

Faculty of Natural and Agricultural Sciences

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

Bachelor of Science in Agriculture in Plant Pathology



Make today matter



The Bachelor of Science in Agriculture in Plant Pathology programme entails the study and control of plant diseases.

Who is the ideal candidate?



The ideal candidate is a creative thinker who wants to explore and understand problems, why and how

they arose, and to find solutions. Finding the culprit (ie the pathogen) that caused disease or even death (of plants) is very much like being a detective working at a crime scene to figure out what happened. Like veterinary scientists and medical doctors, plant pathologists also work with patients but with the difference that they cannot communicate with the plant. They therefore have to rely on observation, experience and intuitive knowledge to figure out what is wrong and to find a solution. A student who does well in this programme is often one who is curious, creative, passionate, driven and ambitious, wanting to explore new challenges.

Agricultural scientists often work in the field or in plant nurseries, farms, pack houses, processing plants, markets or retail. They may also be involved in the local or international food trade. They are multifaceted thinkers who enjoy solving problems, are curious about nature and want to provide food for the table by ensuring healthy plants, crop protection, high yields and reduced waste and losses.

What makes this programme unique?



The programme covers both basic and applied research and ensures safe food and food security for all.

Minimum admission requirements

Career opportunities



- Consultant plant pathologists often collaborate with economists, soil scientists, horticulturists, entomologists and farmers, big corporates, pesticide companies or retailers. They not only advise, but also influence government
- entomologists and farmers, big corporates, pesticide companies or retailers. They not only advise, but also influence governments, industry and the general public regarding critical matters such as trade, phytosanitary and sanitary matters, and the right to food.
- Lecturers and researchers at universities and technical colleges provide quality creative education and share their skills and experiences with students to prepare them for careers in the flower industry, turf grass or horticultural sectors, crop production, viticulture, agronomy, soil sciences and entomology, as well as agricultural economics. They are classical transdisciplinary thinkers who can solve mega problems and are innovative in finding practical solutions for farmers and others in the agricultural sector.
- Agricultural scientists and researchers at various companies and academic institutions research many different aspects of plant health, crop protection, food security and food safety.

Which companies employ our graduates?



Our graduates are employed at:

- National Department of Agriculture
- Agricultural Research Council
- Agrochemical companies
- Seed and plant production companies
- Undercover crop production endeavours, eg vertical farming, greenhouses and hydroponics
- Tissue culture laboratories
- Diagnostic laboratories
- Biological control companies
- Nurseries and garden centres
- Lawn and landscape maintenance firms
- Agricultural cooperatives
- Private agricultural estates, farms and big corporate estates
- The SA Bureau of Standards (SABS) and Council for Scientific and Industrial Research (CSIR)
- Exporting or importing companies
- Fresh Produce Markets and Retailers
- National and International certification bodies such as auditors, assessors or technical experts in good agricultural practices or food safety
- United Nations, Food and Agricultural Organisation, World Health Organisation, World Trade Organisation or International Standards Organisations
- Researchers and lecturers at Colleges, Technical universities or Universities

Programme	Minimum requirements for NSC/IEB for 2025						
	Achievement level						
	English Home Language or English First Additional Language	Mathematics Physical Sciences		APS			
Bachelor of Science in Agriculture in Plant Pathology [4 years]	5	5	5	32			



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





Refer to the International undergraduate prospectus at www.up.ac.za/programmes > Undergraduate > Admission Information or <u>click here</u> 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.

	Minimum requirements for 2025									
	Achievement level									
		GCSE #			AS Level	A Level		B		
		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.								
FACULTY OF NATURAL AND AGRICULTURAL SCIENCES	Compulsory subjects	CIE	UK	HIGCSE NSSC HL	GCE CIE	GCE CIE	IB SL	IB HL	KOMBI ABITUR	KCSE
Programmes		IGCSE LGCSE BGCSE SGCSE	LGCSE Wales BGCSE Northern		NSSC AS	CGCE UACE WAEC ZIMSEC				
		O Level NSSC OL CGCE UCE NECO WAEC ZIMSEC								
Bachelor of Science Biochemistry					C C C C	E E E	4 4 4 4			
Bachelor of Science Biotechnology	1		4 4	3 3 3 3				3 3 3 3	60-69% 60-69%	B B B B
Bachelor of Science Ecology	1									
Bachelor of Science Zoology	1									
Bachelor of Science Entomology										
Bachelor of Science Genetics	1									
Bachelor of Science Human Genetics	1									
Bachelor of Science Human Physiology	1									
Bachelor of Science Human Physiology, Genetics and Psychology	For eliste									
Bachelor of Science Medical Sciences	English Mathematics									
Bachelor of Science Microbiology	Physics		4						60-69%	
Bachelor of Science Plant Science	Chemistry		4						60-69%	
Bachelor of Science Chemistry										
Bachelor of Science Physics										
Bachelor of Science <i>Geography</i> [Option: Geography and Environmental Science]										
Bachelor of Science Geoinformatics										
Bachelor of Science Geology										
Bachelor of Science Meteorology										
Bachelor of Science Environmental and Engineering Geology										

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



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		GCS	SE #	AS Level		A Level	IB			
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FACULTY OF NATURAL AND AGRICULTURAL SCIENCES	Compulsory subjects	CIE IGCSE	UK England	HIGCSE NSSC HL	GCE CIE NSSC	GCE CIE CGCE	IB SL	IB HL	KOMBI ABITUR	KCSE
Programmes		O Level NSSC OL VCE NECO WAEC ZIMSEC	Wales Northern Ireland		AS	UACE WAEC ZIMSEC				
Bachelor of Science Food Science		c c c c	4 4 4 4	3 3 3 3	C C C	E E E E	4 4 4 4	3 3 3 3	60-69% 60-69% 60-69% 60-69%	B B B B
Bachelor of Science in Food Management [Option: Culinary Science]										
Bachelor of Science in Food Management [Option: Nutrition]	English Mathematics Physics Chemistry									
Bachelor of Science in Agriculture in Agricultural Economics and Agribusiness Management										
Bachelor of Science in Agriculture in Animal Science										
Bachelor of Science in Agriculture in Plant Pathology										
Bachelor of Science in Agriculture in Applied Plant and Soil Sciences										
Bachelor of Science Actuarial and Financial Mathematics	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 Mathematics										
Bachelor of Science Applied Mathematics Bachelor of Science Mathematical Statistics	English Mathematics	C B	4 5	3 2	C B	E D	4 5	3 4	60-69% 70-79%	B B+
Bachelor of Consumer Science Clothing Retail Management										
Bachelor of Consumer Science Food Retail Management	English Mathematics	C D	4 3	3 3	C D	E	4 2	3 2	60-69% 50-59%	B C+
Bachelor of Consumer Science Hospitality Management										

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

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