CMTR101	5	16	R5260.00
Cornerstone 101	CSTN101	5	12	R3580.00
Introduction to Technopreneurship	ITCH101	5	8	R2070.00
Instrument. & Techniques for Clinical Technology I	ITCT101	5	12	R4130.00
Pathophysiology I	PTY101	5	8	R2750.00
Physics (Module 2)	PHIS121	5	8	R3030.00
Total Credits for Semester One & Two			140	
TOTAL				R20820.00
Second Year Curriculum				
Applied Anatomy and Physiology IA	AAPA101	6	12	R4130.00
Applied Anatomy and Physiology IB	AAPB101	6	12	R4950.00
Clinical Technology Practice	CLTP101	6	12	R4130.00
Instrument and Techniques for Clinical Technology II	ITCT201	6	16	R4130.00
Pathophysiology II	PTY201	6	16	R4130.00
Pharmacology	PRCL101	6	16	R4400.00
Research Methodology I	RMTD101	6	16	R4130.00
HIV and communicable diseases in KZN	HCDK101	6	8	R2380.00
Equality and Diversity	EQDV101	6	8	R2380.00
Professional Practice & Management	PPRM101	6	12	R2380.00
Personal and Professional Develop II	PPDV101	6	12	R2380.00
Total Credits for Semester One & Two			124	
TOTAL				R39520.00
Third Year Curriculum				
Research Methodology II	RMTD201	7	16	R4130.00
Health Care Management I	HLCM101	7	8	R2750.00
Restorative Justice	RSJS101	7	8	R2380.00
Ethics & Medical Law	EMDL101	7	12	R4920.00
Personal and Professional Develop III	PPDV301	7	12	R2380.00
TOTAL CREDITS			80	
TOTAL				R16560.00
ELECTIVES				
Specialisation in Cardiology				
Pathophysiology for Cardiology	PTCD101	7	16	R5500.00
Pharmacology for Cardiology	PMCD101	7	8	R2750.00
Clinical Tech Practice in Cardiology IA	CTCA101	7	12	R5500.00
Clinical Tech Practice in Cardiology IB	CTCB101	7	16	R4130.00
Instrumentation and Tech for Clinical Technology in Cardiology IA	ITCA101	7	12	R5500.00
Instrumentation and Tech for Clinical Technology in Cardiology IB	ITCB101	7	16	R5500.00
Total Credits			80	
TOTAL				R28880.00
Specialisation in Critical care				
Pathophysiology for Critical Care	PPCC101	7	16	R5500.00

Pharmacology for Critical Care	PHCC101	7	8	R2750.00
Clinical Technology Practice in Critical Care IA	CCCA101	7	12	R5500.00
Clinical Technology Practice in Critical Care IB	CCCB101	7	16	R4130.00
Instrumentation and Tech for Clinical Technology in Critical Care IA	ICRA101	7	12	R5500.00
Instrumentation and Tech for Clinical Technology in Critical Care IB	ICRB101	7	16	R5500.00
Total Credits			80	
TOTAL				R28880.00
Specialisation in Neurophysiology				
Pathophysiology for Neurophysiology	PTNP101	7	16	R5500.00
Pharmacology for Neurophysiology	PHNP101	7	8	R2750.00
Clinical Technology Practice in Neurophysiology IA	CTNA101	7	12	R5500.00
Clinical Technology Practice in Neurophysiology IB	CTNB101	7	16	R4130.00
Instrumentation and Tech for Clinical Tech in Neurophysiology IA	ITNA101	7	12	R5500.00
Instrumentation and Tech for Clinical Tech in Neurophysiology IB	ITNB101	7	16	R5500.00
Total Credits			80	
TOTAL				R28880.00
Fourth Year Curriculum				
Specialisation in Nephrology				
Healthcare Management Practice	HCMP101	8	12	R4950.00
Personal and Professional Development IV	PPDV401	8	12	R3580.00
Research Project A	RPJA101	8	12	R4130.00
Research Project B	RPJB101	8	16	R4130.00
Health care management II	HLCM201	8	16	R4130.00
Clinical Instruction	CLIN101	8	16	R5500.00
Small Business Management	SBSM101	8	16	R2380.00
Total Credits			100	
TOTAL				R28800.00
Specialisation in Cardiology				
Clinical Technology Practice in Cardiology IIA	CTCA201	8	16	R5510.00
Clinical Technology Practice in Cardiology IIB	CTCB201	8	16	R5510.00
Instrumentation and Tech for Clinical Technology in Cardiology IIA	ITCA201	8	12	R4130.00
Instrumentation and Tech for Clinical Technology in Cardiology IIB	ITCB201	8	16	R5510.00
Total Credits			60	
TOTAL				20660.00
Specialisation in Critical care				
Clinical Technology Practice in Critical Care IIA	CCCA201	8	16	R5500.00
Clinical Technology Practice in Critical Care IIB	CCCB201	8	16	R5500.00
Instrumentation and Tech for Clinical Technology in Critical Care IIA	ICRA201	8	12	R4130.00
Instrumentation and Tech for Clinical Technology in Critical Care IIB	ICRB201	8	16	R5500.00
Total Credits			60	
TOTAL				R20630.00
Specialisation in Neurophysiology				
Clinical Technology Practice in Neurophysiology IIA	CTNA201	8	16	R5510.00
Clinical Technology Practice in Neurophysiology IIB	CTNB201	8	16	R5510.00
Instrumentation and Tech for Clinical Tech in Neurophysiology IIA	ITNA201	8	12	R4130.00
Instrumentation and Tech for Clinical Tech in Neurophysiology IIB	ITNB201	8	16	R5510.00
Total Credits			60	
TOTAL				R20660.00
Specialisation in Nephrology				
Clinical Technology Practice in Nephrology IIA	CTPA201	8	16	R5510.00
Clinical Technology Practice in Nephrology IIB	CTPB201	8	16	R5510.00
Instrumentation and Tech for Clinical Technology in Nephrology IIA	ITPA201	8	12	R4130.00
Instrumentation and Tech for Clinical Technology in Nephrology IIB	ITPB201	8	16	R5510.00
Total Credits			60	
TOTAL				R20660.00
Specialisation in Perfusion				
Clinical Technology Practice in Perfusion IIA	CPPA201	8	16	R5500.00
Clinical Technology Practice in Perfusion IIB	CPPB201	8	16	R5510.00
Instrumentation and Tech for Clinical Technology in Perfusion IIA	ITFA201	8	12	R4130.00
Instrumentation and Tech for Clinical Technology in Perfusion IIB	ITFB201	8	16	R5510.00
Total Credits			60	
TOTAL				R20650.00
Specialisation in Pulmonology				
Clinical Technology Practice in Pulmonology IIA	CTLA201	8	16	R5510.00
Clinical Technology Practice in Pulmonology IIB	CTLB201	8	16	R5510.00
Instrumentation and Tech for Clinical Technology in Pulmonology IIA	ITLA201	8	12	R4130.00
Instrumentation and Tech for Clinical Technology in Pulmonology IIB	ITLB201	8	16	R5510.00
Total Credits			60	
TOTAL				R20660.00

Specialisation in Reproductive Biology				
Clinical Technology Practice in Reproductive Biology IIA	CTRA201	8	16	R5510.00
Clinical Technology Practice in Reproductive Biology IIB	CTRB201	8	16	R5510.00
Instrumentation & Tech for Clin Tech in Reproductive Biology IIA	ITBA201	8	12	R4130.00
Instrumentation and Tech for Clin Tech in Reproductive Biology IIB	ITBB201	8	16	R5510.00
Total Credits			60	
TOTAL				R20660.00

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
Internet: <http://www.cao.ac.za>

CAO Code: DU-D-DCT

Closing Date for applications: 30 September 2023

For Further Information

Contact the Department of Biomedical and Clinical Technology
Durban University of Technology
P O Box 1334
DURBAN
4000
Tel: (031) 373 5411
Fax: (031) 373 5295

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)3732931/2557/2054.

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