

# BACCALAUREUS TECHNOLOGIAE: BIOKINETICS

Qualification code: BTBK05 - NQF Level 7

Campus where offered: Pretoria Campus (day classes)

Last year of new intake: 2019

Teach-out (phase-out) dates: 31 December 2021

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](http://www.tut.ac.za).

Key to asterisks:

\* Information does not correspond to information in Report 151.

(Deviations approved by the Senate in September 2006.)

## CURRICULUM

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

## YEAR SUBJECTS

CODE	SUBJECT	CREDIT
ALN400T	Applied Anatomy IV	(0,167)
AXP400T	Advanced Exercise and Physical Evaluation IV	(0,167)
CCX400T	Clinical Exercise Science IV	(0,167)
CNO400T	Clinical Orthopaedic Management IV	(0,167)
PMN400T	Practice Management IV	(0,167)
RMD110T	Research Methodology	(0,081)*
SET410T	Research Project IV	(0,084)

TOTAL CREDITS FOR THE QUALIFICATION: **1,000**

## 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

**ADVANCED EXERCISE AND PHYSICAL EVALUATION IV (AXP400T)** **1 X 3-HOUR PAPER**  
(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)

Students who successfully complete this subject will be competent in the physiological and anatomical evaluation and assessment of sports people and people suffering from various pathologies. The student will be equipped to identify various strengths and weaknesses and interpret test results effectively in order to prescribe the necessary interventions. This includes both field and laboratory tests, and advanced techniques such as isokinetic testing, pulmonary function testing, EMG and ECG. (Total tuition time: ± 75 hours)

**APPLIED ANATOMY IV (ALN400T)** **1 X 3-HOUR PAPER**  
(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)

Students will learn the fundamental anatomical principles underlying the objective evaluation of joints, muscle, posture, and pain. These include joint and anatomical palpation techniques, assessment techniques for generalised joint range of motion and isolated muscle flexibility and strength assessment. Students will further gain a working knowledge of neural plexuses, spinal nerves, and the composition of muscle charts. Basic radiological/imaging interpretive skills will also be covered to aid the practitioner with the correct assessment of various bone and soft tissue conditions. (Total tuition time: ± 75 hours)



**C****CLINICAL EXERCISE SCIENCE IV (CCX400T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)**

The student will cover the theoretical and practical skills of the guidelines for exercise testing and prescription of the American College of Sports Medicine, including the areas of health appraisal, risk assessment, the safety of exercise and exercise testing and prescription. Following this introduction, students will cover the essentials of pathophysiology, starting with the foundations and concepts in pathophysiology, and covering the pathophysiology of the most common chronic and acute systemic conditions. Finally, exercise management for persons with chronic diseases and disabilities, including considerations regarding physical activity for children and the youth, considerations regarding physical activity during pregnancy and post-partum, cardiovascular diseases, pulmonary diseases, metabolic diseases, immunological/haematological diseases, orthopaedic diseases and disabilities, neuromuscular disorders, cognitive, psychological and sensory disorders. (Total tuition time: ± 75 hours)

**CLINICAL ORTHOPAEDIC MANAGEMENT IV (CNO400T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)**

Both the theoretical knowledge and clinical skills to assess and successfully manage acute traumatic and overuse orthopaedic and sport injuries will be covered in this section. Special consideration will be given to the rehabilitation and management of musculoskeletal injuries, encompassing the prognoses and goals of rehabilitation, the various tools of rehabilitation, and scientific rehabilitation techniques for specific injuries. (Total tuition time: ± 75 hours)

**P****PRACTICE MANAGEMENT IV (PMN400T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)**

Various aspects of the general management and workings of a biokineticist in a private practice/multi-disciplinary environment. Basic principles of financial management for a small business, the code of ethics and scope of practice for biokinetics, and selected readings in medical law as suggested by the Health Professions Council of South Africa (HPCSA) and Biokinetics Association of South African (BASA). (Total tuition time: ± 35 hours)

**R****RESEARCH METHODOLOGY (RMD110T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)**

The subject provides an overview of the research process, including types of research, the literature survey, research hypothesis, etc. Basic statistics and statistical analysis will also be covered to help students complete their research project successfully. (Total tuition time: ± 35 hours)

**RESEARCH PROJECT IV (SET410T)****PROJECT ASSESSMENT****(Subject custodian: Department of Sport, Rehabilitation and Dental Sciences)**

This subject relates to the research project the student will have to complete in order to pass the subject. A short research proposal, mini-dissertation and a research article of limited scope, will be written under the guidance of a supervising lecturer. (Total tuition time: not available)

