



Make today matter



The degree offers further specialisation in engineering geology and hydrogeology. Engineering geology is the study of the behaviour of ground (soil and rock) and how likely it is to affect engineering works. It comprises geotechnical studies and relates to construction (eg founding or excavation) on and with geological materials (eg construction materials), and to the influences of geological, geomorphological and hydrological processes on construction and development. Hydrogeology refers to the occurrence, distribution and movement of water below the Earth's surface. The study of groundwater is generally both quantitative (eg water supply, safe abstraction and the influences of pumping) and qualitative (eg contamination, remediation and drinking water).

Who is the ideal candidate?



The programme requires a strong understanding of mathematics and mechanics. Genuine concern for Planet Earth, a desire to work outdoors and an interest in geology or geomorphology will be an advantage. Depending on your personality, you can choose how you would like to divide your time between doing fieldwork and working on a computer.

What makes this programme unique?



Very few universities offer professional qualifications in engineering geology and hydrogeology. UP offers both, which places it in a strong position on the interface between infrastructure development and subsurface water. The qualification complies with the requirements for professional registration.

Career opportunities



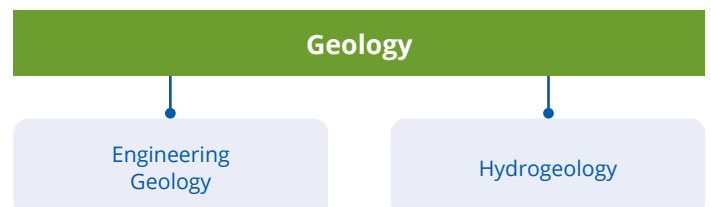
Engineering geologists work closely with civil engineers, mining engineers, town planners and environmental scientists. Your work will require you to identify geological hazards, source building materials and supply foundation solutions.

As a hydrogeologist you will be involved in the supply of water for urban, agricultural and industrial use. Nowadays many graduates work in contaminant transport and remediation, which involves identifying sources of pollution and finding suitable remediation solutions.

Which companies employ our graduates?



Our graduates are employed by civil and infrastructure industries, the mining industry and parastatals (Council for Geoscience; CSIR), as well as by government (Department of Water Affairs; the NHBRC; local governments).



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>Environmental and Engineering Geology</i> [3 years]	5	5	5	34



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)



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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.			GCE CIE NSSC AS	GCE CIE CGCE UACE WAEC ZIMSEC	IB SL	IB HL		
CIE	UK	GCE CIE NSSC AS	GCE CIE CGCE UACE WAEC ZIMSEC	IB SL	IB HL	KOMBI ABITUR	KCSE			
IGCSE LGCSE BGCSE SGCSE	England Wales Northern Ireland									
O Level NSSC OL CGCE UCE NECO WAEC ZIMSEC										
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



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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
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		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
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		C	4	3	C	E	4	3	60-69%	B
Bachelor of Science in Agriculture in Applied Plant and Soil Sciences		C	4	3	C	E	4	3	60-69%	B
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	4	3	C	E	4	3	60-69%	B
Bachelor of Science <i>Mathematical Statistics</i>		B	5	2	B	D	5	4	70-79%	B+
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>										

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IELTS – Writing=6; Speaking=6; Reading=6; Listening=6

