FACULTY OF ENGINEERING AND TECHNOLOGY



Bachelors of Science 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:

- C5 ICO 11: Introduction to Computers (20)
- C5 MAT 11: Mathematics 1 (20)
- D5 CSS 14: Communication and Study Skills (20)
- C5 CSA 11: Computer System Architecture (20)
- C5 OSH 11: Operating Systems & Hardware
- C6 DMA 19: Discrete Mathematics (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 MD1 11: Managing Business Desktops 1
- C6 WCD 11: Web Content Development (20)
- C7 JAV 11: Programming using Java (20)
- C7 MD2 11: Managing Business Desktops 2
- 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)

Elective modules:

Select one from the following:

- E8 ISD 18 : Innovation for sustainable development (20)
- B8 ENT 11: Essentials of Entrepreneurship

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)

Select one from the following:

- C8 MAD 11: Mobile Application Development (20) or
- C8 3DD 11: 3D Design (20)

Select one from the following:

- C8 CP2 11: Designing Creative Publications 2 (20) or
- C8 PN2 11: Programming using .Net 2 (20)

Recommended full-time study path for Software Engineering specialisation (4 $\frac{1}{2}$ 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 - MD1 - 11, C6 - WCD - 11

Semester 5:

 C7 - JAV - 11, Electives any two (C7 - SEN -11, 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 - MAD - 11/C8 - 3DD - 11), Second

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Elective select any one (C8 - CP2 - 11/C8 - PN2 - 11)

Semester 9:

C8 - PRO - 11, Elective select anyone (B8 - ENT - 11, E8 - ISD -18)

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

Semester 1:

- C5 ICO 11, C5 MAT 11, D5 CS5 14
- C5 CSA 11, C5 OSH 11, C6 DMA 19 **Semester 3:**
- C6 QMD 11, C6 IPC 11

Semester 4:

- C6 DMO 11, C6 MD1 11, C6 WCD 11 **Semester 5:**
- C7 JAV 11, C7 PIS 11, C7 MD2 11

Semester 6:

- C7 ITP 11, C7 NH1 11, C7 WN1 11
- Semester 7:
- C7 PPR 11

Semester 8:

- C8 LNA 11, C8 NH2 11, C8 WN2 11 Semester 9:
- C8 PRO 11, Elective select anyone (B8 ENT 11, E8 ISD -18)

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 MD1 11, C6 WCD 11
- Semester 5:
- C7 JAV 11, Select one from Software (C7 SEN 11/C7 PN1/C7 CP1) and Select one from NW & IM (C7 PIS 11/C7 MD2 11)

Semester 6:

 C7 - ITP - 11 Select one from Software (C7 -DSA - 11/C7 - ADJ - 11) and Select one from NW & IM (C7 - NH1 - 11/C7 - WN1 - 11)

Semester 7:

• C7 - PPR - 11

Semester 8:

- C8 IDE 11, Select one from Software (C8 -MAD - 11/C8 - 3DD - 11/ C8 - CP2 - 11/C8 - PN2 - 11) and Select one from NW & IM (C8 - LNA
 - 11/C8 NH2 11/C8 WN2 11)

Samester 9

C8 - PRO - 11, Elective select anyone (B8 - ENT - 11, E8 - ISD -18)

Admissions Criteria

- 1) Application are expected to have succesfully completed secondary schooling. The typical entry requirement for any Diploma or Bachelors programme is SGCSE, IGCSE, or other equivalent secondary school qualification. SGCSE and IGCSE candidates are required to achieve a minimum grade of 'C' or above in 5 subjects."
- **2)** Applicants must have 10 points in English and Mathematics combined or 32 points in the top 5 subjects.
- **3)** Applicants in possession of a Diploma or Higher Diploma in related field may be given exemptions based on the credit point equivalency.

For enquiries and more information please visit our website: www.bothouniversity.com

