

# University of Pretoria Yearbook 2024

## BSc Geology (02133023)

**Department** Geology

**Minimum duration of study** 3 years

**Total credits** 428

**NQF level** 07

## Programme information

Those students registered for the BSc (Geology) 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  
Geology

## 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

34

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 (Geology), may be considered for admission to the BSc – Extended programme – Physical Sciences, which requires an additional year of study.

### BSc - Extended Programme - Physical 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

28

**Please note:** Progression from the BSc – Extended programme – Physical Sciences to the mathematics-intensive programmes will be considered only if students obtained a GPA of 65% in their first-year modules. Students who pass all their first-year modules will be advised on alternative academic pathways.

#### 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.\* 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.



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## Curriculum: Year 1

**Minimum credits: 144**

Fundamental = 14

Core = 130

### 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

General chemistry 117 (CMY 117) - Credits: 16.00

General chemistry 127 (CMY 127) - Credits: 16.00

Southern African geomorphology 166 (GGY 166) - Credits: 8.00

Introduction to geology 155 (GLY 155) - Credits: 16.00

Earth history 163 (GLY 163) - Credits: 16.00

Cartography 110 (GMC 110) - Credits: 10.00

First course in physics 114 (PHY 114) - Credits: 16.00

Mathematics 134 (WTW 134) - Credits: 16.00

## Curriculum: Year 2

### Minimum credits: 134

Core = 94

Elective = 48

### Additional information:

Students must select at least 40 credits of electives, bearing the following in mind:

- To be eligible for Chemistry or Hydrogeology Honours, CMY 282, CMY 283, CMY 284, CMY 285 (48 credits) are required
- To be eligible to take GIS 320, GIS 220 is required

### Core modules

[Introductory geographic information systems 283](#) (GGY 283) - Credits: 14.00

[Introductory soil science 250](#) (GKD 250) - Credits: 12.00

[Sedimentology 253](#) (GLY 253) - Credits: 12.00

[Fundamental and applied mineralogy 255](#) (GLY 255) - Credits: 12.00

[Igneous and metamorphic petrology 263](#) (GLY 263) - Credits: 24.00

[Geological field mapping 266](#) (GLY 266) - Credits: 6.00

[Remote sensing 220](#) (GMA 220) - Credits: 14.00

### Elective modules

[Biometry 210](#) (BME 210) - Credits: 24.00

[Physical chemistry 282](#) (CMY 282) - Credits: 12.00

[Analytical chemistry 283](#) (CMY 283) - Credits: 12.00

[Organic chemistry 284](#) (CMY 284) - Credits: 12.00

[Inorganic chemistry 285](#) (CMY 285) - Credits: 12.00

[Process geomorphology 252](#) (GGY 252) - Credits: 12.00

[Geographic data analysis 220](#) (GIS 220) - Credits: 14.00

[Surveying 220](#) (SUR 220) - Credits: 14.00

## Curriculum: Final year

### Minimum credits: 144

Core = 78

Elective = 66

### Additional information:

Students must select 72 credits of electives, bearing in mind the following:

- CMY 382, CMY 383, CMY 384, CMY 385 (72 credits) are required to be eligible for Chemistry Honours
- GKD 320, GKD 350 and PGW 350 (42 credits) are required to be eligible for Soil Science Honours
- CMY 385, CMY 383, and GLY 369 (72 credits) are required to be eligible for Hydrogeology Honours
- GGY 363 and GIS 310 or GMA 320 are required to be eligible for Geography and Environmental Science Honours

### Core modules

[Structural geology 365](#) (GLY 365) - Credits: 18.00

[Groundwater 366](#) (GLY 366) - Credits: 18.00

[Economic geology 367](#) (GLY 367) - Credits: 36.00

[Advanced Geological field mapping 368](#) (GLY 368) - Credits: 6.00

### Elective modules

[Physical chemistry 382](#) (CMY 382) - Credits: 18.00

[Analytical chemistry 383](#) (CMY 383) - Credits: 18.00

[Organic chemistry 384](#) (CMY 384) - Credits: 18.00

[Inorganic chemistry 385](#) (CMY 385) - Credits: 18.00

[Applied geomorphology 363](#) (GGY 363) - Credits: 12.00

[Geographic information systems 310](#) (GIS 310) - Credits: 22.00

[Spatial analysis 320](#) (GIS 320) - Credits: 22.00

[Soil chemistry 320](#) (GKD 320) - Credits: 14.00

[Soil formation and classification 350](#) (GKD 350) - Credits: 14.00

[Engineering geology and rock mechanics 369](#) (GLY 369) - Credits: 36.00

[Remote sensing 320](#) (GMA 320) - Credits: 22.00

[Soil-water relationship and irrigation 350](#) (PGW 350) - Credits: 14.00

### 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.