

## **BACHELOR OF SCIENCE IN COMPUTER SCIENCE (3023)**

### **B.127 ADMISSION**

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

#### **B.127.1 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 27 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 3 (40-49%) in Mathematics, and
  - level 3 (40-49%) in Physical Science, or
  - level 3 (40-49%) in Life Sciences, or
  - level 4 (50-59%) in Information Technology

#### **B.127.2 Minimum admission requirements for applicants who matriculated before 2008**

- (a) Senate, upon recommendation of the faculty, may admit an applicant with a full Matriculation exemption with Mathematics and either Science or Biology at Higher Grade with an E- symbol or Standard Grade with a D-symbol.

**OR**

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

#### **B.127.3 Alternative admission**

##### **Alternative admission requirements for applicants in terms of Recognition of Prior Learning (RPL)**

An applicant who completed the NSC in 2008 or thereafter, but have not obtained an endorsement, shall be considered for alternative admission after the age of 23. Such an applicant shall be required to complete an RPL portfolio development course and submit to a process where relevant learning and/or experience shall be assessed.

An applicant who is 23 years or older and does not have a matriculation certificate or NSC, but who may have obtained other qualifications or experience that may be deemed to be equivalent to admission criteria for particular study programmes shall also be required to complete an RPL portfolio development course or an RPL portfolio process as agreed upon, and to submit to a process where such learning, qualification, and/or experience shall be assessed.

### **B.128 SELECTION**

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

## B.129 DURATION

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

## B.130 CURRICULUM

### B.130.1 Level 1

Module Name	Alpha Code	Cred
<b>Compulsory (select all modules)</b>		
Mathematics 151(SF)	MAM151	15
Physics 151(SF)	PHY151	15
Introduction to Science 153	ISC153	30
	<b>Sub-total</b>	<b>60</b>

### B.130.2 Level 2

Module Name	Alpha Code	Cred
<b>Compulsory (select all modules)</b>		
Mathematics 152 (SF)	MAM152	15
Computer Science 101	COS101	30
	<b>Sub-total</b>	<b>45</b>

#### Electives (select 1 module)

Mathematics 112	APM112	15
Applied Mathematics 123	APM123	15
Statistics 151 (SF)	STA151	15
Physics 152	PHY152	15
Information Systems 131 or Information Systems 132	IFS131/132	15
	<b>Sub-total</b>	<b>15</b>
	<b>Total</b>	<b>60</b>

### B.130.3 Level 3

Module Name	Alpha Code	Cred
<b>Compulsory (select both modules)</b>		
Computer Science 211	CSC211	20
Computer Science 212	CSC212	20
	<b>Sub-total</b>	<b>40</b>

#### Electives (select 2 groups)

<b>Group 1 (select both modules)</b>		
Information Systems 231	IFS231	20
Information Systems 233	IFS233	20

#### Group 2 (select 1 sub-group)

<b>Group 2.1 (select all modules)</b>		
Mathematics 211 (prerequisite for Honours in Statistics)	MAT211	20
Mathematics 212	MAT212	20

#### Group 2.2 select both modules)

Mathematics 211 (prerequisite for Honours in Statistics)	MAT211	20
Mathematics 221	MAT221	20

#### Group 3 (select both modules)

Statistics 211	STA211	20
Statistics 221	STA221	20

#### Group 4 (select both modules)

Physics 212	PHY212	20
Physics 222	PHY222	20

<b>Group 5 (select both modules)</b>		
Physics 217	PHY217	20
Physics 227	PHY227	20
	<b>Sub-total</b>	<b>80</b>
	<b>Total</b>	<b>120</b>

#### **B.130.4 Level 4**

<b>Module Name</b>	<b>Alpha Code</b>	<b>Cred</b>
<b>Compulsory (select both modules)</b>		
Computer Science 311	CSC311	30
Computer Science 312	CSC312	30
	<b>Sub-total</b>	<b>60</b>

#### **Electives (select 1 group)**

##### **Group 1 (select 2 modules)**

Mathematics 311	MAT311	30
Mathematics 321	MAT321	30
Mathematics 322	MAT322	30
Mathematics 312	MAT312	30

##### **Group 2 (select 1 sub-group)**

###### **Group 2.1 (select both modules)**

Statistics 332 (prerequisite for Honours in Statistics)	STA332	30
Statistics 331 (prerequisite for Honours in Statistics)	STA331	30

###### **Group 2.2 (select both modules)**

Statistics 333	STA333	30
Statistics 332	STA332	30

##### **Group 3 (select both modules)**

Information Systems 361	IFS361	30
Information Systems 362	IFS362	30

##### **Group 4 (select both modules)**

Physics 312	PHY312	30
Physics 322	PHY322	30

##### **Group 5 (select both modules)**

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.131 ASSESSMENT**

Assessment is governed by Rule A5 as stipulated in the General Calendar: General Information Part 1 in addition to the following:

##### **B.131.1 Sub-minimum requirement**

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

##### **B.131.2 Weighting of practical component**

**B.131.2.1** The percentage of the total marks allocated to the practical examination where it forms part of the theory evaluation shall not exceed 50%.

**B.131.2.2** For the purpose of promotion the practical component shall not be credited independently of the theory component of a particular module.

### **B.131.3 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.131.4 Re-evaluation of practical components**

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

### **B.131.5 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.132 PROMOTION RULES**

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

### **B.132.1 Level 1**

A student shall promote to level 2 of study on obtaining 45 credits and when all prerequisites for level 2 modules have been met.

### **B.132.2 Level 2**

A student shall promote to level 3 of study on obtaining 90 credits at level 2 and when all prerequisites for level 3 modules have been met.

### **B.132.3 Level 3**

A student shall promote to level 4 of study on obtaining 200 credits and when all level 1 and 2 modules have been passed.

## **B.133 ADVANCE REGISTRATION**

**B.133.1** 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 prerequisites for the next level module have been met and no timetable clashes occur as a result of this registration.

### **B.133.2 Level 1**

A student who has passed 2 of the 3 modules at level 1 of study may be allowed to register for a maximum of 30 credits or one year module at level 2.

### **B.133.3 Level 2**

A student who has obtained 30 credits at level 2 of study may be allowed to register for a maximum of 40 credits at level 3 and completing all modules at level 1. Total credits registered may not exceed 90.

### **B.133.4 Level 3**

A student who has obtained 80 credits at level 3 of study may be allowed to register for a maximum of 30 credits at level 4 and completing all modules at levels 1 and 2. Total credits registered may not exceed 90.

**Please Note:** A student is advised to complete all level 1 and 2 modules before registering level 4 modules.

## **B.134 RENEWAL OF REGISTRATION**

**B.134.1** 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.134.2** 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.135 SPECIAL REQUIREMENTS FOR THE PROGRAMME**

### **B.135.1 Modules from other faculties**

**B.135.1.1** 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.135.1.2** At least 100 of the total number of credits obtained at levels 2 and 3 of study shall be from the same programme.

### **B.135.2 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.135.2.1 Chemistry:** (CHE114 and CHE124) or (CHE116 and CHM126).

**B.135.2.2 Physics:** (PHY111 and PHY121) or (PHY116 and PHY126) or (PHY112 and PHY113 and PHY116) or (PHY151 and PHY152).

**B.135.2.3 Mathematics:** MAT105 or MAM115 or (MAT103 and MAT104) or (MAM151 and MAM152).

**B.135.2.4 Statistics:** STA111 or STA125 or STA151 or BUS131 or BUS132 or STA141 or STA142.

**B.135.2.5** A student who has obtained credits prior to 1999 shall not be allowed to obtain credits for equivalent modules as offered from 1999.

**B.135.3 Endorsed Degree**

**B.135.3.1** In order to obtain an “endorsed degree” a student must obtain at least 240 credits in the core modules of the degree.

**B.135.3.2** 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.