Bachelor of Health Sciences in Medical Orthotics and Prosthetics

NQF Level: 8

SAQA ID: 91786

Qualification Code: BHMOP3

Location: Steve Biko Campus, Ritson Campus/ Wentworth Hospital

What is an Orthotics/ Prosthetics?

Medical orthotists/prosthetists (MOPs) are concerned with the design, manufacturing and fitting of splints, braces, surgical appliances (orthotics) and artificial limbs (prosthetics). MOP's are members of the rehabilitation team; helping those who require orthopaedic support.

What work am I actually going to do?

MOPs usually work independently or in a team. Working alongside doctors, surgeons, physiotherapists, occupational therapists, and nursing staff. In addition, some work is referred from other medical personnel. Some of the members of the team can diagnose and assess the problems the patient is experiencing and send a treatment plan or prescription to the
Orthotist/ Prosthetist, who thereafter consults and formulates a treatment plan with and for the patient. The role of the O&P is both clinical and technical in nature. With the aim of creating orthotics/prosthetics that are well- fitting and functional, medical orthotists/prosthetists examine patients' disabilities, take measurements, and make plaster moulds of the affected areas. The orthotics/prosthetics are custom fitted to the patients. Adjustments are made until both parties are fully satisfied with the results.

The profession entails a lot of direct work with the patients. Orthotists/prosthetists may use significant hours to instruct the patient on the use of the orthotics/prosthetics.

Expertise in this field is developing in response to advances in technology. Previously steel and leather were used to make appliances. Currently, plastics and materials such as carbon fibres, acrylic resin, titanium and silicone make it possible to manufacture lighter, more functional and aesthetically pleasing orthotics/prosthetics. Technological advancement in electronics enables medical orthotists/ prosthetists to make prosthetics that function electronically. Therefore, there exists a growing scope for research in this field for those individuals who wish to further their qualifications at a later stage.

Description of the Programme

The programme in Orthotics and Prosthetics has been developed to produce a competent clinician who is grounded in the fundamental theory and principles that underlay the practice and growth in the field of orthotics and prosthetics. The programme's strong clinical and practical components are offered as increasingly complex and demanding modules through the four years of the programme. A partnership between the Department of Medical Orthotics and Prosthetics and the KwaZulu-Natal Department of Health including the private sector will ensure that the students fully participate in focused clinical practice activities. The BHSc in Medical Orthotics and Prosthetics programme leads to professional practice and scientific advancement in Medical Orthotics and Prosthetics.

Successful completion of this qualification will entitle the student to register with the Health Professions Council of South Africa (HPCSA) as an independent Medical Orthotist and Prosthetist.

Personal Qualities Required

Prospective MOPs should show an authentic interest in working with people with physical disabilities. They must be empathetic, patient and understanding. It is advisable to be psychologically well adjusted with an optimistic approach towards life thereby encouraging and inspiring confidence in patients. As biomechanics is a major subject in the qualification, exceptional biomechanical insight enables these professionals to design orthotics and prosthetics that are both practical and successful. Practical proficiency is an indispensable quality since a significant portion of tasks involves the actual physical manufacturing of orthotics and prosthetics. It is therefore also to your advantage to possess artistic skills.

Career Opportunities

There exists high demand for qualified medical orthotists and prosthetists in South Africa. This programme will play a crucial role in meeting the need to service this health care sector. Graduates will have an extremely high employment opportunity, due to the national and African need for practitioners in this field. Orthotists and prosthetists may find employment in a variety of settings:

- Hospitals
- Government departments
- Rehabilitation facilities / private institutions • Specialty clinics and home health settings
- Universities and Universities of Technology

Duration

Minimum duration for completion (full-time): 4 years. Entry term: Annual programme starting in January.

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 Orthotics and Prosthetics (MOP)

NATIONAL SENIOR CERTIFICATE (NSC) (01 JANUARY 2009)		**SENIOR CERTIFICATE (SC) (PRE 2009)**		
NSC DEGREE ENTRY		**SC – With Matric Exemption**		
Compulsory Subjects	**NSC Rating Code**	**Compulsory Subjects**	**HG**	**SG**
English	3	English	D	B
Mathematics	4	Mathematics	D	B
Physical Science	4	Physical Science	D	B
Life Science	4	Biology	D	B
And **TWO** 20 credit subjects (not more than **ONE** language)	4			

Additional Entry Requirements:

Certain attributes including a combination of cognitive and psychomotor abilities, which will be determined through an interview, placement, test and a review of a voluntary practice report. (Available from DUT- Department of Medical Orthotics and Prosthetics)

Selections Procedure

- Top applicants will be invited to participate in a placement test and an interview. The 30 highest-ranked persons will then be allowed access to the programme. In summary, selection criteria include:
- The applicant must meet the entrance requirements and meet a minimum point score as determined from time to time
- Applicants will be encouraged to complete at least 8 hours of voluntary service in a Prosthetic and Orthotic environment, for which a voluntary practice report must be submitted with your application.

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 **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.

In addition, there may be further costs associated with the programme e.g., consumables, personal equipment, and prescribed textbooks.

BHS in Medical Orthotics and Prosthetics (MOP) Curriculum

First Year Curriculum				
Name of Module	**Module Code**	**HEQSF Level**	**SAQA Credits**	**2021 Fees**
Physics	PSIC101	5	12	R3610.00
Cornerstone 101	CSTN101	5	12	R3260.00
Mathematic	MTMS101	5	8	R2530.00
Materials Science	MTSC101	5	12	R8960.00
Anatomy I	ANMY101	6	20	R7840.00
Biomechanics I	BIMC101	6	16	R8960.00
Principles of Orthotics and Prosthetics	POPR101	5	28	R10590.00
Clinical Practice I	CLCP101	5	24	R13720.00
TOTAL CREDITS			**114**	
TOTAL				**R59470.00**
Second Year Curriculum				
Computer and graphical communication	CGRC101	6	12	R3040.00
Electronics	ETRN101	6	8	R4060.00
Anatomy II	ANMY201	6	12	R6710.00
Community Health Care and Research-Introduction	CHRI101	7	12	R4750.00
Physiology for MOP	PYSL102	7	16	R3770.00
Biomechanics II	BIMC201	7	12	R8960.00
Principles of Orthotics and Prosthetics II	POPR201	6	28	R11200.00
Clinical Practice II	CLCP201	6	32	R19800.00
TOTAL CREDITS			**132**	
TOTAL				**R62290.00**
Third Year Curriculum				
Community Healthcare and Research-Intermediate	CHRN101	6	12	R5430.00
Clinical Studies I	CLCS101	6	16	R4340.00
Psychology	PYCL101	7	8	R2170.00
Basic Pharmacology	BPHY101	7	12	R3260.00
Biomechanics III	BIMC301	8	12	R10550.00
Principles of Orthotics and Prosthetics III	POPR301	7	32	R11760.00
Clinical Practice III	CLCP301	7	24	R23800.00
TOTAL CREDITS			**116**	
TOTAL				**R61220.00**
Fourth Year Curriculum				
Clinical Studies II	CLCS201	7	24	R6510.00
Clinical Practice IVA (Orthotics)	CLPO401	8	32	R13020.00
Clinical Practice IVB (Prosthetics)	CLPP401	8	32	R13020.00
Clinic, Laboratory and Business Management	CLBM101	8	16	R5430.00

Comm Healthcare and Research-Advanced	CHRA101	7	12	R3260.00
Advanced clinical practice	ACLP401	8	8	R2160.00
TOTAL CREDITS			**124**	
TOTAL				**R43400.00**
Total Credits			**486**	

Application

Applicants who wish to enroll 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: DUDHSP

Closing date for applications: 30 September 2021

For Further Information

Contact the Department of Medical Orthotics and Prosthetics,
Durban University of Technology
Mr. Bruce Nothling (Head of Department)
Tel: (031) 373 2035
Email: brucen@dut.ac.za
Ms Nosipho Thabethe (Departmental Secretary)
Tel: (031) 3736723
Email: nosiphot@dut.ac.za/ oandp@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)3732931/2557/2054.