

Faculty of Natural and **Agricultural Sciences**

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

Bachelor of Science Geoinformatics



Make today matter



The Bachelor of Science Geoinformatics programme entails the collection, storage, analysis, visualisation and management of geospatial information by using an assortment of geospatial analytical methods and tools to help with decision making and providing solutions to geographic problems. Our graduates have a passion for geography, an interest in collecting, processing, displaying

and analysing geographic information, and deriving, geospatial data products, and an interest in using computing technology and quantitative techniques to address geographical problems.

What makes this programme unique?

The programme is accredited by the South African Geomatics Council for registration as candidate Geomatics Technologists in GISc (GTg, GISc).

Career opportunities



Web programmer, geospatial data officer, geospatial software developer, mobile app developer, geovisualisation specialist, GIS project manager, GISc consulting, map designer, spatial data analyst, earth observation data analyst and systems analyst.

Which companies employ our graduates?



Graduates with a Bachelor of Science Geoinformatics readily find work at organisations such as:

- The Environmental Systems Research Institute (ESRI) South Africa;
- Intergraph Systems Southern Africa;
- The Council for Scientific and Industrial Research (CSIR); .
- The Agricultural Research Council (ARC);
- AfriGIS; GeoTerralmage; GISCOE; Aurecon;
- The South African National Space Agency (SANSA);
- South Africa's national mapping organisation (National Geospatial Information (NGI):
- Any municipality in the country;
- Many government departments (eg Environmental Affairs, Forestry and Fisheries (DEFF); Science and Innovation (DSI); Statistics South Africa; and Agriculture, Land Reform and Rural Development (DALRRD); and Water and Sanitation (DWS).





'I enjoy the Bachelor of Science *Geoinformatics* degree programme because we are exposed to many different fields in a short time: geography, business, IT, law, mathematics, remote sensing, cartography, geodesy and statistics. This degree programme is challenging, yet extremely

interesting. I am never bored! I enjoy statistics and analysis, this combination can be used in GIS. Any job that combines these activities would definitely be my dream job! Most of all I dream of working in Google's spatial department!'

- Kayla Theron



'Geoinformatics is a fascinating degree as it allows you to work in a variety of fields from agriculture to transport planning which I enjoy as I have many interests. I enjoyed the visual and programming aspects of the degree as they are very rewarding as you can see a final product at the end. In the

spatial solutions.

Terisha Pillay



'I have a passion for solving real-world issues and enjoy working with state-of-theart technologies. The Bachelor of Science *Geoinformatics* programme also teaches problem solving, critical thinking, project management and other highly soughtafter skills. My dream job is to work for a

GIS consultancy. This will allow me to work in many different industries while I continue learning."

- Nicholas de Kock

Minimum admission requirements

	Minimum requirements for NSC/IEB for 2025					
	Achievement level					
Programme	English Home Language or English First Additional Language	Mathematics	Physical Sciences	APS		
Bachelor of Science <i>Geoinformatics</i> [3 years]	5	5	5	34		



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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	IB			
		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		LGCSE W BGCSE No	England Wales Northern Ireland		NSSC AS	CGCE UACE WAEC ZIMSEC				
		O Level NSSC OL CGCE UCE NECO WAEC ZIMSEC								
Bachelor of Science Biochemistry					C C C C					
Bachelor of Science Biotechnology	1	C C C C	4 4 4 4	3 3 3 3		E E E	4 4 4 4	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	F Viele									
Bachelor of Science Medical Sciences	English Mathematics									
Bachelor of Science Microbiology	Physics								60-69%	
Bachelor of Science Plant Science	Chemistry								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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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 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	English Mathematics	C D	4 3	3 3	C D	E E	4 2	3 2	60-69% 50-59%	
Bachelor of Consumer Science Food Retail Management										B C+
Bachelor of Consumer Science Hospitality Management										

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