

Emergency Medical Care & Rescue



DURBAN UNIVERSITY OF TECHNOLOGY
INYUVESI YASETHEKWINI YEZJBUCHWEPHESHE



20 HAND 24 BOOK

ENVISION2030

transparency • honesty • integrity • respect • accountability
fairness • professionalism • commitment • compassion • excellence

CREATIVE. DISTINCTIVE. IMPACTFUL.

HANDBOOK FOR 2024

FACULTY OF HEALTH SCIENCES

**DEPARTMENT of EMERGENCY MEDICAL CARE
and RESCUE**

What is a University of Technology?

A university of technology is characterized by being research informed rather than research driven where the focus is on strategic and applied research that can be translated into professional practice. Furthermore, research output is commercialized thus providing a source of income for the institution. Learning programmes, in which the emphasis on technological capability is as important as cognitive skills, are developed around graduate profiles as defined by industry and the professions.

IMPORTANT NOTICES

The rules in this departmental handbook must be read in conjunction with the General Rules (G Rules) contained in the DUT General Handbook for Students as well as the relevant module Study Guides.

Your attention is specifically drawn to Rule GI (8) and to the process of dealing with students' issues.

NOTE TO ALL REGISTERED STUDENTS

Your registration is in accordance with all current rules of the Institution. If, for whatever reason, you do not register consecutively for every year/semester of your programme, your existing registration contract with the Institution will cease. Your re-registration anytime thereafter will be at the discretion of the institution and, if permitted, will be in accordance with the rules applicable at that time.

FACULTY of HEALTH SCIENCES
FACULTY VISION, MISSION, GOALS & VALUES
(November 2019 - 2021)

VISION

Leading transformative and Innovative Health Sciences Education

MISSION

Developing Holistic Professionals responsive to Healthcare needs
through *excellence* in:
Teaching and learning
Research, Innovation and engagement
Fostering entrepreneurship

VALUES

Professionalism

(To work within regulatory frameworks of professional conduct. To maintain and develop professional expertise and good work ethic.)

Integrity

(To conduct ourselves with strong moral principles. To be honest and authentic. To do what is ethical and just.)

Ubuntu

(To treat people with respect, fairness, courtesy, politeness and kindness.)

Transparency

(To conduct ourselves with openness and honesty through shared governance.)

Accountability

(To accept responsibility for one's actions.)

DEPARTMENTAL VISION, MISSION & GOALS

VISION

Leaders in Emergency Care Education

MISSION

To develop quality emergency care graduates
through *excellence* in:

Teaching and learning

Research

Community engagement

VALUES

Commitment

(We are selfless and dedicated to our mission.)

Professionalism

(We value integrity, fairness, accountability and continuous development)

Ubuntu

(We are kind, respectful, courteous, considerate and compassionate to all)

1.	DEPARTMENTAL & FACULTY CONTACT DETAILS	1
2.	STAFFING	2
3.	DEPARTMENTAL INFORMATION & RULES	4
3.1	Qualifications offered by the department	4
3.2	Departmental Information	4
3.3	Departmental Rules	4
4.	Bachelor of Health Sciences in Emergency Medical Care (BHEMC3)	6
4.1	Programme Information	6
4.1.1	Purpose	6
4.1.2	Programme Structure	6
4.2	Programme Rules	11
4.2.1	Minimum Admission Requirements	11
4.2.2	Minimum duration of study	12
4.2.3	Selection Criteria	12
4.2.4	Assessment and Moderation	12
4.2.5	Special Tests and Condonement	13
4.2.6	Re-registration Rules	13
4.2.7	Progression Rules	13
4.2.8	Exclusion Rules	14
4.2.9	Interruption of Studies	14
4.2.10	Student Appeals	14
4.3	Module Content	15
5.	Master of Health Sciences in Emergency Medical Care (MHEMCI)	24
5.1	Programme Information	24
5.2	Programme Rules	24
5.2.1	Minimum Admission Requirements & Selection Criteria	24
5.2.2	Pass Requirements	24
5.2.3	Interruption of Studies	24
5.3	Assessment and Moderation	25
6.	Doctor of Philosophy in Emergency Medical Care (DPEMCI)	26
6.1	Programme Information	26
6.2	Programme Rules	26
6.2.1	Minimum Admission Requirements & Selection Criteria	26
6.2.2	Pass Requirements	26
6.2.3	Interruption of Studies	27
6.3	Assessment and Moderation	27

- **I. CONTACT DETAILS**

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Location of Department

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- **2. STAFFING**

- **Acting Head of Department**

Name and Qualification

Mr Sageshin Naguran, M Tech: Emergency Medical Care (DUT); B Tech: Emergency Medical Care (DUT); ND: Ambulance and Emergency Care (DUT)

Lecturers

Mr Melvin Chetty, MHSc: Emergency Medical Care (DUT); B Tech: Emergency Medical Care (DUT); ND: Emergency Medical Care (DUT)

Mr Ntuthuko Chule, MHSc: Emergency Medical Care (DUT); BHSc Emergency Medical Care (DUT)

Ms Amy Lagesse, MHSc: Emergency Medical Care (DUT); BHSc Emergency Medical Care (DUT)

Mr Yugan Pillay, M Tech: Emergency Medical Care (DUT); B Tech: Emergency Medical Care (DUT); ND: Emergency Medical Care (DUT)

Clinical Tutor

Mrs Faith Tsiri, B Tech: Emergency Medical Care (DUT); ND: Emergency Medical Care (DUT)

Clinical Instructor

Mrs Robyn Stander, MHSc: Emergency Medical Care (DUT); Bachelor of Emergency Medical Care (CPUT); NC: Emergency Medical Care (CPUT)

Secretary

Mrs Leigh Meyers, MMSc: Administration & Information Management (DUT); B Tech: Office Management and Technology (DUT); ND: Office Management and Technology (DUT)

Honorary Research Professor

Prof Timothy Hardcastle, PhD (UKZN); MBChB (Stell); FCS (SA), Trauma (HPCSA)

Honorary Research Fellow

Prof Ismail Mall, PhD; B.Pharm (UKZN); MMedSc (UKZN)

Dr Simpiwe Sobuwa, PhD Emergency Medicine (UCT; HD: Higher Education and Training (CPUT); MSc: (Med) Emergency Medicine (UCT); B Tech: Emergency Medical Care (CPUT); ND: Emergency Medical Care (CPUT)

Honorary Research Associate

Dr Padarath (Ajeth) Gangaram, PhD (UCT); BTech: EMC (DUT)

3. DEPARTMENTAL INFORMATION AND RULES

3.1 Qualifications offered by the department

Learning programmes are offered in this Department that will, upon successful completion, lead to the award of the following qualifications:

Qualification	Qualification Code	SAQA NLRD Number
BHSc in Emergency Medical Care	BHEMC3	74471
MHSc in Emergency Medical Care	MHEMCI	96727
DPhil in Emergency Medical Care	DPEMCI	90818

3.2 DEPARTMENTAL INFORMATION

3.2.1 Academic Integrity

Please refer to the General Rules pertaining to academic integrity G13 (1)(0). These will be enforced wherever necessary to safeguard the worthiness of our qualifications, and the integrity of the Faculty of Health Sciences at the DUT.

3.2.2 Code of Conduct for Students

Students must comply with the Departmental Student Code of Conduct at all times.

3.2.3 Attendance

Please refer to the Student Code of Conduct

3.2.4 Health and Safety

Students must adhere to all Health and Safety regulations while at DUT, during Medical Rescue training and while undertaking Clinical Practice. Failure to do so will be treated as a breach of the disciplinary code of conduct.

3.2.5 **Registration with the HPCSA: Professional Board for Emergency Care** Within two weeks of registration with the Department, students are required to register with the HPCSA: Professional Board for Emergency Care as an ECP student.

3.3 DEPARTMENTAL RULES

3.3.1 Special Tests and Condonement

No missed assessments will be condoned.

3.3.1.1 If a student misses an assessment for reasons of illness, a special assessment may be granted if the student provides a valid medical certificate

specifying the nature and duration of the illness, and a declaration that for health reasons it was impossible for the student to sit for the assessment. This certificate must be submitted to the Head of Programme and/or Year Coordinator and/or Lecturer no later than five (5) working days after the “fit for duty” date on the medical certificate.

- If a student misses an assessment for reasons other than illness, a special assessment may be granted if the student provides a valid declaration that for unavoidable reasons it was impossible for the student to sit for the assessment. This certificate must be submitted to the Head of Programme and/or Year Coordinator and/or Lecturer no later than five (5) working days after the date of the missed assessment.
- Any student who misses an assessment and who does not qualify for a special assessment, and any student who qualifies for a special assessment but fails to write it, shall be awarded a zero mark for the missed assessment.

SECTION A: UNDERGRADUATE QUALIFICATION

4. BACHELOR OF HEALTH SCIENCES IN EMERGENCY MEDICAL CARE (BHEMC3)

4.1 PROGRAMME INFORMATION

The Bachelor of Health Sciences in Emergency Medical Care is registered by SAQA at NQF Level 8 of the HEQSF. The programme allows articulations into the Master of Health Sciences degree in Emergency Medical Care and other equivalent qualifications.

This qualification has been designed as a four-year professional BHSc degree as mandated by the Health Professions Council of South Africa: Professional Board of Emergency Medical Care that will lead to professional registration as an Emergency Care Practitioner.

4.1.1 Purpose

To develop a competent learner in the knowledge, attitude, insight and skills required for the emergency medical care and rescue professions.

4.1.2 Programme Structure

Codes	Modules:	HEQSF Level	Assessment	SAQA Credits	Pre-requisite modules	Co-requisite modules
BACHELOR OF HEALTH SCIENCES IN EMERGENCY MEDICAL CARE						
Year One						
EMCT101	Emergency Medical Care Theory I	5	CA	16	Physics, Chemistry, Anatomy I, Physiology I, Foundations of Professional Practice I	Emergency Medical Care Practical I, Clinical Practice I
EMCP101	Emergency Medical Care Practical I	5	CA	16	Physics, Chemistry, Anatomy I, Physiology I, Foundations of Professional Practice I	Emergency Medical Care Theory I, Clinical Practice I
CNLP101	Clinical Practice I	5	CA	20	Physics, Chemistry, Anatomy I, Physiology I, Foundations of Professional Practice I	Emergency Medical Care Theory I, Emergency Medical Care Practical I
AAMY102	Anatomy I	6	CA	16	Meet admission requirements	None
PHSL101	Physiology I	6	CA	16	Meet admission requirements	None
PHIS101	Physics	6	CA	8	Meet admission requirements	None
CSTY101	Chemistry	5	CA	8	Meet admission requirements	None
CSTN101	Cornerstone	5	CA	12	Meet admission requirements	None
PHYP101	Physical Preparedness I	5	CA	0	Meet admission requirements	None
FNPP101	Faculty Gen Ed modules: Foundations of Professional	5	CA	12	Meet admission requirements	None

Year Two						
DGST101	Diagnostics	7	CA	12	Anatomy I Physiology I Emergency Medical Care Theory I Emergency Medical Care Practical I Clinical Practice I	None
ERTA201	Emergency Medical Care Theory IIA	6	CA	8	Physiology I Anatomy I Emergency Medical Care Theory I Emergency Medical Care Practical I Clinical Practice I	Emergency Medical Care Practical IIA Clinical Practice IIA
ERTB201	Emergency Medical Care Theory IIB	6	CA	8	Emergency Medical Care Practical IIA Emergency Medical Care Theory IIA	Emergency Medical Care Practical IIB Clinical Practice IIB
ERPA201	Emergency Medical Care Practical IIA	6	CA	16	Physiology I Anatomy I Emergency Medical Care Theory I Emergency Medical Care Practical I Clinical Practice I	Clinical Practice IIA Emergency Medical Care Theory IIA
ERPB201	Emergency Medical Care Practical IIB	6	CA	16	Emergency Medical Care Practical IIA Emergency Medical Care Theory IIA	Clinical Practice IIB Emergency Medical Care Theory IIB
CLPA201	Clinical Practice IIA	6	CA	8	Physiology I Anatomy I Emergency Medical Care Theory I Emergency Medical Care Practical I Clinical Practice I	Emergency Medical Care Theory IIA Emergency Medical Care Practical IIA
CLPB201	Clinical Practice IIB	6	CA	12	Emergency Medical Care Theory IIA, Emergency Medical Care Practical IIB, Clinical Practice IIA	Emergency Medical Care Theory IIB Clinical Practice IIB
MDRA101	Medical Rescue IA	6	CA	4	Physical Preparedness I Clinical Practice I Emergency Medical Care Practical I Emergency Medical Care Theory I	Physical Preparedness II
MDRB101	Medical Rescue IB	6	CA	4	Physical Preparedness I Clinical Practice I Emergency Medical Care Practical I Emergency Medical Care Theory I	Physical Preparedness II
MDRC101	Medical Rescue IC	6	CA	4	Physical Preparedness I Clinical Practice I Emergency Medical Care Practical I Emergency Medical Care Theory I	Physical Preparedness II

MDRD101	Medical Rescue ID	6	CA	4	Physical Preparedness I Clinical Practice I Emergency Medical Care Practical I Emergency Medical Care Theory I	Physical Preparedness II
PSYA201	Physiology IIA	7	CA	16	Physiology I and Anatomy I	None
PSYB201	Physiology IIB	7	CA	8	Physiology IIA	None
PHYP201	Physical Preparedness II	5	CA	4	Physical Preparedness I	None
ETML101	Faculty Gen Ed module: Ethics and Medical Law	6	CA	12	None	None
HCDK101	HIV and Communicable Diseases in	6	CA	8	None	None
Year Three						
ERTA301	Emergency Medical Care Theory IIIA	7	CA	8	Emergency Medical Care Theory IIB Emergency Medical Care Practical IIB Clinical Practice IIB Physiology IIB Pharmacology IB	Clinical Practice IIIA Emergency Medical Care Practical IIIA
ERTB301	Emergency Medical Care Theory IIIB	7	CA	8	Emergency Medical Care Theory IIIA Emergency Medical Care Practical IIIA Clinical Practice IIIA	Clinical Practice IIIB Emergency Medical Care Practical IIIB
ERPA301	Emergency Medical Care Practical IIIA	7	CA	8	Emergency Medical Care Theory IIB Emergency Medical Care Practical IIB Clinical Practice IIB Physiology IIB Pharmacology IB	Emergency Medical Care Theory IIIA Clinical Practice IIIA
ERP301	Emergency Medical Care Practical IIIB	7	CA	8	Emergency Medical Care Practical IIIA Emergency Medical Care Theory IIIA Clinical Practice IIIA	Emergency Medical Care Theory IIIB Clinical Practice IIIB
CLPA301	Clinical Practice IIIA	7	CA	12	Emergency Medical Care Theory IIB Emergency Medical Care Practical IIB Clinical Practice IIB Physiology IIB Pharmacology IB	Emergency Medical Care Theory IIIA Emergency Medical Care Practical IIIA
CLPB301	Clinical Practice IIIB	7	CA	12	Emergency Medical Care Theory IIIA Emergency Medical Care Practical IIIA Clinical Practice IIIA	Emergency Medical Care Theory IIIB Emergency Medical Care Practical IIIB
PHMA101	Pharmacology IA	7	CA	8	Physiology II Emergency Medical Care Theory II Emergency Medical Care Practical II Clinical Practice II	None

MDRA201	Medical Rescue IIA	7	CA	4	Physical Preparedness II Emergency Medical Care Theory IIB Emergency Medical Care Practical IIB Clinical Practice IIB Medical Rescue IA, IB, IC and ID	Physical Preparedness III	
MDRB201	Medical Rescue IIB	7	CA	4	Physical Preparedness II Emergency Medical Care Theory IIB Emergency Medical Care Practical IIB Clinical Practice IIB Medical Rescue IA, IB, IC and ID	Physical Preparedness III	
MDRC201	Medical Rescue IIC	7	CA	4	Physical Preparedness II Emergency Medical Care Theory IIB Emergency Medical Care Practical IIB Clinical Practice IIB Medical Rescue IA, IB, IC and ID	Physical Preparedness III	
MDRD201	Medical Rescue IID	7	CA	4	Physical Preparedness II Emergency Medical Care Theory IIB Emergency Medical Care Practical IIB Clinical Practice IIB Medical Rescue IA, IB, IC and ID	Physical Preparedness III	
GPTA101	General Pathology IA	7	CA	8	Emergency Medical Care Theory IIB Emergency Medical Care Practical IIB Clinical Practice IIB Physiology IIB	None	
RSHM101	Research Methodology	7	CA	8	None	None	
RPSL101	Research Proposal	7	CA	8	Research Methodology	None	
PHYP301	Physical Preparedness III	5	CA	4	Physical Preparedness II	None	
CMEP101	Community Engagement Project	7	CA	8	None	None	
EDTC102	Faculty Gen Ed module: Educational Techniques	7	CA	12	None	None	
Year Four							
ERTA401	Emergency Medical Care Theory IVA	8	CA	8	Emergency Medical Care Theory IIIIB Emergency Medical Care Practical IIIIB Clinical Practice IIIIB General Pathology IA	Emergency Medical Care Practical IVA Clinical Practice IVA	
ERTB401	Emergency Medical Care Theory IVB	8	CA	8	Emergency Medical Care Theory IIIIB Emergency Medical Care Practical IIIIB Clinical Practice IIIIB General Pathology IA	Emergency Medical Care Practical IVB Clinical Practice IVB	

ERPA401	Emergency Medical Care Practical IVA	8	CA	8	Emergency Medical Care Theory III B Emergency Medical Care Practical III B Clinical Practice III B General Pathology IA	Emergency Medical Care Theory IVA Clinical Practice IVA
ERPB401	Emergency Medical Care Practical IVB	8	CA	8	Emergency Medical Care Theory III B Emergency Medical Care Practical III B Clinical Practice III B General Pathology IA	Clinical Practice IV B Emergency Medical Care Theory IV B
CLPA401	Clinical Practice IVA	8	CA	12	Emergency Medical Care Theory III B Emergency Medical Care Practical III B Clinical Practice III B General Pathology IA	Emergency Medical Care Theory IVA Emergency Medical Care Practical IVA
CLPB401	Clinical Practice IVB	8	CA	16	Emergency Medical Care Theory III B Emergency Medical Care Practical III B Clinical Practice III B General Pathology IA	Emergency Medical Care Theory IV B Emergency Medical Care Practical IV B
MDRA301	Medical Rescue IIIA	8	CA	4	Physical Preparedness III Emergency Medical Care Theory III B Emergency Medical Care Practical III B Clinical Practice III B Medical Rescue IIA, IIB, IIC and IID	Physical Preparedness IV
MDRB301	Medical Rescue IIIB	8	CA	4	Physical Preparedness III Emergency Medical Care Theory IIIA & IIIB Emergency Medical Care Practical IIIA & IIIB Clinical Practice IIIA & IIIB Medical Rescue IIA, IIB, IIC and IID	Physical Preparedness IV
MDRC301	Medical Rescue IIIC	8	CA	4	Physical Preparedness III Emergency Medical Care Theory III B Emergency Medical Care Practical III B Clinical Practice III B Medical Rescue IIA, IIB, IIC and IID	Physical Preparedness IV
MDRD301	Medical Rescue IIID	8	CA	4	Physical Preparedness III Emergency Medical Care Theory III B Emergency Medical Care Practical III B Clinical Practice III B Medical Rescue IIA, IIB, IIC and IID	None
RJPT101	Research Project IV	8	CA	20	Research Proposal	None
WWRK101	World of Work	5	CA	8	None	None
MNTP101	Faculty Gen Ed module: Management Practice	8	CA	12	None	None

PHLC101	Primary Health Care I	8	CA	12	Emergency Medical Care Theory IIIA & IIIB Emergency Medical Care Practical IIIA & IIIB Clinical Practice IIIA & IIIB	None
PHYP401	Physical Preparedness IV	5	CA	4	Physical Preparedness III	None

HEQSF = Higher Education Qualifications Sub-Framework

SAQA = South African Qualifications Authority

Co-requisite means a module that a student must take simultaneously to the listed Module

Prerequisite means a module that a student must pass before registering for the listed module

CA = Continuous Assessment

4.2 Programme Rules

4.2.1 Minimum Admission Requirements

To register for the BHSc in Emergency Medical Care the applicant must have a minimum of **30 points** (not including Life Orientation).

The applicant must pass the following departmental evaluations:

- Medical Fitness Evaluation
- Physical Fitness Evaluation

In addition, SATAP Placement test/s will be conducted and will be used for general academic information

The minimum admission requirement for holders of the National Senior Certificate (NSC) with a Bachelor Degree endorsement must include the following subjects at the stated ratings.

Compulsory Subjects	NSC Rating
English	4
Mathematics	4
Life Science and / or Physical Science	4

The minimum admission requirement for holders of the Senior Certificate (SC) is matriculation exemption with the following subjects at the stated ratings.

Compulsory Subjects	HG	SG
English	D	B
Mathematics	D	B
Biology AND / OR Physical Sciences	D	B

4.2.1.1 Admission Requirements based upon Work Experience, Age and Maturity and Recognition of Prior Learning (RPL)

The DUT general rules G7 (3) and G7 (8), respectively apply.



4.2.1.2 Admission of International Students

The DUT's Admissions Policy for International Students, and General Rules G4 and G7 (5) apply. *(Approved: Senate 29/08/2012)*

4.2.2 Minimum Duration of Study

With reference to a Bachelors Degree at NQF Level 8, the minimum duration for this programme will be four (4) years of registered study and the maximum duration will be six (6) years of registered study, including any periods of Clinical Practice.

4.2.3 Selection Criteria

Acceptance into the programme is limited to 30 places. As more qualifying applications are received than can be accommodated, the following selection process will determine placement in the programme:

- All applicants must apply through the Central Applications Office (CAO).
- Initial shortlisting for selection is based on the applicant's academic performance in Grade 12 (Grade 11, or Grade 12 trial marks, will be used for current matriculants).
- CAO applications that meet the minimum admission requirement will be invited to undergo physical fitness and medical assessments.
- Applicants are required to write a SATAP placement test.
- Provisional acceptance is given to selected applicants awaiting National Senior Certificate (NSC) results. If the final Grade 12 NSC results do not meet the minimum entrance requirements, this provisional acceptance will be withdrawn.
- Applicants whose application has been declined due to poor academic achievement in Grade 11 may reapply to the programme should they be able to show improved academic performance in the final Grade 12 examinations. Those applicants who wish to reapply should immediately notify the programme of their intention to reapply. In order for the application to be reconsidered, the applicant must submit the final Grade 12 results to the Department as soon as these results are available.

4.2.4 Assessments and Moderation

The continuous (ongoing) assessment method is used for all modules in the programme and therefore, there are no final examinations. The results for these modules are determined through a weighted combination of assessments, which includes theory, practical and Viva Voce assessments; individual and group assignments/projects; written and oral presentations; portfolios and OSCEs and physical assessments. Students are encouraged to work steadily through the period of registration in order to achieve the highest results possible. Assessments are listed under each module at the back of this handbook. Moderation follows the DUT assessment policy and assessment

guidelines. Detailed information can be found in the relevant module study guides.

4.2.5 Special Tests and Condonement

- 4.2.5.1 If an assessment is missed due to medical reasons, the medical certificate / sick note must reach the relevant year coordinator or responsible lecturer within 5 working days after return to campus. This is solely the responsibility of the student.
- 4.2.5.2 Assignments or case studies handed in after the submission date will be penalized (this includes both hard and electronic copies). Ten percent of the mark awarded will be subtracted for each **calendar day** that the assignment or case study is submitted late. This will be done up to a **maximum of five calendar days** (50%) thereafter the assignment or case study will not be accepted and a mark of zero will be awarded. All assignments and case studies must be submitted through Turnitin. Please check the relevant study for the maximum allowed percentage for the similarity index.

4.2.6 Re-registration

In addition to Rule G16 of the General Handbook the following rules apply:

- A student returning to the programme after a break of one year or longer will be required to pass the medical and physical fitness evaluations before re-admission is allowed.
- Students who are absent from group evaluations will be required to complete these evaluations in the following registration period.
- A student must be successful in a Module at the lower level before progressing to the next level.

4.2.7 Progression Rules

Students are encouraged to apply themselves to their learning and strive for the best academic results possible in order to adequately prepare themselves for their future careers, and to maximize possible employment opportunities. The BHSc: Emergency Medical Care is comprised of modules with no final examination. As such pass requirements are as follows (as applicable):

- The Module mark will comprise of all the marks generated during the course of the Module, in the ratio specified in the Study Guide.
- A minimum of 50% is required to pass the Module.
- As rescue skills are performed on real patients, in the real-world setting, a sub-minimum of 100% will apply to all OSCE evaluations (i.e. all levels of Medical Rescue Modules).
- A sub-minimum of 50% is required for the theory component of all Modules.
- A sub-minimum of 50% is required for the practical component of all Modules.

4.2.8 Exclusion Rules

A first-year student who fails three (3) or more Modules with a combined final mark average of less than 40% is not permitted to re-register in the Department of Emergency Medical Care and Rescue.

4.2.9 Interruption of Studies

Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister, will need to prove currency of appropriate knowledge prior to being given permission to reregister and pass the departmental medical and physical evaluations.

4.2.10 Student Appeals

Students wishing to appeal will have to follow provisions of Rule GI (8) of the general handbook.

4.3 Module content

ModuleName (code)	Learning areas / content	Assessment Plan
Year 1		
FACULTY GEN ED MODULE: FOUNDATIONS OF PROFESSIONAL PRACTICE (FNPP101)	Principles of Primary Health Care Social Determinants of Health Healthcare in South Africa National Health Insurance National Core Standards Role of Professional Bodies and Associations in Health Care Continuous Professional Development for Health Care Professionals Professionalism Improving system Quality Academic skills Computer literacy Introduction to Emergency Medical Services EMS Communications EMS Vehicles Stress and Effects Self-Protection Primary Health Care	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
FACULTY GEN ED MODULE: CORNERSTONE 101 (CSTN101)	Proficiency and Competencies Innovation Social Responsibility Personal Development	A weekly blog written by Each Student 20% Tutorial attendance 10% Visual artefact 15% Written report 30% Oral presentation 15% Peer assessment 10%
EMERGENCY MEDICAL CARE I THEORY (EMCT101)	Introduction to Emergency Care Basic Airway Management Oxygenation and Ventilation Cardiopulmonary Resuscitation Electrophysiology An overview of Trauma Kinematics of Trauma Patient Handling Fracture management & Haemorrhage Control Patient handling Spinal immobilisation Maxillo-facial trauma Soft-tissue emergencies Musculoskeletal emergencies	This module is based on continuous assessment. Please refer to the module study guide for assessment details.

<p>EMERGENCY MEDICAL CARE I PRACTICAL (EMCP101)</p>	<p>Introduction to Emergency Care Basic Airway Management Oxygenation and Ventilation Cardiopulmonary Resuscitation Electrophysiology An overview of Trauma Kinematics of Trauma Patient Handling Fracture management & Haemorrhage Control Patient handling Spinal immobilisation Maxillo-facial trauma Soft-tissue emergencies Musculoskeletal emergencies</p>	<p>This module is based on continuous assessment. Please refer to the module study guide for assessment details.</p>
<p>ANATOMY I (AAMY102)</p>	<p>Anatomical Terminology Thorax Abdomen & Pelvis Limb and Back Anatomy Neuroanatomy Head and Neck Anatomy</p>	<p>This module is based on continuous assessment. Please refer to the module study guide for assessment details.</p>
<p>PHYSIOLOGY I (PHSL101)</p>	<p>Cells and tissues Integumentary system Muscular system Skeletal system Nervous system Special senses Endocrine system Cardiovascular system Immunity and the Lymphatic system Blood Respiratory system Digestive system Urinary system Reproductive system</p>	<p>This module is based on continuous assessment. Please refer to the module study guide for assessment details.</p>

CHEMISTRY (CSTY101)	<p>Introduction to chemistry</p> <p>Measurements</p> <p>Energy and Matter</p> <p>Atoms and Elements</p> <p>Compounds and their bonds</p> <p>Chemical Reactions and Quantities</p> <p>Gases</p> <p>Solutions</p> <p>Acids and Bases</p> <p>Nuclear Radiation</p> <p>Alkanes and Cycloalkanes</p> <p>Unsaturated hydrocarbons</p> <p>Organic Compounds with Oxygen and Sulphur</p> <p>Carboxylic acid and Esters</p> <p>Amines and Amides</p>	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHYSICS I (PHIS101)	<p>MECHANICS</p> <p>Fundamental Units & Dimensional Analysis</p> <p>Vectors and Scalars</p> <p>One Dimension Kinematics</p> <p>Newton's Laws of Motion</p> <p>Work, Energy & Power</p> <p>Impulse and Momentum</p> <p>Rotational Dynamics</p> <p>PROPERTIES OF MATTER</p> <p>Phases of Matter</p> <p>Elasticity</p> <p>Density and Specific Gravity</p> <p>Pressure in Fluids</p> <p>Atmospheric Pressure and Gauge Pressure</p> <p>Pascal's Principle</p> <p>Buoyancy and Archimedes' Principle</p> <p>Surface Tension</p> <p>Capillary Action</p> <p>Viscosity</p> <p>Poiseuille's Law</p>	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHYSICAL PREPAREDNESS I (PHYP101)	<p>Physical strength</p> <p>Endurance</p> <p>Speed</p> <p>Cardiovascular fitness</p> <p>Body weight</p> <p>Power to weight ratio</p> <p>Swimming proficiency</p>	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
CLINICAL PRACTICE I (CNLP101)	<p>Emergency Medical Service (EMS) operational systems</p> <p>Professional practice</p> <p>Emergency medical care</p> <p>Documentation and record keeping</p> <p>Transportation of the ill/injured patient</p>	This module is based on continuous assessment. Please refer to the module study guide for assessment details.

Year 2		
FACULTY GEN ED MODULE: ETHICS AND MEDICAL LAW (ETML101)	Professional ethics International ethics principles Professional body and National Health requirements Scope of practice Multidisciplinary and interdisciplinary interactions Legal aspects of medical care Applications in authentic settings	Theory tests 60% Projects/Case Studies/ Assignments 40%
FACULTY GEN ED MODULE: HIV AND COMMUNICABLE DISEASES IN KZN (HCDK101)	Epidemiology of HIV, TB and STIs globally, in sub- Saharan Africa, South Africa and KZN HIV infection, transmission and prevention Psychological issues of HIV and TB Module structured around themes: Stigma Disclosure Rights Communication Facilitation Advocacy	E-learning activities 30% Critical reflective diary 20% Community report 50%
DIAGNOSTICS (DGST101)	Patient interaction and history taking General survey and vital signs The Skin Head and neck Thorax and lungs Cardiovascular system Breast and Axillae The Abdomen The male genitalia and hernias The female genitalia The pregnant women The anus, rectum and prostate The peripheral nervous system The musculoskeletal system The nervous system Assessment of children and adolescents	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE THEORY IIA (ERTA201)	Advanced Airway Management I Cardiovascular Emergencies Respiratory emergencies Chest trauma Shock Syndrome Venous access and medication administration	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE THEORY IIB (ERTB201)	Obstetric emergencies Abdominal trauma Gastro-intestinal emergencies Genitourinary emergencies Immune system emergencies Endocrine emergencies	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE PRACTICAL IIA (ERPA201)	Advanced Airway Management I Cardiovascular Emergencies Respiratory emergencies Chest trauma Shock Syndrome Venous access and medication administration	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE PRACTICAL IIB (ERPB201)	Obstetric emergencies Abdominal trauma Gastro-intestinal emergencies Genitourinary emergencies Immune system emergencies Endocrine emergencies	This module is based on continuous assessment. Please refer to the module study guide for assessment details.

MEDICAL RESCUE IA (MDRA101)	Rope rescue techniques Physics applied to rope rescue Incident Management Systems – tactical level	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IB (MDRB01)	Scene and vehicle stabilization, extrication techniques, patient management and removal	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IC (MDRC101)	Introduction to fire, search and rescue	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE ID (MDRD101)	Introduction to industrial and agricultural rescue	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHYSIOLOGY IIA (PSYA201)	The Cardiovascular System and Blood The Respiratory Physiology Urinary System	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHYSIOLOGY IIB (PSYB201)	Nervous System Special senses Endocrine System Reproduction	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHARMACOLOGY IA (PHMA101)	General aspects of drug therapy Pharmacokinetics Pharmacodynamics Administration of drugs to patients Adverse effects of drugs Autonomic, somatic and sensory nervous systems Analgesics and anti-inflammatories	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHARMACOLOGY IB (PHMB101)	Antimicrobials and other anti-infectives Drugs affecting the CNS Drugs affecting the CVS Haemopoetic drugs Hormones and Hormone antagonists Antihistamines Respiratory Drugs GIT Drugs Poisoning and emergency drug treatment	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
CLINICAL PRACTICE IIA (CLPA201)	Emergency medical service operational systems Professional practice Emergency medical care Coronary Care Intensive Care Documentation and record keeping Transportation of the ill/injured patient	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
CLINICAL PRACTICE IIB (CLPB201)	Emergency medical service operational systems Professional practice Emergency medical care Coronary Care Intensive Care Documentation and record keeping Transportation of the ill/injured patient	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHYSICAL PREPAREDNESS II (PHYP201)	Physical strength Endurance Speed Cardiovascular fitness Body weight Power to weight ratio Swimming proficiency	This module is based on continuous assessment. Please refer to the module study guide for assessment details.

Year 3		
FACULTY GEN ED MODULE: EDUCATIONAL TECHNIQUES (EDTC102)	Introduction to education techniques Learning theories Facilitation and communication skills Learning programme planning Learner motivation and engagement Learning material Assessment and moderation Management E-learning and Blackboard Quality assurance	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
FACULTY GEN ED MODULE: COMMUNITY ENGAGEMENT PROJECT (CMEP101)	The principles of community engagement Working in groups (being an effective team player) Guidelines for undertaking a community engagement project The community as a main factor in community engagement Skills for community engagement Ethical issues in community engagement Planning a community engagement project Implementing a community engagement project Evaluating a community engagement project	Project portfolio 50% Presentation 50%
EMERGENCY MEDICAL CARE THEORY IIIA (ERTA301)	Advanced Airway Management II Mechanical Ventilation Respiratory Emergencies	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE THEORY IIIB (ERTB301)	Endocrine Emergencies Toxicology Gastroenterology Urology	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE PRACTICAL IIIA (ERPA301)	Advanced Airway Management II Mechanical Ventilation Respiratory Emergencies	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE PRACTICAL IIIB (ERP301)	Endocrine Emergencies Toxicology Gastroenterology Urology	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IIA (MDRA201)	Rope rescue techniques Patient management and removal Introduction to the Incident Management System (IMS)	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IIB (MDRB201)	Introduction to Aviation Rescue	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IIC (MDRC201)	Introduction to the wilderness environment Camp craft Navigation and survival techniques	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IID (MDRD201)	Aquatic rescue which consists of the following components: surface water rescue, swift water rescue and small boat handling	This module is based on continuous assessment. Please refer to the module study guide for assessment details.

<p>GENERAL PATHOLOGY IA (GPTA101)</p>	<p>Introduction to pathology and disease Disease at cellular level: cell injury, death, necrosis Amyloid Calcification Pigmentation Jaundice Fluid disturbances (oedema and electrolyte imbalances) Haemodynamic derangements (hyperaemia, congestion, haemorrhage, thrombosis, embolism, infarction) Inflammation, healing and repair Infection and disease Disorders of growth and neoplasia Disorders of Carbohydrate metabolism Nutritional disorders Effect of radiation Autoimmune disorders</p>	<p>This module is based on continuous assessment. Please refer to the module study guide for assessment details.</p>
<p>RESEARCH METHODOLOGY I (RSHM101)</p>	<p>Introduction to research methodology Research and theory Ethical considerations in the conduct of health sciences research Overview of the research process Selecting or identifying research problems The literature review Refining and defining the research question or formulating a hypothesis and preparing a research proposal Quantitative research Non-traditional and qualitative research designs Sampling Data collection Data quality Data analysis Research reports and report evaluation</p>	<p>This module is based on continuous assessment. Please refer to the module study guide for assessment details.</p>
<p>RESEARCH PROPOSAL (RPSL101)</p>	<p>Ethical considerations in the conduct of health sciences research Overview of the research process Selecting or identifying research problems The literature review Refining and defining the research question or formulating a hypothesis and preparing a research proposal Quantitative research Non-traditional and qualitative research designs Sampling Data collection Data quality Data analysis Research reports and report evaluation</p>	<p>This module is based on continuous assessment. Please refer to the module study guide for assessment details.</p>
<p>CLINICAL PRACTICE IIIA (CLPA301)</p>	<p>Emergency medical service operational systems Professional practice Emergency medical care Coronary care Intensive care Theatre, advanced airway and peri-operative surgical care Documentation and record keeping Transportation of the ill/injured patient</p>	<p>This module is based on continuous assessment. Please refer to the module study guide for assessment details.</p>

CLINICAL PRACTICE IIIB (CLPB301)	Emergency medical service operational systems Professional practice Emergency medical care Coronary care Intensive care Theatre, advanced airway and peri-operative surgical care Documentation and record keeping Transportation of the ill/injured patient	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHYSICAL PREPAREDNESS III (PHYP301)	Physical strength Endurance Speed Cardiovascular fitness Body weight Power to weight ratio Swimming proficiency	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
Year 4		
FACULTY GEN ED MODULE: MANAGEMENT PRACTICE (MNTPI01)	Principles of management New public sector management Managing equity in the health system Project management Organisational development and re-engineering the health system Managing for change in the health system Human resource management Strategic resource management Motivation and leadership	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
FACULTY GEN ED MODULE: WORLD OF WORK (WWRK101)	Traditional and Modern CV Writing Job searching/applications/Interviewing Body language and Verbal communication Organisational Aspects Business Etiquette Project Management/Meetings Technical Report Writing Productivity/Quality/Health & Safety in the Workplace Computer and Technology Applications Interpersonal Skills Problem Identification & Solving Power & Conflict Management Planning	Written tests 60% Assignment (individual) 30% Class work: attendance; Graduate attributes 10%
EMERGENCY MEDICAL CARE THEORY IVA (ERTA402)	Neonatology Paediatrics	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE THEORY IVB (ERTB402)	Intensive Care Transfers Thrombolysis Aeromedical Care and Evacuation Gynaecology Obstetrics	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE PRACTICAL IVA (ERPA402)	Neonatology Paediatrics	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
EMERGENCY MEDICAL CARE PRACTICAL IVB (ERPB402)	Intensive Care Transfers Thrombolysis Aeromedical Care and Evacuation Gynaecology Obstetrics	This module is based on continuous assessment. Please refer to the module study guide for assessment details.

RESEARCH PROJECT IV (RPJT102)	<ul style="list-style-type: none"> Planning a research proposal Conducting research Research ethics Writing a research article Oral defence of research Use of tables and figures in a research report Referencing 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
CLINICAL PRACTICE IVA (CLPA401)	<ul style="list-style-type: none"> Emergency medical service operational systems Professional practice Emergency medical care Coronary care Intensive care Theatre, advanced airway and peri-operative surgical care Documentation and record keeping Transportation of the ill/injured patient 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
CLINICAL PRACTICE IVB (CLPB401)	<ul style="list-style-type: none"> Emergency medical service operational systems Professional practice Emergency medical care Coronary care Intensive care Theatre, advanced airway and peri-operative surgical care Documentation and record keeping Transportation of the ill/injured patient 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IIIA (MDRA301)	<ul style="list-style-type: none"> Introduction to confined space rescue, confined space hazard control Atmospheric monitoring & ventilation, self-contained/supplied air breathing apparatus Patient management and removal, physics applied to confined space rescue 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IIIB (MDRB301)	<ul style="list-style-type: none"> Theory of trench rescue, trench rescue safety, trench incident management Patient management and removal, physics applied to trench rescue 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IIIC (MDRC301)	<ul style="list-style-type: none"> Overview of structural collapse rescue theory of emergency building shoring Structural collapse incident management, patient management and removal 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
MEDICAL RESCUE IIID (MDRD301)	<ul style="list-style-type: none"> Introduction to HazMat Rescue Properties of Hazardous Materials Personal Protective Equipment Recognition of Hazardous Materials Risk Assessment Incident Command Tactical and Defensive Control Strategies Decontamination 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PRIMARY HEALTH CARE I (PHLC101)	<ul style="list-style-type: none"> Primary Health Care Approaches Health Care Systems National Health Insurance Patterns of Health Disease Health Promotion Social Determination of Health 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.
PHYSICAL PREPAREDNESS IV (PHYP401)	<ul style="list-style-type: none"> Physical strength Endurance Speed Cardiovascular fitness Body weight Power to weight ratio Swimming proficiency 	This module is based on continuous assessment. Please refer to the module study guide for assessment details.

SECTION B: POSTGRADUATE QUALIFICATIONS

5. MASTER OF HEALTH SCIENCES IN EMERGENCY MEDICAL CARE (MHEMCI)

5.1 Programme Information

This is a full research qualification and the guidelines are contained in the Post Graduate Student Handbook. This 180-credit qualification is offered at the SAQA NQF Level 9. This programme comprises a comprehensive, independently executed research project that culminates in a dissertation.

The student will undertake self-study that will comprise proposal writing, literature review and writing up of a dissertation under guidance of the appointed supervisor/s.

Contact with supervisor/s and access to the library and available online databases and e-journals is essential throughout the research process. The conducting of fieldwork/laboratory work/data collection will be undertaken under supervision following the applicable research methodology in compliance with DUT's Institutional Research Ethics requirements.

5.2 Programme Rules

5.2.1 Minimum Admission Requirements & Selection Criteria

Candidates must be possession of a Bachelors' Degree in Emergency Medical Care (NQF Level 8), or must have been granted conferment of status.

Candidates may also apply for admittance via Recognition of Learning (RPL). Acceptance into the Master of Health Sciences in Emergency Medical Care degree is limited and admission is therefore not guaranteed. In the event of there being more applicants than the enrolment plan allows, the ranking will be based on:

5.2.1.1 Academic performance during the undergraduate qualification.

5.2.1.2 A concept document of the proposed research submitted to the Departmental Research Committee for approval

5.2.2 Pass Requirements

Students are encouraged to apply themselves to their research, and strive for the best academic results possible in order to adequately prepare themselves for their future careers. A dissertation will be submitted for examination to two approved external examiners. The dissertation must reflect original research that makes a significant contribution to the field of Emergency Medical Care and Rescue.

5.2.3 Interruption of Studies

Should there be bona fide reasons for the interruption of studies for a period of one (1) year or more once the candidate is formally registered, the student may apply for an interruption of registration. Registration may be interrupted under **exceptional circumstances** only and is not done retrospectively.

5.3 Assessment and Moderation

Please refer to the Postgraduate Student Handbook.

6. DOCTOR OF PHILOSOPHY IN EMERGENCY MEDICAL CARE (DPEMCI)

6.1 Programme Information

This is a full research qualification and the guidelines are contained in the Post Graduate Student Handbook. This 360-credit qualification is offered at the HEQSF Level 10. This programme comprises a novel, comprehensive, independently executed research project that culminates in a thesis.

The student will undertake self-study that will comprise proposal writing, literature review and writing up of a thesis under guidance of the appointed supervisor/s.

Contact with supervisor/s and access to the library and available online databases and e-journals is essential throughout the research process. The conducting of fieldwork/laboratory work/data collection will be undertaken under supervision following the applicable research methodology in compliance with DUT's Institutional Research Ethics requirements.

6.2 Programme Rules

6.2.1 Minimum Admission Requirements & Selection Criteria

The minimum admission requirements to register for the Doctor of Philosophy in Emergency Medical Care degree are:

6.2.1.1 Candidates must be in possession of an appropriate Masters' degree in the field of Emergency Medical Care and Rescue, or the candidate must have been granted conferment of status.

6.2.1.2 Candidates are encouraged to refer to the General Student Handbook and the Postgraduate Student Handbook for further details.

Acceptance into the Doctor of Philosophy in Emergency Medical Care degree is limited and entry is therefore not guaranteed. In the event of there being more applicants than the enrolment plan allows, the following criteria will be applied for selection:

6.2.1.3 Candidates must have completed their Masters' degree within the prescribed time frame as stated by the Durban University of Technology.

6.2.1.4 A concept document of the proposed research topic must be submitted to the Departmental Research Committee for approval prior to registration.

6.2.2 Pass Requirements

Students conduct independent original research through scientific discourse and independent investigation contributing to the development of the field of emergency medical care and rescue. The outcome of this field-specific Doctoral Degree is a comprehensive and systematic grasp of an in-depth body of knowledge in the field of emergency medical care and rescue with the development of specialist expert knowledge, thereby contributing to evidence based professional practice.

A thesis will be submitted for examination to two approved external examiners. The thesis must reflect original research that makes a significant, novel contribution to the field of Emergency Medical Care and Rescue.

6.2.3 Interruption of Studies

The minimum duration for this programme shall be two consecutive years of registered study and the maximum duration will be four years of registered study.

Should there be *bona fide* reasons for a break of a year or more once you are formally registered, you may apply for a suspension of registration. Your registration may be suspended only under **exceptional circumstances**, and is rarely done retrospectively.

6.3 Assessment and Moderation

Please refer to the Postgraduate Student Handbook.