

Faculty of Natural and Agricultural Sciences

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

Bachelof of Science Chemistry



Make today matter

Chemistry is the study, understanding and analysis of substances and materials and how they interact. This is achieved through carefully designed laboratory experiments using sophisticated instrumentation, mathematical calculations, data processing and modelling.

Who is the ideal candidate?



The ideal candidate will have the following characteristics:

- Ability to work with high precision and accountability;
- Good time management;
- Proficiency in scientific writing;
- Ability to work in a team;
- Good management skills; and
- Environmental consciousness in work ethic.

What makes this programme unique?



Bachelof of Science *Chemistry* graduates have the ability to combine concepts across different fields.

They develop excellent analytical and problem-solving skills, which can also be applied in less traditional fields, for example the financial sector and information technology. Chemistry is a central science and links with many other subjects, including physics, mathematics, biochemistry, computer science, geology, etc.



'If someone had told me while I was in high school that I would one day enroll for a degree in chemistry, I would have called them crazy. Not that I did not like the subject but I did not find it interesting. When I registered for the module in first year, it was just a core module that I had

to do but when I started learning more, I fell in love with it. For the first time, everything that I had been introduced to in high school made perfect sense. It was even more amazing that I could explain why and how certain reactions take place. My dream has always been to work in the field of forensic science. The added fact that it is such a broad field makes forensic chemistry my destination.'

- Daisy Mdeka

Career opportunities



Graduates are equipped for careers in the following fields:

- Chemical manufacturing;
- Education;
- Environmental studies;
- Health:
- Industrial chemistry;
- Information technology;
- Journalism;
- Law: and
- Research.

Which companies employ our graduates?



Our graduates are employed by:

- chemical manufacturers;
- mining companies;
- government departments;
- the media;
- law firms;
- laboratories;
- cosmetic companies;
- instrument manufacturers;
- pharmaceutical companies; and
- education companies.



'Chemistry used to be that one class I dreaded taking back in high school, but that completely changed for me when I started taking chemistry in my first year as a BSc student. Chemistry went from this impossible amount of memorization to this fascinating field of logic that I got to witness

in my everyday life. I started realising how applicable the principles of chemistry are in my life and found myself wanting to learn more for that reason. When it came to choosing a career, I decided to focus on biochemistry and delve into how chemistry plays a role in biotic factors and am now pursuing a career in food safety.'

- Chrizelda Visser

Minimum admission requirements

Programme	Minimum requirements for NSC/IEB for 2025					
	Achievement level					
	English Home Language or English First Additional Language	Mathematics	Physical Sciences	APS		
Bachelof of Science Chemistry [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.

		Minimum requirements for 2025								
		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 diministration. S and/or eave been the 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	LGCSE Wales BGCSE Northern SGCSE Ireland O Level NSSC OL CGCE UCE NECO WAEC		NSSC AS	CGCE UACE WAEC ZIMSEC				
Bachelor of Science Biochemistry				3 3 3 3	C C C	E E E	4 4 4 4	3 3 3 3	50.500	
Bachelor of Science Biotechnology		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									В
Bachelor of Science Medical Sciences	Mathematics								60-69% 60-69%	B B B
Bachelor of Science Microbiology	Physics								60-69%	
Bachelor of Science Plant Science	Chemistry	С	4						60-69%	
Bachelor of Science Chemistry										
Bachelor of Science <i>Physics</i>										
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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	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		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		ZIIVISEC								
Bachelor of Science in Food Management [Option: Culinary Science] Bachelor of Science in Food Management				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]		nematics C	4 4 4 4							
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 natics 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										

[#] 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

