

University of Pretoria Yearbook 2023

BScHons (Biochemistry) (02240701)

Department Genetics

Minimum duration of study 1 year

Total credits 135

NQF level 08

Admission requirements

1. Relevant BSc degree
2. A weighted average of at least 60% in Biochemistry at final-year level
3. An admission examination may be required

Other programme-specific information

- A pass mark is required for all the components of the honours programme and the average mark is calculated proportionally to the credits.
- Additional modules can be prescribed to remedy shortcomings in a candidate's undergraduate training.

General information

University of Pretoria Programme Qualification Mix (PQM) verification project

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.

Curriculum: Final year

Minimum credits: 135

Additional information:

Suitably qualified candidates may also apply for the interdepartmental BScHons Biotechnology (Code 02240393) with a registration in the Division of Biochemistry. For more information, please refer to the programme information for the BScHons Biotechnology.

Core modules

Scientific communication 771 (BCM 771)

Module credits	15.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 1 seminar per week
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Year

Module content

Students are guided to collect relevant and up-to-date literature on broad topics from databases using referencing software, and to select and condense relevant papers into the outline for a literature review. Critical reading of research papers, article discussions and presentations. Scientific writing and presentation skills.

Research project and report 773 (BCM 773)

Module credits	60.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 other contact session per week
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Year

Research methods 774 (BCM 774)

Module credits	25.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	2 Practicals/Discussion classes per week
Language of tuition	Module is presented in English



Department	Biochemistry, Genetics and Microbiology
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Period of presentation	Year
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Module content

Students are guided through the methodology of research planning and data handling. They are given hands-on and in-depth practical experience in a range of biochemical and molecular biological techniques.

Advanced biochemistry 775 (BCM 775)

Module credits	20.00
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NQF Level	08
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Prerequisites	No prerequisites.
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Contact time	1 Practical or 2 Discussion classes per week
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Language of tuition	Module is presented in English
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Department	Biochemistry, Genetics and Microbiology
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Period of presentation	Year
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Module content

This module covers current topics in biochemistry, selected due to their applications in academia and industry. The course has a clear focus on research induction, providing students with the opportunity for individual learning in a laboratory environment. Ethical and philosophical issues in the broader field of the cellular and molecular sciences are also addressed.

Molecular and cellular biology 721 (MLB 721)

Module credits	15.00
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NQF Level	08
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Prerequisites	No prerequisites.
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Contact time	2 discussion classes per week
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Language of tuition	Module is presented in English
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Department	Biochemistry, Genetics and Microbiology
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Period of presentation	Year
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Module content

Principles and applications of recombinant DNA, and other novel molecular and genomics technologies, to address questions in the biological sciences and/or biotechnology. Strong emphasis is placed on the principles of research planning, including identifying suitable research objectives, formulating a research strategy and understanding the relevance and feasibility of research. The module is assessed by means of a research project proposal, conceived and formulated by each student. The proposal must focus on the use of molecular technologies in addressing realistic questions in biology and/or biotechnology. There is also an oral defense of the project proposal.

This module is jointly presented in the Departments of Biochemistry, Genetics and Microbiology and Plant and Soil Sciences.

Regulations and rules

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.

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