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. in Computing has three specialisation areas including: Software Engineering (SE), Network & Infrastructure Management (NW&IM).

Core modules:
- C5-CE1-20: Computer and its Essentials 1 (10)
- C6-PIE-20: Professional Issues and Ethics (10)
- C5-MAT-20: Mathematics (10)
- C5-OSH-11: Operating System and Hardware (20)
- C5-PLD-20: Programming Logic and Design (10)
- C6-DMA-19: Discrete Mathematics (20)
- C6-CE2-20: Computer and its Essentials 2 (10)
- C6-CSA-20: Computer System Architecture (10)
- D6-AWS-20: Academic Writing for STEM (10)
- C6-NEF-20: Networking Fundamentals (10)
- C6-DMS-20: Database Management System (10)
- C6-DMP-20: Database Management Practice Lab (10)
- C6-IPC-11: Introduction to Programming using C++ (20)
- C6-LIE-19: Linux Essentials (20)
- C6-DMO-11: Database Management Using Oracle (20)
- C6-WDD-20: Web Design and Development (10)
- C6-WDP-20: Web Design Practice Lab (10)
- C7-SEN-11: Software Engineering (20)
- C7-JAV-11: Programming using Java (20)
- C7-ITE-20: Internet Technologies (10)
- C7-RMS-20: Research Methods for STEM (10)
- C7-PPC-20: Professional Practice in Computing (40)
- C8-RP2-20: Research Project 2: Dissertation (20)
- C7-ITP-11: IT Project Management (20)
- C7-ADJ-11: Advanced Java (20)
- C7-DSA-11: Data Structures and Algorithms (20)
- C7-RP1-20: Research Project 1: Proposal Writing (10)
- B8-ENT-13: Entrepreneurship and Innovation (20)
- C8-HCI-23: Human Computer Interaction (10)
- C7-JAV-11: Programming Using Java (20)
- C6-RSW-20: Routing and Switching (10)
- C6-RSL-20: Routing and Switching Lab (10)
- C7-SCS-20: Scripting for Cybersecurity (20)
- C6-SCN-20: Scaling Network (20)
- C7-WN1-11: Windows Network Administration (20)
- C7-ITM-20: IT infrastructure Management (10)
- C7-LWD-20: LAN and WAN Design (10)
- C7-LWL-20: LAN and WAN Design Lab (10)
- C7-WN2-11: Windows Network Administration 2 (20)
- C8-LNA-11: Linux Network Administration (20)
- C7-PPC-20: Professional Practice in Computing (40)
- C8-RP2-20: Research Project 2: Dissertation (20)

Elective modules:
- C7-NSE-20: Network Security (10)
- C7-WNS-20: Wireless Network Security (10)
- C7-CP1-11 -Designing Creative Publications - 1
- C7-PN1 -11 - Programming using .NET 1
- C8-CP2-11: Designing Creative Publications I (20)
- C8-PN2-11: Programming using .NET2 9(20)

Recommended full-time study path for Software Engineering (4 years):

Semester 1:
- C5-CE1-20, C6-PIE-20, C5-MAT-20, C5-OSH-11, C5-PLD-20

Semester 2:
- C6-DMA-19, C6-CE2-20, C6-CSA-20, D6-

AWS-20, C6-NEF-20

Semester 3:
• C6-DMS-20, C6-DMP-20, C6-IPC-11, C6-LIE-19

Semester 4:
• C6-DMO-11, C6-WDD-20, C6-WDP-20, C7-SEN-11

Semester 5:
C7-JAV-11, C7-ITE-20, C7-RMS-20 Select anyone from (C7-PN1-11, C7-CP1-11)

Semester 6:
C7-ITP-11, C7-ADJ-11, C7-DSA-11

Semester 7:
C7-RP1-20, B8-ENT-13, C8-HCI-23 Select anyone from (C8-CP2-11, C8-PN2-11)

Semester 8:
• C7-PPC-20, C8-RP2-20

Recommended full-time study path for Network and Infrastructure Management (4 years):

Semester 1:
• C5-CE1-20, C6-PIE-20, C5-MAT-20, C5-OSH-11, C5-PLD-20

Semester 2:
• C6-DMA-19, C6-CE2-20, C6-CSA-20, D6-AWS-20, C6-NEF-20

Semester 3:
• C6-DMS-20, C6-DMP-20, C6-IPC-11, C6-LIE-19

Semester 4:
• C7- JAV-11, C6-RSW-20, C6-RSL-20, C7-SCS-20

Semester 5:
• C6-SCN-20, C7-WN1-11, C7-ITM-20, C7-RMS-20

Semester 6:
• C7-ITP-11, C7-LWD-20, C7-LWL-20, C7-WN2-11

Semester 7:
• C7-RP1-20, C8-LNA-11, B8-ENT-11 Select anyone from (C7-NSE-20, C7-WNS-20))

Semester 8:
• C7-PPC-20, C8-RP2-20

Admissions Criteria

1) SGCSE/equivalent with minimum Credit (C) in 5 subjects including English and Mathematics
2) Applicants in possession of a Diploma or Higher Diploma in related field may be given exemptions based on the credit point equivalency.
3) For enquiries and more information please visit our website: **www. bothouniversity.com**

Bachelors of Science in Mobile Computing

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.

Core modules:
• C5-CE1-20: Computer and its Essentials 1 (10)
• C6-PIE -20: Professional Issues and Ethics (10)
• C5-MAT-20: Mathematics (10)
• C5-OSH-11: Operating Systems and Hardware :(20)
• C5-PLD-20: Programming Logic and Design (10)
• C6-MCE-20: Mobile Computing Essentials (20)
• C6-CE2-10: Computer and its Essentials 2 (10)
• C6-CSA-20: Computer System Architecture (10)
• C6-MHT-20: Mobile Hardware Troubleshooting (10)
• D6-AWS-20: Academic Writing for STEM (10)
• C6-DMS-20: Database Management Systems (10)
• C6-DMP-20: Database Management Practice Lab (10)