



## Bachelor of Health Sciences in Medical Laboratory Science

**NQF Level: 8**

**SAQA ID: 101689**

**Qualification Code: BHMSI**

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

### Description of the Programme

Medical laboratory Science is a profession of highly knowledgeable and skilled individuals who perform clinical laboratory tests on patient samples. The service offered by Medical laboratory Scientist is an important component of patient health care, as the results obtained from these laboratory tests are a vital tool in the diagnosis, treatment and prevention of disease.

Based on a variety of placement assessments, successful applicants for study towards a Bachelor of Health Sciences degree will be accepted into a four-year minimum study period. A partnership between the Medical Laboratory Science programme, the National Health Laboratory Service, the South African Blood Services, Lancet & Ampath private Laboratories and the KwaZulu-Natal Department of Health will ensure that the students fully participate in focused clinical practice activities. The participation of students in real life learning environments will ensure the achievement of exit level competencies and outcomes. The Clinical Laboratory Practice I in Year 3 and Clinical Laboratory Practice II in the final year will provide an opportunity to expose the student to new and novel environments in addition to providing an opportunity for the student to identify an area for in-depth practice. This will also allow for the development and attainment of the necessary graduate attributes, all of which form part of the institutions vision.

A student in Medical Laboratory Science must attend formal lectures and practical sessions at the Durban University of Technology in all modules for a period of their studies. This includes a total of six (6) months in the 3<sup>rd</sup> year of study and 12 months in the 4<sup>th</sup> year of study where they will have placed in training laboratories.

### Registration with Professional Board

On enrolment, it is mandatory that each student register with the Health Professionals Council of South Africa (HPCSA) as a student Medical Laboratory Scientist as per regulations set out in the Government Gazette (Circular E2/a9/2, 79, 09, 28). Successful completion of this qualification will entitle the student to register with the Health Professions Council of South Africa (HPCSA) as a Medical Laboratory Scientist who can practice independently.

### Career opportunities

The qualifying learner will be able to organise and perform laboratory operations in clinical diagnostic laboratories and related fields in compliance with statutory requirements for ethics, safety and quality assurance. Supervisory, management and research skills are developed. The Medical Laboratory Science degree that will be offered at DUT will at the onset, offer the following specialization options: Clinical Pathology, Haematology 3, Medical Microbiology 3, Clinical Chemistry 3, Immunohematology 2, Cytology and Histopathology 2. Other specialization modules viz. Cytogenetics, Forensic Medicine and Virology will be added on later as per industry demand. Graduates that qualify with the MLS degree may work in government pathology laboratories, private and research health care laboratories. To practice independently as a Medical Laboratory Scientist, two (2) years post-registration experience is required. Non-HPCSA registered Medical Laboratory Scientist may work in non- diagnostic 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 Medical Laboratory Science)

| NATIONAL SENIOR CERTIFICATE (NSC)<br>(01 JANUARY 2009)                   |                 | SENIOR CERTIFICATE (SC)<br>(PRE 2009) |    |    | NATIONAL CERTIFICATE<br>(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 <b>OR</b>                     | 70%  |
| And <b>TWO</b> 20 credit subjects<br>(not more than <b>ONE</b> language) | 3               |                                       |    |    | Biology                                    | 70%  |
|  |                 |                                       |    |    | And <b>FOUR</b> other Subjects             | 70%  |

**Additional Entry Requirements:**  
Applicants are required to have some knowledge regarding the profession and will have to undergo an interview.

### OR

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 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 **2021** 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 **2022** fees are not yet final.

### First Year Curriculum (BHS in Medical Laboratory Science)

| Name of Module                                       | Module Code | HEQSF Level | SAQA Credits | 2021 Fees |
|--|-------------|-------------|--------------|-----------|
| Physics Module I                                     | PHIS111     | 5           | 8            | R2770.00  |
| Chemistry  | CMTR101     | 5           | 16           | R4800.00  |
| Anatomy and physiology IA                            | ANPA101     | 5           | 12           | R2400.00  |
| Fundamentals of Medical Lab Science                  | FMLS101     | 5           | 12           | R2910.00  |
| Cornerstone 101                                      | CHCR101     | 5           | 12           | R3260.00  |
| <b>Select ONE Module from the List Below:</b>        |             |             |              |           |
| Issues of Gender Equality in Health Care <b>OR</b>   | IGSH101     | 5           | 12           | R4880.00  |
| Environmental Awareness for Healthcare Practitioners | EVAH101     |             |              |           |

|                           |               |   |    |          |
|---------------------------|---------------|---|----|----------|
| Cell Biology              | CBIO101       | 5 | 16 | R3610.00 |
| Immunology                | IMLG101       | 5 | 16 | R3140.00 |
| Anatomy and physiology IB | A N P B 1 0 2 | 5 | 12 | R4190.00 |
| Physics Module 2          | PHIS121       | 5 | 8  | R2770.00 |
| Statistics                | STTS101       | 5 | 8  | R2120.00 |

**Select ONE Module from the List Below:**

|                            |         |   |   |          |
|----------------------------|---------|---|---|----------|
| Values in the workplace OR | VWKP101 | 5 | 8 | R2170.00 |
| Cultural diversity         | CLDV101 | 5 | 8 | R2040.00 |

|                      |  |  |            |                  |
|----------------------|--|--|------------|------------------|
| <b>TOTAL CREDITS</b> |  |  | <b>140</b> |                  |
| <b>TOTAL</b>         |  |  |            | <b>R39020.00</b> |

**Second Year Curriculum**

|                           |         |   |    |          |
|---------------------------|---------|---|----|----------|
| Clinical Chemistry I      | CLCM101 | 6 | 16 | R3490.00 |
| Medical Microbiology I    | MMCR101 | 6 | 8  | R3490.00 |
| Medical Microbiology IIA  | MDMA201 | 7 | 16 | R3490.00 |
| Haematology I             | HMTL101 | 6 | 16 | R3490.00 |
| Immunohematology I        | IMHT101 | 6 | 16 | R2970.00 |
| Histopathology I          | HPTH101 | 6 | 16 | R2970.00 |
| Cytology I                | CYTL101 | 6 | 16 | R3180.00 |
| Molecular Biology         | MLCB101 | 6 | 18 | R2560.00 |
| Fundamentals of Pathology | SYSP101 | 6 | 8  | R2130.00 |
| Systemic Pathophysiology  | FPTH101 | 6 | 8  | R2130.00 |

**Select ONE Module from the List Below:**

|                             |         |   |   |          |
|-----------------------------|---------|---|---|----------|
| The entrepreneurial edge OR | TENE101 |   |   | R2170.00 |
| The global environment OR   | GENV101 | 6 | 8 | R2040.00 |
| Equality and diversity      | EQDV101 |   |   | R2040.00 |

|                      |  |  |            |                  |
|----------------------|--|--|------------|------------------|
| <b>TOTAL CREDITS</b> |  |  | <b>120</b> |                  |
| <b>TOTAL</b>         |  |  |            | <b>R32070.00</b> |

**Third Year Curriculum**

|                                |         |   |    |          |
|--------------------------------|---------|---|----|----------|
| Clinical Chemistry II          | CLCM201 | 7 | 16 | R3490.00 |
| Medical Microbiology IIB       | MDMB201 | 7 | 16 | R3490.00 |
| Haematology II                 | HMTL201 | 7 | 16 | R3490.00 |
| Cytology II                    | CYTL201 | 7 | 16 | R3180.00 |
| Clinical Laboratory Practice I | CLLP101 | 7 | 16 | R2450.00 |
| Principles of Management       | PMTG101 | 7 | 8  | R2560.00 |
| Restorative Justice            | RSJS101 | 7 | 8  | R2170.00 |
| Ethics and Medical Law         | ETML101 | 7 | 12 | R4890.00 |
| Principles of Research         | PRRS101 | 7 | 8  | R3490.00 |

|                      |  |  |            |                  |
|----------------------|--|--|------------|------------------|
| <b>TOTAL CREDITS</b> |  |  | <b>132</b> |                  |
| <b>TOTAL</b>         |  |  |            | <b>R29210.00</b> |

**Fourth Year Curriculum**

|                                     |         |   |    |          |
|-------------------------------------|---------|---|----|----------|
| Research Project Module A           | RPJA101 | 8 | 20 | R3770.00 |
| Research Project Module B           | RPJB101 | 8 | 16 | R3770.00 |
| Integrated Pathophysiology Module A | IPPA101 | 8 | 12 | R2390.00 |
| Integrated Pathophysiology Module B | IPPB102 | 8 | 8  | R2390.00 |
| Laboratory Management               | LBTM101 | 8 | 12 | R4190.00 |

**Select ONE Module (electives) from the List Below:**

|                              |         |   |    |          |
|------------------------------|---------|---|----|----------|
| Clinical Pathology Module IA | CPHA101 | 8 | 28 | R2910.00 |
| Clinical Pathology Module IB | CPHB101 | 8 | 24 | R2910.00 |
| Clinical Chemistry IIIA      | CLCA301 | 8 | 28 | R3080.00 |
| Clinical Chemistry IIIB      | CLCB301 | 8 | 24 | R3080.00 |
| Medical Microbiology IIIA    | MDMA301 | 8 | 28 | R2500.00 |
| Medical Microbiology IIIB    | MDMB301 | 8 | 24 | R2500.00 |
| Cytology IIIA                | CYTA301 | 8 | 28 | R2500.00 |
| Cytology IIIB                | CYTB301 | 8 | 24 | R2500.00 |
| Haematology IIIA             | HMTA301 | 8 | 28 | R2500.00 |
| Haematology IIIB             | HMTB301 | 8 | 24 | R2500.00 |
| Histopathology IIA           | HISA201 | 8 | 28 | R2500.00 |

|  |         |   |            |                  |
|--|---------|---|------------|------------------|
| Histopathology IIB   | HISB201 | 8 | 24         | R2500.00         |
| Immunohaematology IIA                                      | IHMA201 | 8 | 28         | R2500.00         |
| Immunohaematology IIB                                      | IHMB201 | 8 | 24         | R2500.00         |
| <b>TOTAL CREDITS</b>                                       |         |   | <b>120</b> |                  |
| <b>TOTAL</b>   |         |   |            | <b>R19010.00</b> |
| <b>TOTAL CREDITS FOR BHS IN MEDICAL LABORATORY SCIENCE</b> |         |   | <b>512</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:** DUDBLS

**Closing Date for applications:** 30 September 2021

### 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](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)3732931/2557/2054.

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