

NATIONAL DIPLOMA: MEDICAL ORTHOTICS AND PROSTHETICS

Qualification code: NDOP04 - NQF Level 6

Campus where offered: Pretoria Campus (day classes)

Last year of new intake: 2019

Teach-out (phase-out) dates: 31 December 2023

Students registered for this qualification should complete their studies according to the teach-out date prescribed for the qualification, subject to the stipulations of Regulation 3.1.11 and 3.1.13 in the Students' Rules and Regulations.

Information on phased-out programmes can be obtained from the TUT website, www.tut.ac.za.

Key to asterisks:

* Information does not correspond to information in Report 151.

(Deviations approved by the Senate in May 2009.)

CURRICULUM

Consult the 2019 Faculty Prospectus for the full contents of the qualification.

FIRST YEAR

CODE	SUBJECT	CREDIT	PREREQUISITE SUBJECT(S)
FIRST SEMESTER			
APK121T	Anatomy, Physiology and Kinesiology I	(0,170)*	
OPS101T	Orthotics and Prosthetics Material Science I	(0,170)*	
PYY111T	Psychology I	(0,160)*	
TOTAL CREDITS FOR THE SEMESTER:		0,500	
SECOND SEMESTER			
EXP1MOP	Work-Integrated Learning I	(0,500)	
TOTAL CREDITS FOR THE SEMESTER:		0,500	
TOTAL CREDITS FOR THE FIRST YEAR:		1,000	

SECOND YEAR

CODE	SUBJECT	CREDIT	PREREQUISITE SUBJECT(S)
FIRST SEMESTER			
APK221T	Anatomy, Physiology and Kinesiology II	(0,100)*	Anatomy, Physiology and Kinesiology I
OPC101T	Orthotics and Prosthetics Practice I	(0,200)*	
OTT101T	Orthotics Theory I	(0,100)*	
PCX101T	Prosthetics Theory I	(0,100)*	
TOTAL CREDITS FOR THE SEMESTER:		0,500	
SECOND SEMESTER			
OPC211T	Orthotics and Prosthetics Practice II	(0,200)*	Orthotics and Prosthetics Practice I Orthotics Theory I Prosthetics Theory I



OPS201T	Orthotics and Prosthetics Material Science II	(0,100)*	Orthotics and Prosthetics Material Science I
OTT201T	Orthotics Theory II	(0,100)*	Orthotics and Prosthetics Practice I Orthotics Theory I Prosthetics Theory I
PCX201T	Prosthetics Theory II	(0,100)*	Orthotics and Prosthetics Practice I Prosthetics Theory I
TOTAL CREDITS FOR THE SEMESTER:		0,500	
TOTAL CREDITS FOR THE SECOND YEAR:		1,000	

THIRD YEAR

CODE	SUBJECT	CREDIT	PREREQUISITE SUBJECT(S)
FIRST SEMESTER			
BCO301T	Basic Concepts of Orthopaedics III	(0,100)*	Anatomy, Physiology and Kinesiology II
OPC311T	Orthotics and Prosthetics Practice III	(0,200)*	Orthotics and Prosthetics Practice II Orthotics Theory II Prosthetics Theory II
OTT301T	Orthotics Theory III	(0,100)*	Orthotics and Prosthetics Practice II Orthotics Theory II
PCX301T	Prosthetics Theory III	(0,100)*	Orthotics and Prosthetics Practice II Prosthetics Theory II
TOTAL CREDITS FOR THE SEMESTER:		0,500	
SECOND SEMESTER			
EXP2MOP	Work-Integrated Learning II	(0,500)	Orthotics and Prosthetics Practice III Work-Integrated Learning I
TOTAL CREDITS FOR THE SEMESTER:		0,500	
TOTAL CREDITS FOR THE THIRD YEAR:		1,000	
TOTAL CREDITS FOR THE QUALIFICATION:		3,000	

SUBJECT INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular subject. At time of publication, the syllabus content was defined as follows:

A

ANATOMY, PHYSIOLOGY AND KINESIOLOGY I (APK121T) 1 X 3-HOUR PAPER (Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)

An introduction to the anatomy, kinesiology and physiology of the muscular system and a complete study of the anatomy of the skeletal, joint and nervous systems that forms the basis in the field of orthotics and prosthetics. (Total tuition time: ± 120 hours)

ANATOMY, PHYSIOLOGY AND KINESIOLOGY II (APK221T) 1 X 3-HOUR PAPER (Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)

A study of the most important skeletal, muscular and vascular systems, as well as the nervous system. (Total tuition time: ± 120 hours)

B

BASIC CONCEPTS OF ORTHOPAEDICS III (BCO301T) **1 X 2-HOUR PAPER**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
The most important abnormalities and deformities of the body, as well as pre- and post-operative procedures. (Total tuition time: ± 120 hours)

O

ORTHOTICS AND PROSTHETICS MATERIAL SCIENCE I (OPS101T) **1 X 3-HOUR PAPER**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
The different types of materials that can be used in orthotics and prosthetics. (Total tuition time: ± 72 hours)

ORTHOTICS AND PROSTHETICS MATERIAL SCIENCE II (OPS201T) **1 X 3-HOUR PAPER**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
The most important materials currently used in practice (e.g. plastic, POP, metals) are covered in detail. (Total tuition time: ± 92 hours)

ORTHOTICS AND PROSTHETICS PRACTICE I (OPC101T) **CONTINUOUS ASSESSMENT**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
Students will apply their theoretical knowledge to manufacture the different orthoses and prostheses. (Total tuition time: ± 240 hours)

ORTHOTICS AND PROSTHETICS PRACTICE II (OPC211T) **CONTINUOUS ASSESSMENT**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
Students will apply in practice what they learned in theory in Orthotics II and Prosthetics II. (Total tuition time: ± 240 hours)

ORTHOTICS AND PROSTHETICS PRACTICE III (OPC311T) **CONTINUOUS ASSESSMENT**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
Splints and upper-limb prostheses are manufactured. (Total tuition time: ± 240 hours)

ORTHOTICS THEORY I (OTT101T) **1 X 3-HOUR PAPER**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
The theory of the manufacturing of lower-limb splints (orthoses) from metal or plastic, and the manufacturing of bow orthoses. (Total tuition time: ± 120 hours)

ORTHOTICS THEORY II (OTT201T) **1 X 3-HOUR PAPER**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
The theory of the manufacturing of long leg callipers, hand and arm splints (orthoses). (Total tuition time: ± 102 hours)

ORTHOTICS THEORY III (OTT301T) **1 X 3-HOUR PAPER**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
Theory of the manufacturing of spinal braces, neck braces, corsets and hernial trusses. (Total tuition time: ± 120 hours)

P

PROSTHETICS THEORY I (PCX101T) **1 X 3-HOUR PAPER**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
Theory of the manufacture of below-knee limbs (prostheses). (Total tuition time: ± 120 hours)

PROSTHETICS THEORY II (PCX201T) **1 X 3-HOUR PAPER**
(*Subject custodian: Department of Sport, Rehabilitation and Dental Sciences*)
Theory of the manufacture of through-knee, above-knee and through-hip prostheses. (Total tuition time: ± 120 hours)



PROSTHETICS THEORY III (PCX301T)

1 X 3-HOUR PAPER

(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)

Theory of the manufacture of all upper limbs, as well as the treatment of all special cases. (Total tuition time: ± 120 hours)

PSYCHOLOGY I (PYY111T)

1 X 3-HOUR PAPER

(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)

A basic study of psychology forms part of the curriculum, because patients treated by an orthotist or prosthetist often have psychological problems due to the fact that they have to wear visible support. Emphasis is placed on social development and dealing with personal problems. (Total tuition time: ± 120 hours)

W

WORK-INTEGRATED LEARNING I (EXP1MOP)

WORK-INTEGRATED LEARNING

WORK-INTEGRATED LEARNING II (EXP2MOP)

WORK-INTEGRATED LEARNING

(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)

Practical application of theoretical subjects in the first- and second year respectively. (Total tuition time: ± 600 hours)

