

## **BACHELOR OF SCIENCE IN PHYSICAL SCIENCE (3233)**

### **B.73 ADMISSION**

Unless Senate decides otherwise, a student shall be required to meet the following criteria to be enrolled for the **Bachelor of Science in Physical Science Degree - BSc (Physical Science)**:

#### **B.73.1 Minimum admission requirements for applicants who matriculated from 2008**

- (a) The National Senior Certificate for Bachelor's Degree study with a score of no fewer than 33 points calculated according to the University's approved points system, as well as the following specific subject requirements:
- Level 4 (50-59%) in English (Home or First Additional Language), and
  - Level 3 (40-49%) in another Language (Home or First Additional Language), and
  - Level 5 (60-69%) in Mathematics, and
  - Level 4 (50-59%) in Physical Sciences

#### **B.73.2 Minimum admission requirements for applicants who matriculated before 2008**

- (a) Unless Senate decides otherwise, an applicant shall not be admitted to any of the Bachelor of Science programmes without having obtained a full matriculation or age exemption. Furthermore, an applicant shall not be admitted to any of the Bachelor of Science programmes if s/he has not obtained a pass in Mathematics and either Physical Science or Biology at Higher grade with at least a D symbol or at Standard grade with at least a C symbol.

**OR**

- (b) A qualification or level of competence that the Senate of the University has deemed to be equivalent to the requirements stipulated in (a) above.

#### **B.73.3 Alternative admission**

Alternative admission does not apply to this programme.

### **B.74 SELECTION**

Final selection shall be based on an applicant meeting the criteria as determined by the Faculty.

### **B.75 DURATION**

Unless Senate decides otherwise, the duration of the degree is three years.

## B.76 CURRICULUM

### B.76.1 Level 1

Module Name	Module Code	Credits
<b>Compulsory (select all groups)</b>		
<b>Group 1 (select all modules)</b>		
Mathematics 105 or *(Mathematics 103 and Mathematics 104)	MAT105 MAT103/104	30 15+15
<b>*A student should note that decanting may extend the degree by one year.</b>		
Physics 111	PHY111	15
Physics 121	PHY121	15
	<b>Sub-total</b>	<b>60</b>
<b>Electives (select two groups)</b>		
<b>Group 3 (select one EED module and one COS module)</b>		
Computing Fundamentals 114	COS114	15
Computing Fundamentals 124	COS124	15
English for Educational Development 117	EED117	15
English for Educational Development 127	EED127	15
<b>Group 4 (select both modules)</b>		
Earth Science 111	ESC111	15
Earth Science 121	ESC121	15
<b>Group 5 (select both modules)</b>		
Chemistry 114 (N)	CHE114	15
Chemistry 124 (N)	CHE124	15
<b>Group 6 (select both modules)</b>		
Mathematics 112	APM112	15
Applied Mathematics 123	APM123	15
<b>Group 7</b>		
Computer Science 101	COS101	30
	<b>Sub-total</b>	<b>60</b>
	<b>Total</b>	<b>120</b>

#### **\*Please note:**

A student who selects MAT105 may be advised to change to MAT103 based on academic performance. MAT104 will have to be taken in the subsequent year. **This may extend your degree by one year.**

### B.76.2 Level 2

Module Name	Module Code	Credits
<b>Compulsory (select all modules)</b>		
Physics 212	PHY212	20
Physics 222	PHY222	20
Mathematics 211	MAT211	20
Mathematics 221	MAT221	20
	<b>Sub-total</b>	<b>80</b>

**Electives (select any two modules)**

Physics 217	PHY217	20
Physics 227	PHY227	20
Mathematics 212	MAT212	20
Mathematics 232	MAT232	20
Chemistry 211	CHM211	20
Chemistry 212	CHM212	20
Computer Science 211	CSC211	20
Computer Science 212	CSC212	20
	<b>Sub-total</b>	<b>40</b>
	<b>Total</b>	<b>120</b>

**B.76.3 Level 3**

<b>Module Name</b>	<b>Module Code</b>	<b>Credits</b>
<b>Compulsory (select both modules)</b>		
Physics 312	PHY312	30
Physics 322	PHY322	30
	<b>Sub-total</b>	<b>60</b>
<b>Electives (select two modules)</b>		
Chemistry 311	CHM311	30
Chemistry 312	CHM312	30
Computer Science 311	CSC311	30
Computer Science 312	CSC312	30
Mathematics 311	MAT311	30
Mathematics 321	MAT321	30
Mathematics 312	MAT312	30
Mathematics 322	MAT322	30
Physics 317	PHY317	30
Physics 327	PHY327	30
	<b>Sub-total</b>	<b>60</b>
	<b>Total</b>	<b>120</b>
	<b>FINAL TOTAL</b>	<b>360</b>

**B.77 ASSESSMENT**

Assessment is governed by Rule A.5 as stipulated in the General Calendar: General Information Part 1 in addition to the following:

**B.77.1 Sub-minimum requirement**

A sub-minimum of 40% is required in the practical part for modules which include a practical component.

**B.77.2 Weighting of practical component**

**B.77.2.1** The percentage of the total marks allocated to the practical examination where it forms part of the theory evaluation shall not exceed 50%.

**B.77.2.2** For the purpose of promotion, the practical component shall not be credited independently of the theory component of a particular module.

### **B.77.3 Final mark**

Except where otherwise indicated, the final mark shall be obtained by means of a system of continuous evaluation, which will differ from module to module, combined with examinations, as indicated in the University's Assessment Policy.

### **B.77.4 Re-evaluation of practical components**

No re-evaluation will be allowed for practical components that are evaluated on a continuous basis.

### **B.77.5 Attendance of practicals**

In the programme Medical Biosciences and Biotechnology a minimum attendance of 80% of the practicals is required to gain access to the examination, in addition to the 40% sub-minimum requirement needed for the coursework mark.

## **B.78 PROMOTION RULES**

Unless Senate decides otherwise and subject to Rule A.3.2.3 or as provided for in the Faculty rules:

### **B.78.1 Level 1**

A student shall promote to Level 2 of study when 90 credits have been obtained of the 120 credits required in Level 1 of study and when all pre-requisites for admission to Level 2 modules have been met.

#### **B.78.1.1 Level 1 with MAT103**

A student registered for MAT103 shall be admitted to Level 2 when 75 of the 105 available credits have been obtained, and when all pre-requisites for admission to Level 2 modules have been met. A student should note that decanting may extend the degree by one year.

### **B.78.2 Level 2**

A student shall promote to Level 3 of study when at least a total of 200 credits have been obtained and when all 120 credits of Level 1 of study have been obtained.

## **B.79 ADVANCE REGISTRATION**

**B.79.1** Notwithstanding the above, in consultation with the faculty a student who has not obtained sufficient credits to promote may register for modules at the next level, provided all pre-requisites for the next level module have been met and no timetable clashes occur as a result of this registration.

### **B.79.2 Level 1**

A student who has obtained at least 75 credits at Level 1 of study may be allowed to register for a maximum of 40 credits at Level 2.

### **B.79.3 Level 2**

**B.79.3.1** A student who has obtained at least 80 credits at Level 2 of study may be allowed to register for a maximum of 60 credits at Level 3.

**Please Note:** A student must complete all Level 1 modules before registering for Level 3 modules.

## **B.80 RENEWAL OF REGISTRATION**

**B.80.1** Renewal of registration shall be governed by Rule A.3.2.3, as stipulated in the University Calendar: General Information Part 1 or as provided for in the Faculty rules.

**B.80.2** Unless Senate decides otherwise, a student who is academically refused in terms of Rule A.3.2.3 may apply in writing to the Dean for renewal of registration if s/he can provide evidence of extenuating circumstances which impacted on his/her academic performance, and can show that these circumstances have changed to the extent that success upon re-registration can reasonably be expected.

**Please Note:** This rule may only be invoked once in the entire duration of the degree programme.

## **B.81 SPECIAL REQUIREMENTS FOR THE PROGRAMME**

### **B.81.1 Modules from other faculties**

**B.81.1.1** A maximum of 30 credits in modules from other faculties shall be permitted, except for Computer Science students who shall be allowed to take Information Systems as a module in his/her programme.

**B.81.1.2** At least 100 of the total number of credits obtained at Levels 2 and 3 of study shall be from the same programme.

**B.81.1.3** Computing Fundamentals (COS114 **or** COS124) and English for Educational Development (EED117 **or** EED127): These are compulsory, credit-bearing modules, comprising one semester module for COS and one semester module for EED.

### **B.81.2 Exemption from COS and/or EED**

A student, who has developed these skills, may apply to the faculty for exemption from this requirement, subject to the general rules of the University. The process to determine his/her level of competency in these modules may involve one or more assessments.

When exempted, such a student must replace these modules with other modules of his/her choice to the same credit value.

### **B.81.3 Restriction on choice of modules**

The following limitations apply to modules that can be credited towards obtaining a degree or certificate. Credit shall not be granted for:

**B.81.3.1 Chemistry:** (CHE114 and CHE124) **or** (CHE116 and CHM126).

**B.81.3.2 Physics:** (PHY111 and PHY121) **or** (PHY116 and PHY126) **or** (PHY112 and PHY113 and PHY116) **or** (PHY151 and PHY152).

**B.81.3.3 Mathematics:** MAT105 or MAM115 or (MAT103 and MAT104) or (MAM151 and MAM152).

**B.81.3.4 Statistics:** STA111 or STA125 or STA151 or BUS131 or BUS132 or STA141 or STA142.

**B.81.3.5** A student who has obtained credits prior to 1999 shall not be allowed to obtain credits for equivalent modules as offered from 1999.

#### **B.81.4 Endorsed Degree**

**B.81.4.1** In order to obtain an “endorsed degree” a student must obtain at least 240 credits in the core modules of the degree.

**B.81.4.2** A student who does not fulfil this criterion may be awarded a BSc degree (not endorsed) provided s/he has completed 130 credits in a major module (i.e. at Levels 1, 2 and 3 of study) and has accumulated a total of 360 credits, with at least 120 credits at each year level.