

## Faculty of Natural and Agricultural Sciences

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

# Bachelor of Science in Geology





Geology is the study of the Earth and includes aspects related to its formation, composition, structure and processes. South Africa is known for its large reserves of gold, platinum, chromium, vanadium and other metal ores, as well as substantial diamond and coal reserves. A mere hour's drive from UP takes one to the Karoo coalfields, the site where the Cullinan diamond was discovered, the Bushveld platinum mines and the Witwatersrand gold mines. South Africa also has some of the Earth's oldest well-exposed geology and significant fossils informing us about the history of the planet.



#### Who is the ideal candidate?

The programme requires an appreciation for mathematics and chemistry. A love for the Earth and working outdoors, and an interest in geology or geomorphology will be beneficial. Depending on your personality, you can decide how you would like to divide your time between working in the field and working in the office.



### What makes this programme unique?

UP is well situated within easy reach of the mining and applied geological industries and offers a strong programme in the applied fields of economic geology, structural geology and mechanics, and engineering geology and hydrogeology. Candidates who successfully complete this programme qualify for professional registration as geological scientists.



#### **Career opportunities**

Geology is split into many subdisciplines which include mineralogy (the study of rock-forming minerals), petrology (the study of rock formation), structural geology (the deformation and behaviour of rock under stress) and economic or mining geology (identification of mineral resources and contribution to the day-to-day operations of mines).

As a geologist, you can choose whether you would prefer to work in a mine or laboratory, or as an exploration geologist in the field. The programme also allows entry into applied geological professions such as hydrogeology and engineering geology.

Apart from working in the mining industry, candidates also find employment at analytical facilities, in forensics, or in the insurance industry.



#### Which companies employ our graduates?

Our graduates are employed as economic or exploration geologists in the mining industry, or work for parastatals (eg the Council for Geoscience, CSIR, MINTEK) or government departments (eg mineral resources; Energy).

#### Minimum admission requirements

	Minimum requirements for NSC/IEB for 2026							
	Achievement level							
Programme	English Home Language or English First Additional Language	Mathematics	Physical Sciences	APS				
Bachelor of Science in Geology [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 2026									
	Achievement level									
	GCSE #				AS Level	A Level	IB			
		two column be consider conditional If final A A levels h completed columns wi It can also for final adr	ations in the is below will red only for admission. S and/or lave been these two ll not apply. In ot be used inssion and/tration.							
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 EGCSE  O Level NSSC OL CGCE UCE NECO WAEC WASSCE ZGCE	England Wales Northern Ireland Pearson Edexcel GCSE		NSSC AS	CGCE UACE WAEC ZGCE				
Bachelor of Science in Biochemistry				3 3	C	E E	4 4	3 3 3		
Bachelor of Science in Biotechnology										
Bachelor of Science in Ecology	-									
Bachelor of Science in Zoology	_									
Bachelor of Science in Entomology										
Bachelor of Science in Genetics										
Bachelor of Science in Human Genetics	_									
Bachelor of Science in Human Physiology										
Bachelor of Science in Human Physiology, Genetics and Psychology	English	С							50.5004	В
Bachelor of Science in Medical Sciences	Mathematics	C	4 4						60-69% 60-69%	В
Bachelor of Science in Microbiology	Physics	С	4	3	C	E	4		60-69%	В
Bachelor of Science in Plant Science	Chemistry	С	4	3	С	E	4	3	60-69%	В
Bachelor of Science in Chemistry										
Bachelor of Science in Physics										
Bachelor of Science in Geography										
[Option: Geography and Environmental Science]										
Bachelor of Science in Geoinformatics										
Bachelor of Science in Geology										
Bachelor of Science in Meteorology										
Bachelor of Science in Environmental and Engineering Geology										

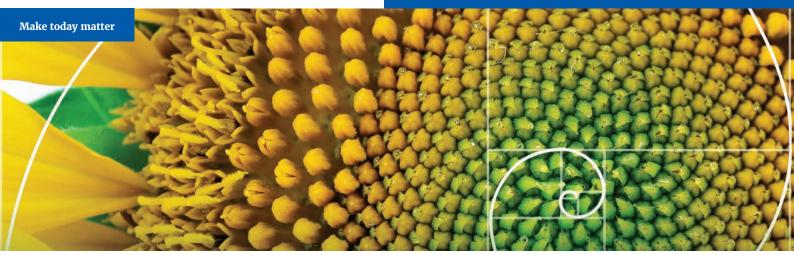


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	Minimum requirements for 2026									
					Achieveme	nt level				
FACULTY OF NATURAL AND AGRICULTURAL SCIENCES	Compulsory subjects	GCSE #  The qualifications in the two columns below will be considered only for conditional admission. If final AS 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.			AS Level	A Level		В		
			England Wales Northern Ireland Pearson Edexcel GCSE	HIGCSE NSSC HL	GCE CIE NSSC AS	GCE CIE CGCE UACE WAEC ZGCE	IB SL	IB HL	KOMBI ABITUR	KCSE
Programmes										
Bachelor of Science in Food Science										
Bachelor of Science in Food Management [Option: Culinary Science]		C C	4 4 4 4	3 3 3 3	C C C	E E E	4 4 4 4	3 3 3 3	60-69% 60-69% 60-69% 60-69%	
Bachelor of Science in Food Management [Option: Nutritional Science]	English Mathematics Physics									B B B
Bachelor of Science in Agriculture in Agricultural Economics in Agribusiness Management										
Bachelor of Science in Agriculture in Animal Science	Chemistry									
Bachelor of Science in Agriculture in Plant Pathology										
Bachelor of Science in Agriculture in Applied Plant and Soil Sciences										
Bachelor of Science in 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 in Mathematics										
Bachelor of Science in Applied Mathematics	English Mathematics	C B	4 5	3 2	C B	E D	4 5	3	60-69% 70-79%	B B+
Bachelor of Science in Mathematical Statistics	iviaciieiliatics		3				J	4	70-7970	Бт
Bachelor of Consumer Science specialising in Clothing and Retail Management Bachelor of Consumer Science	English Mathematics	C D	4 3	3	C D	E E	4 2	3 2	60-69% 50-59%	B C+
specialising in Food Management										

# 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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Make today matter

	Minimum requirements for 2026										
			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	y CIE IGCSE	<b>UK</b> England	HIGCSE NSSC HL	GCE CIE NSSC	GCE CIE CGCE	IB SL	IB HL	KOMBI ABITUR	KCSE	
Programmes		LGCSE BGCSE EGCSE O Level NSSC OL CGCE UCE NECO WAEC WASSCE ZGCE	Wales Northern Ireland Pearson Edexcel GCSE		AS	UACE WAEC ZGCE					
Bachelor of Science in Mathematics [4-year programme]	English Mathematics	D C	3 4	3 3	0 0	E E	2 4	2 3	58% 65%	B- B	
Bachelor of Science in Chemistry [4-year programme]											
Bachelor of Science in Geoinformatics [4-year programme]											
Bachelor of Science in Geology [4-year programme]											
Bachelor of Science in Meteorology [4-year programme]		D D D	3 3 3 3	3 3 3 3	D D D	E E E	2 2 2 2 2	2 2 2 2	58% 58% 58% 58%		
Bachelor of Science in Physics [4-year programme]	English Mathematics Physics Chemistry									B- B-	
Bachelor of Science in Ecology [4-year programme]										B- B-	
Bachelor of Science in Human Physiology [4-year programme]											
Bachelor of Science in Agriculture in Applied Plant and Soil Sciences [5-year programme]											
Bachelor of Science in Agriculture in Plant Pathology [5-year programme]											

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