



Make today matter

The modern financial world has a growing need for graduates who are well skilled in analytical problem solving, modelling and other quantitative techniques. The programme provides students with a broad education and skills development in these areas. Students can tailor their coursework to either an actuarial or a financial mathematics option.

The actuarial programme is structured to provide the aspiring actuary with the opportunity to fulfil the requirements needed for exemption from the Actuarial Society of South Africa examinations in the shortest possible time. For aspiring financial analysts or financial engineers, the programme provides depth and develops the student's ability to design and analyse financial products.

What is an actuary?

An actuary is a professional who applies analytical, statistical and mathematical skills to financial and business problems. This is especially valuable when facing real-world problems that involve uncertain future events or financial risk. This ability to quantify that which is unclear helps individuals and businesses to safeguard their future, confidently and at a fair price, in an ever-changing world (Actuarial Society of South Africa).



Who is the ideal candidate?

The ideal candidates are high-achieving students who consistently earn seven or more A's in high school. They are actively involved in sports, cultural activities, and often hold leadership roles. These students are well-rounded, highly motivated, and likely to excel in an AP Mathematics course if available. Additionally, they tend to enjoy coding and problem-solving with computers, when such opportunities exist.



Which companies employ our graduates?

Bachelor of Science in Actuarial and Financial Mathematics graduates are generally employed by accounting firms; banks; consulting firms; insurance companies; investment companies; medical schemes and universities.



What makes this programme unique?

The study programme prepares students for qualification as actuaries or financial engineers. Specialisation in either of these fields occurs in the third year of study and continues at postgraduate level.

The programme is accredited with the Actuarial Society of South Africa and gives students the opportunity to earn exemptions from the A100 and A200 subjects of the Actuarial Society of South Africa during their undergraduate degree. To achieve further exemptions, a follow-up honours degree is recommended.

We prepare our students to compete in the actuarial workplace. Large employers of actuarial students speak highly of our graduates and some actively seek students from our programme.



Career opportunities

Many actuaries follow careers in the more traditional fields of insurance and retirement funds. However, actuaries are also increasingly working in other fields following recognition of their analytical skills. This includes healthcare, financial consulting, risk management and banking. Because of their unique skills, many actuaries are appointed to senior management positions after their initial analytical roles.

Financial engineers can be employed by banks and financial institutions, brokerage firms and investment institutions. They are essential in portfolio and risk management. Activities include asset management (trading in bonds, futures and derivative instruments such as options), designing new financial products and devising strategies to control credit risk.



Minimum admission requirements

Programme	Minimum requirements for NSC/IEB for 2026		
	Achievement level		APS
	English Home Language or English First Additional Language	Mathematics	
Bachelor of Science in Actuarial and Financial Mathematics [3 years]	5	7	36



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 2026									
	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 ZGCE	IB SL	IB HL		
		CIE	UK							
IGCSE LGCSE BGCSE EGCSE O Level NSSC OL CGCE UCE NECO WAEC WASSCE ZGCE		England Wales Northern Ireland Pearson Edexcel GCSE								
Bachelor of Science in Biochemistry	English Mathematics Physics Chemistry	C	4	3	C	E	4	3	60-69%	B
Bachelor of Science in Biotechnology		C	4	3	C	E	4	3	60-69%	B
Bachelor of Science in Ecology		C	4	3	C	E	4	3	60-69%	B
Bachelor of Science in Zoology		C	4	3	C	E	4	3	60-69%	B
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										
Bachelor of Science in Medical Sciences										
Bachelor of Science in Microbiology										
Bachelor of Science in Plant Science										
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										

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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Bachelor of Science in Food Science	English Mathematics Physics Chemistry									
Bachelor of Science in Food Management [Option: Culinary Science]										
Bachelor of Science in Food Management [Option: Nutritional Science]										
Bachelor of Science in Agriculture in Agricultural Economics in Agribusiness Management		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 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 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	English Mathematics									
Bachelor of Science in Applied Mathematics		C B	4 5	3 2	C B	E D	4 5	3 4	60-69% 70-79%	B B+
Bachelor of Science in Mathematical Statistics										
Bachelor of Consumer Science specialising in Clothing and Retail Management	English Mathematics	C D	4 3	3 3	C D	E E	4 2	3 2	60-69% 50-59%	B C+
Bachelor of Consumer Science specialising in Food Management										

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Bachelor of Science in Mathematics [4-year programme]	English Mathematics	D C	3 4	3 3	D C	E E	2 4	2 3	58% 65%	B- B
Bachelor of Science in Chemistry [4-year programme]	English Mathematics Physics Chemistry	D D D D	3 3 3 3	3 3 3 3	D D D D	E E E E	2 2 2 2	2 2 2 2	58% 58% 58% 58%	B- B- B- B-
Bachelor of Science in Geoinformatics [4-year programme]										
Bachelor of Science in Geology [4-year programme]										
Bachelor of Science in Meteorology [4-year programme]										
Bachelor of Science in Physics [4-year programme]										
Bachelor of Science in Ecology [4-year programme]										
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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