

## BACCALAUREUS TECHNOLOGIAE: BIOMEDICAL TECHNOLOGY

Qualification code: BTBM01 - NQF Level 7

Campus where offered: Arcadia Campus

### Important notification to new applicants:

Students who intend to enrol for this qualification should take note that no new applications will be accepted as from 2020. Potential students are advised to consult the University's website for possible new qualifications which are aligned with the newly-implemented Higher Education Qualification Sub-Framework.

### REMARKS

- a. *Admission requirement(s):*  
A National Diploma: Biomedical Technology or an NQF Level 6 bachelor's degree in Biomedical Technology from a South African university.  
  
Holders of any other equivalent South African or international qualification may also be considered, see Chapter 1 of Students' Rules and Regulations.
- b. *Selection criteria:*  
Selection is based on an assessment by a departmental selection panel.
- c. *Minimum duration:*  
One year.
- d. *Presentation:*  
Block-mode classes offered over a period of two years on specific contact days.
- e. *Intake for the qualification:*  
January only.
- f. *Exclusion and readmission:*  
See Chapter 2 of Students' Rules and Regulations.
- g. *Recognition of Prior Learning (RPL), equivalence and status:*  
See Chapter 30 of Students' Rules and Regulations.
- h. *Practicals:*  
100% attendance is compulsory for all practical classes. Students must pass the practical component of a subject to obtain admission to sit for the examination.
- i. *Textbooks:*  
Textbooks and other educational material will be required.
- j. *Personal protective equipment:*  
Specific safety wear is compulsory in the practical laboratories.
- k. *Other requirements:*  
Vaccination against Hepatitis B is compulsory.
- l. *Registration as a student medical technologist:*
  - Registration with the Health Professions Council of South Africa (HPCSA) either as a student or a qualified medical technologist is compulsory.
  - International students will be allowed to register at the HPCSA only as student technologists for the duration of the relevant qualification. They will however not be able to register with the HPCSA as medical technologists.



- m. *Professional registration as a medical technologist:*  
Registration as a qualified medical technologist takes place four years after registration as a student medical technologist. The candidate must also have worked in a laboratory approved by the HPCSA for at least 14 months and must have passed the Board Examination of the Society of Medical Laboratory Technologists of South Africa (SMLTSA).
- n. *Subject credits:*  
Subject credits are shown in brackets after each subject.

## CURRICULUM

### ATTENDANCE (2019/2021)

CODE	SUBJECT	CREDIT
IPP400T	Integrated Pathophysiology IV (year subject)	(0,500)
RMQ201T	Research Methods and Techniques (second-semester subject)	(0,125)
TOTAL CREDITS FOR THE YEAR:		<b>0,625</b>

### ATTENDANCE (2020/2022)

CODE	SUBJECT	CREDIT
LMG201T	Laboratory Management (second-semester subject)	(0,125)
MLB400T	Molecular Biology IV (year subject)	(0,250)
TOTAL CREDITS FOR THE YEAR:		<b>0,375</b>
TOTAL CREDITS FOR THE QUALIFICATION:		<b>1,000</b>

## 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. On 01 August 2018, the syllabus content was defined as follows:

### I

#### **INTEGRATED PATHOPHYSIOLOGY IV (IPP400T) 1 X 3-HOUR PAPER**

*(Subject custodian: Department of Biomedical Sciences)*

The pathogenesis of the different systems of the body are studied with reference to the following systems: the skin, skeleton, muscle, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. The emphasis is on laboratory diagnosis and not on clinical cases. Case studies will be used. (Total tuition time: ± 90 hours)

### L

#### **LABORATORY MANAGEMENT (LMG201T) 1 X 3-HOUR PAPER**

*(Subject custodian: Department of Management and Entrepreneurship)*

Personnel and financial management. Management information systems. Communication. Entrepreneurial skills. (Total tuition time: ± 60 hours)



**M****MOLECULAR BIOLOGY IV (MLB400T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Biomedical Sciences)**

Structure, composition and characteristics of macromolecules. Transcription and translation. Recombinant DNA technology and prokaryotic and eukaryotic genetic manipulation. Use of nucleic acid probes and primers. Mutation analysis. Human mitochondrial genome. Practical techniques. Project. (Total tuition time: ± 90 hours)

**R****RESEARCH METHODS AND TECHNIQUES (RMQ201T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Biomedical Sciences)**

Data collection. Data processing. Reporting: papers and seminars. Statistical methods: descriptive statistics, probability, inference, confidence intervals, parametric and distribution-free tests, analysis of variance, experimental design, correlation and regression. Project. (Total tuition time: ± 60 hours)

