



# BSc in Biochemistry

- [University of Pretoria](#)
- [Study at UP](#)
- BSc in Biochemistry

This degree falls under the Department of Biochemistry, Genetics and Microbiology and provides a firm basis for a career in the life sciences.

First-year students are exposed to a range of biological and physical science subjects to ensure a firm scientific basis. In the second and third years, they delve deeper into biochemistry, combining theoretical lectures with appropriate practical studies to learn the principles and methodology of research.

Ideally, biochemistry is combined with chemistry, microbiology, genetics, human physiology, plant science, zoology and/or food science.

Transferable skills gained while studying biochemistry include critical observation and analysis, project planning, report writing, time management, problem solving, logical thinking and computer literacy.

Life at the cellular and molecular levels depends on the specific interaction and cooperation of many individual biomolecules. To understand life at a fundamental level, biochemists study the role of individual biomolecules and relate this function to its unique structure and its interactions with other molecules.

Challenges of global relevance, such as COVID-19, HIV/AIDS, malaria, tuberculosis, antimicrobial drug resistance and other human or animal diseases are addressed by using flow cytometry, biophysical analysis, protein crystallography, genome analysis, selective gene expression and metabolic profiles.

Biochemists can work in medicine, veterinary science, the food and pharmaceutical industries, agricultural research and many other fields.

A candidate for the Bachelor of Science in Biochemistry programme should be motivated, innovative, persistent, meticulous and curious about life.

For more information, please consult the Faculty webpage.

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## Career Opportunities

Biochemistry offers many opportunities for exciting and challenging careers in the food and pharmaceutical, fine chemicals and waste processing industries. Careers at research councils, such as the Medical Research Council (MRC), the Agricultural Research Council (ARC), the Cancer Association of South Africa (CANSA) and the Water Research Commission (WRC) are possibilities, as are academic institutions, the Council for Scientific and Industrial Research (CSIR) and forensic as well as pathology laboratories. Possible careers include that of researcher, teacher, lecturer and medical representative. Graduates are comfortable in work environments such as universities, research institutes, pharmaceutical companies, biotechnology companies and related industries.

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## Programme Code

02133398

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## Closing Dates

- **SA** - 30/06/2025
  - **Non-SA** - 30/06/2025
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## Admission Requirements

### Important information for all prospective students for 2026

The admission requirements below apply to all who apply for admission to the University of Pretoria with a **National Senior Certificate (NSC)** and **Independent Examination Board (IEB)** qualifications. [Click here](#) for this Faculty Brochure.

### Minimum requirements

Achievement level			
English Home Language or English First Additional Language	Mathematics	Physical Sciences	APS
NSC/IEB	NSC/IEB	NSC/IEB	

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Life Orientation is excluded when calculating the APS.

Applicants currently in Grade 12 must apply with their final Grade 11 (or equivalent) results.

Applicants who have completed Grade 12 must apply with their final NSC or equivalent qualification results.

Please note that meeting the minimum academic requirements does not guarantee admission.

Successful candidates will be notified once admitted or conditionally admitted.

Unsuccessful candidates will be notified after 30 June.

Applicants should check their application status regularly on the UP Student Portal at [click here](#).

**Applicants with qualifications other than the abovementioned** should refer to the International undergraduate prospectus 2026: Applicants with a school leaving certificate not issued by Umalusi (South Africa), available at [click here](#).

**International students:** [Click here](#).

### Transferring students

A transferring student is a student who, at the time of applying at the University of Pretoria (UP) is/was a registered student at another tertiary institution. A transferring student will be considered for admission based on NSC or equivalent qualification and previous academic performance. Students who have been dismissed from other institutions due to poor academic performance will not be considered for admission to UP.

**Closing dates:** Same as above.

### Returning students

A returning student is a student who, at the time of application for a degree programme is/was a registered student at UP, and wants to transfer to another degree at UP. A returning student will be considered for admission based on NSC or equivalent qualification and previous academic performance.

### Note:

- Students who have been excluded/dismissed from a faculty due to poor academic performance may be considered for admission to another programme at UP, as per faculty-specific requirements.
- Only ONE transfer between UP faculties and TWO transfers within a faculty will be allowed.

- Admission of returning students will always depend on the faculty concerned and the availability of space in the programmes for which they apply.

### **Closing date for applications from returning students**

Unless capacity allows for an extension of the closing date, applications from returning students must be submitted before the end of August via your UP Student Centre.

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### **Minimum duration of study**

3 years, full-time

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### **Faculty Notes**

All modules will only be presented in English, which is the University's official language of tuition, communication and correspondence.

The Faculty of Natural and Agricultural Sciences is home to more than 6 500 undergraduate and postgraduate students. The Faculty presents degrees in fields ranging from the proverbial A to Z – from actuaries to zoologists, and consists of 13 departments.

All degree programmes are designed to develop problem-solving individuals who can easily adapt to changing circumstances and take the lead in their chosen fields of specialisation. The qualifications awarded are of world-class and provide access to a multitude of career opportunities for dynamic and creative people. According to the latest Times Higher Education World University Rankings the University has achieved new world rankings in Physical Sciences, a discipline which features strongly in NAS and also maintains excellent positions on the ISI Web of Science (WOS) field rankings in Plant and Animal Sciences, Agricultural Sciences, and Environment and Ecology Sciences.

In the Faculty of Natural and Agricultural Sciences, we strive to continuously improve our high impact research and significantly address the national shortage of PhD graduates that respond to global and local challenges.

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## **Enquiries about the programme**

[Click Here](#)

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## **How to apply**



# Online Application



Note: Also consult General Rules and Information on the Yearbook website for additional information.

Disclaimer: Due to the continuous restructuring of the Faculty and this website, some of the information displayed here may not fully reflect the most recent developments in the Faculty. Any discrepancies that are experienced may be taken up with Student Administration of the Faculty.