

# Biological Sciences

## Human Physiology

### BSc (Human Physiology)

During the first year of study for this degree, students are exposed to a generic range of subjects from the biological and agricultural sciences. In the second year they study physiological systems, which include the neurophysiological, haematological, cardiovascular, pulmonary, renal, nutritional and digestive, endocrinological and reproductive systems), with biochemistry as a compulsory subject.

The study programme for the third and final year includes a selection of integrated physiology modules, such as exercise and nutrition physiology, cellular and developmental physiology, applied and pathophysiology, higher neurological function and industrial physiology. At the third-year level, students have an opportunity to select elective modules in the programme. The BSc (Human Physiology) programme will appeal to scientifically minded students who are inquisitive by nature.

#### What makes this programme unique?

Physiologists study the mechanisms by which the body functions from the molecular and cellular levels through progressive differentiation to tissue, organs and systems, and eventually the integrated interactions and control of body functions.

This core knowledge is applied in research undertaken to investigate normal and abnormal life processes.

#### Which companies employ our graduates?

##### Our graduates are employed by:

- Academia
- State departments (eg the Department of Health)
- Medical and pharmaceutical companies
- Private and government research laboratories (CSIR, MRC, NHLS, ARC, NRF, SANBI and NICD)
- Computational biology and bioinformatics companies
- Biomedical science communication companies
- Corporate and sales businesses
- Wellness companies

#### What career opportunities exist for graduates?

Research is undertaken in cooperation with medical teams in private and government research laboratories at, for example, the Council for Scientific and Industrial Research (CSIR), the Medical Research Council (MRC), the South African Bureau of Standards (SABS), pharmaceutical firms, universities, veterinary and industrial institutions, state departments (for example the Department of Health) and health farms.

Physiologists also make contributions in the fields of education (as teachers, lecturers and instructors), sports physiology, biostatistics, bioengineering, industrial hygiene, journalism, medical technology and, in the industry, as representatives of pharmaceutical firms.



### Minimum admission requirements

Programme	Minimum requirements for NSC and IEB for 2023			
	Achievement level			APS
	English Home Language or English First Additional Language	Mathematics	Physical Sciences	
<b>BSc (Human Physiology)</b> [3 years] <b>Close on availability of space:</b> As soon as the number of places available for this programme are filled, it will be closed for further applications.	5	5	5	32