



Make today matter

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 Bachelor of Science *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.



'I decided to study Bachelor of Science *Human Physiology* as I was highly intrigued about how the human body functioned, on a molecular and cellular level. The opportunity to study the degree had exposed me to a great number of experts in physiology and led me to have a greater understanding in the process associated with mundane things such as thinking, breathing and digestion. The road of studying the degree has let me pursue my passion in research. I am currently studying a MSc in the neuro track of physiology and I am highly interested in how ultrasound can be used as a tool in a neuro-surgical setting. My dream is to obtain my PhD and pursue health research further that will one day benefit the neurophysiology and neurosurgical field, which will hopefully lead to a greater understanding of the human brain.'

Muhammad J Bassa – Bachelor of Science *Human Physiology*

Career opportunities



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 firms. 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.

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

Minimum admission requirements

Programme	Minimum requirements for NSC/IEB for 2025			
	Achievement level			APS
	English Home Language or English First Additional Language	Mathematics	Physical Sciences	
Bachelor of Science <i>Human Physiology</i> [3 years]	5	5	5	32



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Natural and Agricultural Sciences

Fakulteit Natuur- en Landbouwetenskappe
Lefapha la Disaense tša Tlhago le Temo

Minimum requirements for
applicants with a school
leaving certificate not issued
by Umalusi (South Africa)



Make today matter



Refer to the International undergraduate prospectus at www.up.ac.za/programmes > Undergraduate > Admission Information or [click here](#) for more information.

- The closing date for applications for programmes in this faculty is 30 June.
- Meeting the minimum admission requirements does not guarantee admission into a programme.

FACULTY OF NATURAL AND AGRICULTURAL SCIENCES Programmes	Minimum requirements for 2025									
	Achievement level									
	Compulsory subjects	GCSE #		HIGCSE NSSC HL	AS Level	A Level	IB		KOMBI ABITUR	KCSE
		The qualifications in the two columns below will be considered only for conditional admission. If final AS and/or A levels have been completed, these two columns will not apply. It can also not be used for final admission and/or registration.								
		CIE IGCSE LGCSE BGCSE SGCSE O Level NSSC OL CGCE UCE NECO WAEC ZIMSEC	UK England Wales Northern Ireland		GCE CIE NSSC AS	GCE CIE CGCE UACE WAEC ZIMSEC	IB SL	IB HL		
Bachelor of Science <i>Biochemistry</i>	English Mathematics Physics Chemistry									
Bachelor of Science <i>Biotechnology</i>										
Bachelor of Science <i>Ecology</i>										
Bachelor of Science <i>Zoology</i>										
Bachelor of Science <i>Entomology</i>										
Bachelor of Science <i>Genetics</i>										
Bachelor of Science <i>Human Genetics</i>										
Bachelor of Science <i>Human Physiology</i>										
Bachelor of Science <i>Human Physiology, Genetics and Psychology</i>										
Bachelor of Science <i>Medical Sciences</i>		C	4	3	C	E	4	3	60-69%	B
Bachelor of Science <i>Microbiology</i>		C	4	3	C	E	4	3	60-69%	B
Bachelor of Science <i>Plant Science</i>		C	4	3	C	E	4	3	60-69%	B
Bachelor of Science <i>Chemistry</i>										
Bachelor of Science <i>Physics</i>										
Bachelor of Science <i>Geography</i> [Option: Geography and Environmental Science]										
Bachelor of Science <i>Geoinformatics</i>										
Bachelor of Science <i>Geology</i>										
Bachelor of Science <i>Meteorology</i>										
Bachelor of Science <i>Environmental and Engineering Geology</i>										

Only English with at least a C symbol on this level can be used for final admission.

NOTE: The Faculty of Natural and Agricultural Sciences requires the following achievement levels for IELTS and TOEFL: TOEFL – Writing=22; Speaking=23; Reading=21; Listening=17
IELTS – Writing=6; Speaking=6; Reading=6; Listening=6



Make today matter

FACULTY OF NATURAL AND AGRICULTURAL SCIENCES Programmes	Minimum requirements for 2025									
	Achievement level									
	Compulsory subjects	GCSE #		HIGCSE NSSC HL	AS Level	A Level	IB		KOMBI ABITUR	KCSE
		The qualifications in the two columns below will be considered only for conditional admission. If final AS and/or A levels have been completed, these two columns will not apply. It can also not be used for final admission and/or registration.			GCE CIE NSSC AS	GCE CIE CGCE UACE WAEC ZIMSEC	IB SL	IB HL		
		CIE	UK							
	IGCSE LGCSE BGCSE SGCSE O Level NSSC OL CGCE UCE NECO WAEC ZIMSEC	England Wales Northern Ireland								
Bachelor of Science <i>Food Science</i>	English Mathematics Physics Chemistry									
Bachelor of Science in Food Management [Option: Culinary Science]										
Bachelor of Science in Food Management [Option: Nutrition]										
Bachelor of Science in Agriculture in Agricultural Economics and Agribusiness Management		C	4	3	C	E	4	3	60-69%	B
		C	4	3	C	E	4	3	60-69%	B
Bachelor of Science in Agriculture in Animal Science		C	4	3	C	E	4	3	60-69%	B
Bachelor of Science in Agriculture in Plant Pathology										
Bachelor of Science in Agriculture in Applied Plant and Soil Sciences										
Bachelor of Science <i>Actuarial and Financial Mathematics</i>	English Mathematics	C A	4 7	3 1	C A	E C	4 6	3 5	60-69% 80-100%	B A
Bachelor of Science <i>Mathematics</i>	English Mathematics									
Bachelor of Science <i>Applied Mathematics</i>		C B	4 5	3 2	C B	E D	4 5	3 4	60-69% 70-79%	B B+
Bachelor of Science <i>Mathematical Statistics</i>										
Bachelor of Consumer Science <i>Clothing Retail Management</i>	English Mathematics									
Bachelor of Consumer Science <i>Food Retail Management</i>		C D	4 3	3 3	C D	E E	4 2	3 2	60-69% 50-59%	B C+
Bachelor of Consumer Science <i>Hospitality Management</i>										

Only English with at least a C symbol on this level can be used for final admission.

NOTE: The Faculty of Natural and Agricultural Sciences requires the following achievement levels for IELTS and TOEFL: TOEFL – Writing=22; Speaking=23; Reading=21; Listening=17
IELTS – Writing=6; Speaking=6; Reading=6; Listening=6

