

# University of Pretoria Yearbook 2024

## BSc *Entomology* (02133401)

**Department** Zoology and Entomology

**Minimum duration of study** 3 years

**Total credits** 430

**NQF level** 07

### Programme information

Those students registered for the BSc (Entomology) programme and who have opted to select any of the dual major fields of study offered within this programme must take note of the following:

- Their Academic Record will list all the modules that they have completed towards a second major field of study (based on final year modules completed).
- Their Degree certificate will only print the officially approved programme name:

Bachelor of Science  
Entomology

### Admission requirements

#### Important information for all prospective students for 2024

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

NSC/IEB

5

##### Mathematics

NSC/IEB

5

##### Physical Sciences

NSC/IEB

5

##### APS

**32**

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 Brochure: Undergraduate Programme Information 2024: Qualifications other than the NSC and IEB, 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.

Candidates who do not comply with the minimum admission requirements for BSc (Entomology), may be considered for admission to the BSc – Extended programme – Biological and Agricultural Sciences, which requires an additional year of study.

### BSc – Extended Programme – Biological and Agricultural Sciences

#### Minimum requirements

#### Achievement level

#### English Home

#### Language or

#### English First

#### Additional

#### Language

NSC/IEB

4

#### Mathematics

NSC/IEB

4

#### Physical Sciences

NSC/IEB

4

#### APS

26

#### Note:

\*The BSc – Extended programmes are not available for students who meet all the requirements for the corresponding mainstream programme.

\*Please note that only students who apply in their final NSC or equivalent qualification year will be considered for admission into any of the BSc – Extended programmes. Students who are upgrading or taking a gap year will not

be considered.

\* *BSc Extended programmes are selection programmes. Additional selection criteria apply.*

## Other programme-specific information

### 1.1 Requirements for specific modules

A candidate who:

- does not qualify for STK 110, must enrol for STK 113 and STK 123;
- registers for Mathematical Statistics (WST) and Statistics (STK) modules must take note that WST and STK modules, except for STK 281, may not be taken simultaneously in a programme; a student must take one and only one of the following options:
  - WST 111, WST 121, WST 212, WST 211, WST 221, WST 311, WST 312, WST 322, WST 321, and STK 353  
or
  - WST 111, WST 121, WST 212, WST 211, WST 221, WST 311, WST 312, WST 322, STK 320, STK 353.  
or
  - STK 110, STK 122, STK 210, STK 220, WST 212, STK 310, STK 320, STK 353.
- registers for a module presented by another faculty must take note of the timetable clashes, prerequisites for that module, subminimum required in examination papers, supplementary examinations, etc.

### 1.2 Fundamental modules

- It is compulsory for all new first-year students to satisfactorily complete the Academic orientation (UPO 102) and to take Academic information management modules (AIM 111 and AIM 121) and Language and study skills (LST 110). Please see curricula for details.
- Students who intend to apply for admission to MBChB or BChD in the second semester, when places become available in those programmes, may be permitted to register for up to 80 module credits and 4 core modules in the first semester during the first year provided that they obtained a final mark of no less than 70% for Grade 12 Mathematics and achieved an APS of 34 or more in the NSC.

## Promotion to next study year

A student will be promoted to the following year of study if he or she passed 100 credits of the prescribed credits for a year of study, unless the Dean on the recommendation of the relevant head of department decides otherwise. A student who does not comply with the requirements for promotion to the following year of study, retains the credit for the modules already passed and may be admitted by the Dean, on recommendation of the relevant head of department, to modules of the following year of study to a maximum of 48 credits, provided that it will fit in with both the lecture and examination timetable.

### General promotion requirements in the faculty

All students whose academic progress is not acceptable can be suspended from further studies.

- A student who is excluded from further studies in terms of the stipulations of the abovementioned regulations, will be notified in writing by the Dean or Admissions Committee at the end of the relevant semester.
- A student who has been excluded from further studies may apply in writing to the Admissions Committee of the Faculty of Natural and Agricultural Sciences for re-admission.
- Should the student be re-admitted by the Admissions Committee, strict conditions will be set which the student

must comply with in order to proceed with his/her studies.

- Should the student not be re-admitted to further studies by the Admissions Committee, he/she will be informed in writing.
- Students who are not re-admitted by the Admissions Committee have the right to appeal to the Senate Appeals Committee.
- Any decision taken by the Senate Appeals Committee is final.

# Curriculum: Year 1

## Minimum credits: 142

Fundamental modules = 14

Core modules = 128

## Fundamental modules

Academic information management 111 (AIM 111) - Credits: 4.00

Academic information management 121 (AIM 121) - Credits: 4.00

Language and study skills 110 (LST 110) - Credits: 6.00

Academic orientation 102 (UPO 102) - Credits: 0.00

## Core modules

Biometry 120 (BME 120) - Credits: 16.00

Plants and society 161 (BOT 161) - Credits: 8.00

General chemistry 117 (CMY 117) - Credits: 16.00

General chemistry 127 (CMY 127) - Credits: 16.00

Introductory genetics 161 (GTS 161) - Credits: 8.00

Introduction to microbiology 161 (MBY 161) - Credits: 8.00

Molecular and cell biology 111 (MLB 111) - Credits: 16.00

Physics for biology students 131 (PHY 131) - Credits: 16.00

Mathematics 134 (WTW 134) - Credits: 16.00

Animal diversity 161 (ZEN 161) - Credits: 8.00

## Curriculum: Year 2

### Minimum credits: 144

Core modules = 108

Elective modules = 36

### Additional information:

It is the student's responsibility to ensure that no clashes will occur between modules as well as that the necessary prerequisites have been met.

- Single major track students must take [BCM 252 OR BCM 261], BOT 261 and MBY 261 as electives.
- Students interested in combining Entomology in a dual major with Biochemistry or Genetics must take BCM 252, BOT 261 and MBY 261 as electives.
- Students interested in combining Entomology in a dual major with Biochemistry must take BCM 252, BCM 261 and [BOT 261 OR MBY 261] as electives.

### Core modules

[Introduction to proteins and enzymes 251](#) (BCM 251) - Credits: 12.00

[Introductory biochemistry 257](#) (BCM 257) - Credits: 12.00

[South African flora and vegetation 251](#) (BOT 251) - Credits: 12.00

[Geographic information systems introduction 221](#) (GIS 221) - Credits: 12.00

[Molecular genetics 251](#) (GTS 251) - Credits: 12.00

[Genetic diversity and evolution 261](#) (GTS 261) - Credits: 12.00

[Bacteriology 251](#) (MBY 251) - Credits: 12.00

[Invertebrate biology 251](#) (ZEN 251) - Credits: 12.00

[African vertebrates 261](#) (ZEN 261) - Credits: 12.00

### Elective modules

[Carbohydrate metabolism 252](#) (BCM 252) - Credits: 12.00

[Lipid and nitrogen metabolism 261](#) (BCM 261) - Credits: 12.00

[Plant physiology and biotechnology 261](#) (BOT 261) - Credits: 12.00

[Mycology 261](#) (MBY 261) - Credits: 12.00

## Curriculum: Final year

### Minimum credits: 144

Core modules = 54

Elective modules = 90

### Additional information:

It is the student's responsibility to ensure that no clashes will occur between modules as well as that the necessary prerequisites have been met.

### Single major track:

Students must take ZEN 351, ZEN 353, ZEN 354, ZEN 355, ZEN 362, ZEN 364, ZEN 365 and [ZEN 361 or ZEN 363].

### Dual major track:

- Entomology and Biochemistry combination: Students must take ZEN 354, ZEN 355, ZEN 361, ZEN 365, BCM 356, BCM 357, BCM 367 and BCM 368.
- Entomology and Genetics combination: Students must take ZEN 354, ZEN 355, ZEN 361, ZEN 365, GTS 351, GTS 354, GTS 367 and [BTC 361 or GTS 368].
- Entomology and Plant Science combination: Students must take ZEN 354, ZEN 355, ZEN 362, ZEN 365, BOT 356, BOT 358, BOT 366 and [BOT 365 or BTC 361].

## Core modules

[Evolutionary physiology 354](#) (ZEN 354) - Credits: 18.00

[Insect diversity 355](#) (ZEN 355) - Credits: 18.00

[Applied entomology 365](#) (ZEN 365) - Credits: 18.00

## Elective modules

[Macromolecules of life: structure-function and bioinformatics 356](#) (BCM 356) - Credits: 18.00

[Biocatalysis and integration of metabolism 357](#) (BCM 357) - Credits: 18.00

[Cell structure and function 367](#) (BCM 367) - Credits: 18.00

[Molecular basis of disease 368](#) (BCM 368) - Credits: 18.00

[Plant ecophysiology 356](#) (BOT 356) - Credits: 18.00

[Plant ecology 358](#) (BOT 358) - Credits: 18.00

[Phytomedicine 365](#) (BOT 365) - Credits: 18.00

[Plant diversity 366](#) (BOT 366) - Credits: 18.00

[Plant genetics and crop biotechnology 361](#) (BTC 361) - Credits: 18.00

[Eukaryotic gene control and development 351](#) (GTS 351) - Credits: 18.00

[Genome evolution and phylogenetics 354](#) (GTS 354) - Credits: 18.00

[Population and evolutionary genetics 367](#) (GTS 367) - Credits: 18.00

[Genetics in human health 368](#) (GTS 368) - Credits: 18.00

[Population ecology 351](#) (ZEN 351) - Credits: 18.00

[Community ecology 353](#) (ZEN 353) - Credits: 18.00

[Physiological processes 361](#) (ZEN 361) - Credits: 18.00

[Evolution and phylogeny 362](#) (ZEN 362) - Credits: 18.00

[Behavioural ecology 363](#) (ZEN 363) - Credits: 18.00

[Conservation ecology 364](#) (ZEN 364) - Credits: 18.00

### **General Academic Regulations and Student Rules**

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. The G Regulations are updated annually and may be amended after the publication of this information.

### **Regulations, degree requirements and information**

The faculty regulations, information on and requirements for the degrees published here are subject to change and may be amended after the publication of this 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 (HEQSF) 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.