

# Faculty of Natural and Agricultural Sciences

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

### Bachelor of Science 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 gold mines of the Witwatersrand. 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 (Council for Geoscience, CSIR, Mintek) or government (Mineral Resources; Energy).

#### Minimum admission requirements

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Programme	Minimum requirements for NSC/IEB for 2025						
	English Home Language or English First Additional Language	Mathematics	Physical Sciences	APS			
Bachelor of Science 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 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.

				Minim	um require	ments for 2	025				
		Achievement level									
	GCSE #		AS Level A Level		IB						
		two column be conside 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 a diminision. S and/or eave been these two ll not apply, not be used nission 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 SGCSE O Level NSSC OL CGCE UCE NECO WAEC ZIMSEC	England Wales Northern Ireland	N33C IIE	NSSC AS	CGCE UACE WAEC ZIMSEC			ABITON		
Bachelor of Science Biochemistry				3 3 3 3	C C C	E E E	4 4 4 4	3 3 3 3	60-69% 60-69% 60-69%		
Bachelor of Science Biotechnology		C C C	4 4 4								
Bachelor of Science <i>Ecology</i>											
Bachelor of Science Zoology											
Bachelor of Science Entomology											
Bachelor of Science Genetics											
Bachelor of Science Human Genetics											
Bachelor of Science Human Physiology											
Bachelor of Science Human Physiology, Genetics and Psychology	English									D	
Bachelor of Science Medical Sciences	English Mathematics									B B B	
Bachelor of Science Microbiology	Physics										
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 <i>Environmental and Engineering Geology</i>											



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Make today matter

	Minimum requirements for 2025									
	Achievement level									
	GCSE #			AS Level	A Level II		В			
		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  O Level NSSC OL CGCE UCE NECO WAEC ZIMSEC	England Wales Northern Ireland		NSSC AS	CGCE UACE WAEC ZIMSEC				
Bachelor of Science Food Science		ZIMSEC								
Bachelor of Science in Food Management [Option: Culinary Science] Bachelor of Science in Food Management		С	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%	B B B
[Option: Nutrition]										
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		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										

<sup>#</sup> 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

