

MODULES
2020/21



**FACULTY OF
ENGINEERING
& TECHNOLOGY**
BSc (HONS) IN COMPUTING

<https://botswana.bothouniversity.com/>





Programme details

The programme consists of core (required) and elective modules as follows. Some modules may have pre-requisites (i.e. may require the student to pass another module or set of modules first). Some modules may be co-requisite (i.e. such modules are required to be taken together). 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

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| <ul style="list-style-type: none">• 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) | <ul style="list-style-type: none">• 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)• 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)• C7 - PIS - 11: Protocols & Internet Working Standards (20)• C7 - SEN - 11: Software Engineering |
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BSc (HONS) IN COMPUTING

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

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

Semester 5:

- 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:

- First Elective: Select any one
• B8 - ENT - 13, C8 - PRO - 11, E8 - ISD - 17

Recommended full-time study path for Network & Infrastructure Management specialisation (4½ years):

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

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
First Elective: Select any one: C8 - AIN - 19, C8 - CLC - 19)

Semester 9:

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

BSc (HONS) IN COMPUTING

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/C7 - CP1) NW & IM (C7 - PIS - 11/C7 - MD2 - 11)

Semester 6:

- C7 - ITP - 11, C7 - DSA - 11/C7 - ADJ - 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 NW (C8 - AIN - 19, C8 - CLC - 19

Semester 9:

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

Elective modules:

Select any two from the following:

- C7 - SEN - 11: Software Engineering (20)
- C7 - PN1 - 11: Programming using .Net 1 (20)
- C7 - CP1 - 11: Designing Creative Publications 1 (20)
- C7 - MDZ - 11: Managing Business Desktops (20)
- C8 - MAD - 11: Mobile Application Development (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 - ISC - 18: Innovation for Sustainable Development (20)

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 an equivalent secondary school qualification.
- 2) Candidates are required to achieve a minimum pass in five subjects and 10 points in English and Mathematics, with a minimum of a C in Mathematics or 32 points and above in the best 5 subjects with a minimum of a C in 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