## FACULTY OF ENGINEERING AND TECHNOLOGY

(CONTINUED)

#### **Admissions Criteria**

- 1) Applicants are expected to have successfully completed secondary schooling. The typical entry requirement is BGCSE or IGCSE (in Botswana), LGCSE (in Lesotho) or other equivalent secondary school qualification.
- **2)** BGCSE/equivalent with minimum Pass (D) in 5 subjects including English and Mathematics.
- **3)** Applicants in possession of a Diploma or Higher Diploma in related field may be given exemptions based on the credit point equivalency.
- 4) For enquiries and more information please visit our website: www.bothouniversity.com

# Bachelor of Science (Hons) in Computing

### Programme details:

The programme consists of core (required) and elective modules as follow. Some modules may have pre-requisites (i.e. may require the student to pass another module or set of modules first). The number at the end of the module in parenthesis indicates the credit load of the module. 1 credit is equal to 10 hours of learning (guided, in-class and independent combined); therefore a 10-credit module requires on average 100 hours of learning from the student. B.Sc. (Hons) in Computing has three specialisation areas including: Software Engineering (SE), Network & Infrastructure Management (NW&IM) and General.

## Core modules:

- C6-DMA-19: Discrete Mathematics (20)
- D5-CSS-14: Communication and Study Skills (20)
- C5 ICO 11: Introduction to Computers (20)
- C5 MAT 11: Mathematics for Computing (20)
- C5 CSA 11: Computer System Architecture (20)
- C5 OSH 11: Operating Systems & Hardware (20)
- C6 QMD 11: Querying and Managing Databases (40)
- C6 IPC 11: Introduction to Programming using C++ (20)

- C6 DMO 11: Database Management using Oracle (20)
- C6 LIE 19: Linux Essentials (20)
- C6 WDD 11: Web Design and Development (20)
- C7 JAV 11: Programming using Java (20)
- C7 MD2 11: Managing Business Desktops 2 (20)
- C7 ITP 11: IT Project Management (20)
- C7 DSA 11: Data Structures and Algorithms (20)
- C7 ADJ 11: Advanced Java (20)
- C7 NH1 11: Managing Network Hardware 1 (20)
- C7 WN1 11: Windows Network Administration 1 (20)
- C7-PPR-11: Professional Practice (60)
- C7 SEN 11: Software Engineering
- C8 IDE 11: Interaction Design (20)
- C8 LNA 11: Linux Network Administration (20)
- C8 NH2 11: Managing Network Hardware 2 (20)
- C8 WN2 11: Windows Network Administration 2 (20)
- C8 PRO 11: Project (40)

### Elective modules:

- C7 PN1 11: Programming using .Net 1 (20)
- C7 CP1 11: Designing Creative

Publications 1(20)

- C7 MD2 11: Managing Business Desktops(20)
- C8 MAD 11: Mobile

ApplicationDevelopment (20)

- C8 3DA 14: 3D Design and Animation (20)
- C8 AIN 19 : Artificial Intelligence (20)
- C8 CP2 11: Designing Creative

Publications 2 (20)

- C8 PN2 11: Programming using .Net 2 (20)
- C8 CLC 19: Cloud Computing (20)
- B8 ENT -13: Essentials of Entrepreneurship (20)
- E8 ISD 18: Innovation for Sustainable Development (20)
- C8 APD -20 : Analytical Product Design

Recommended full-time study path for Software Engineering specialisation (4½ years):

<sup>\*</sup>The programmes offered in this document are accredited by BOA and offered at Botho University at the time of print. Please refer to your offer letter from the admissions department for any changes in programme name or duration that may occur due to regulatory requirements.

## **FACULTY OF ENGINEERING** AND TECHNOLOGY

(CONTINUED)



## Semester 1:

• C5 - ICO - 11, C5 - MAT - 11, D5 - CSS - 14 Semester 2:

C5 - CSA - 11, C5 - OSH - 11, C6 - DMA - 19

Semester 3:

• C6 - QMD - 11, C6 - IPC - 11

Semester 4:

• C6 - DMO - 11, C6 - LIE - 19, C6 - WDD -19

• C7 - JAV - 11, C7 - SEN - 11, Elective: Select any one C7 - PN1 / C7 - CP1)

Semester 6:

• C7 - ITP - 11, C7 - DSA - 11, C7 - ADJ - 11

Semester 7: • C7 - PPR - 11

Semester 8:

• C8 - IDE - 11, First Elective: Select any one (C8 -AIN - 19/C8 - MAD - 11/C8 - 3DA - 14), Second Elective: Select any one (C8 - CP2 -11/C8 - PN2 - 11/C8 - CLC - 19)

Semester 9:

• C8 - PRO-11

Elective: Select any one (B8 - ENT - 13, E8 - ISD - 18

C8 - APD -20)

Recommended full-time study path for Network & Infrastructure Management specialisation (41/2 years):

## Semester 1:

• C5 - ICO - 11, C5 - MAT - 11, D5 - CSS - 14

• C5 - CSA - 11, C5 - OSH - 11, C6 - DMA - 19

Semester 3:

C6 - QMD - 11, C6 - IPC - 11

Semester 4:

• C6 - DMO - 11, C6 - LIE - 19, C6 - WDD - 19 Semester 5:

• C7 - JAV - 11, C7 - NH1 - 11, C7 - MD2 - 11

Semester 6: • C7 - ITP - 11, C8 - NH2 - 11, C7 - WN1 - 11

Semester 7:

• C7 - PPR - 11

Semester 8:

 C8 - LNA - 11, C8 - WN2 - 11 Elective: Select any one: (C8 - AIN - 19, C8 -CLC -19)

Semester 9:

• C8 - PRO - 11, Elective (one of B8 - ENT -13,E8 - ISD -18, C8 - APD -20)

## Recommended full-time study path for General specialisation (4½ years):

### Semester 1:

 C5 - ICO - 11, C5 - MAT - 11, D5 - CS5 - 14 Semester 2:

• C5 - CSA - 11, C5 - OSH - 11, C6 - DMA -19

## Semester 3:

• C6 - QMD - 11, C6 - IPC - 11

## Semester 4:

• C6 - DMO - 11, C6 - LIE - 11, C6 - WDD - 19 Semester 5:

• C7 - JAV - 11, C7 - SEN - 11 Select one from Software (C7 - PN1-11/C7-CP1-11) Networking (C7 - MD2 -11/C7-NH1-11)

#### Semester 6:

 C7 - ITP - 11, Select one from Software (C7) - DSA - 11/C7 - ADJ - 11) , Select one from Networking (C8-NH2-11/C7-WN1-11)

#### Semester 7:

C7 - PPR - 11

#### Semester 8:

• C8 - IDE - 11, Select one from Software (C8 -MAD - 11/C8 - 3DA - 14/ C8 - CP2 - 11/C8 - PN2 - 11) and Select one from Networking (C8 - AIN - 19/C8 - CLC - 19/ C8 - LNA - 1/C8 - WN2-11) Semester 9:

• C8 - PRO - 11, Elective (one of E8 - ISD - 18, B8 - ENT - 13, C8 - APD -20)

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