FACULTY OF ENGINEERING AND TECHNOLOGY

(CONTINUED)

- B8-ENT-11: Essentials of Entreprenuership (20)
- E8 ISD 17: Innovation for sustainable development (20)

Recommended full-time study path (4½ years):

Semester 1:

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

Semester 2:

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

Semester 3:

• C6 - QMD - 11, C6 - IPC - 11

Semester 4:

• C6 - DCN- 19, C6 - LIE - 19, C6 - WDD - 19

Semester 5:

 C7 - JAV - 11, C7 - MDC - 19, C7 -MOS - 13

Semester 6:

 C7 - WNM - 13, C7 - MDP - 13, C7 -MTE - 13

Semester 7:

• C7 - PPR - 11

Semester 8:

 C8 - MID - 13,C8-WMS-19 Select one from (C8 - DIS - 13,C8-MIA-13)

Semester 9:

C8 - PRO - 11, Elective (B8 - ENT - 11, E8 - ISD - 17)

Admissions Criteria

- 1) Applicants are expected to have successfully completed secondary schooling. The typical entry requirement is LGCSE or other equivalent secondary school qualification.
- **2)** LGCSE/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.

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

Bachelor of Science in Computer Networking

Programme details:

This programme consists of core modules (required) which are combination of 10 credit and 20 credit modules, Elective modules and 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 core requisite (i.e. such modules are required to be taken together). 1 credit is equal to 10 hours of learning (guided, in-class and independent combined); therefore a 10-credit module requires on average 50 hours of learning from the student.

Core modules:

- C5-CE1-20: Computer and its Essentials 1 (10)
- C5-PLD-20: Programming Logic and Design (10)
- C5-MAT-20: Mathematics (10)
- C6-PIE-20: Professional Issues and Ethics (10)
- C5-OSH-11: Operating Systems and Hardware (20)
- C6-NEF-20: Networking Fundamentals (20)C6-DBC-20: Database Concepts (10)
- D6-AWS-20: Academic Writing for STEM (10)
 C6-CE2-20: Computer and its Essentials 2
- C6-CSA-20: Computer System Architecture
- C6-MDW-20: Managing Business Desktops using Windows (10)
- C6-PUC-20: Programming using C++ (20)
- C6-NSE-20: Network Security (10)
- C6-RSW-20: Routing and Switching (10)
- C6-RSL-20: Routing and Switching Lab (10)
- C6-WDD-20: Web Design and Development (10)
- C6-WDP-20: Web Design Practice Lab (10)
- C6-EOL-20: Essentials of Linux (10)
- C6-DSA-20: Data Structures and Algorithm (10)
- C6-SCN-20: Scaling Networks (20)
- C7-LWD-20: LAN and WAN design (10)
- C7-LWL-20: LAN and WAN design Lab- 1 (10)
- C7-WNS-20: Wireless Networks (10)

FACULTY OF ENGINEERING AND TECHNOLOGY

(CONTINUED)



- C7-ITM-20: IT Infrastructure Management (10)
- C7-PNA-20: Principles of Network Administration (20)
- C7-RMS- 20: Research Methods for STEM (10)
- C7-IPR-20: Implementing IP Routing
- C7-ISM-20: IT Service Management (10)
- C7-DAS-20: Database Administration and Security (20)
- B8-ENI-20: Entrepreneurship and Innovation (20)
- C7-ISN-20: IP Switched Networks (10)
- C7-RP1-20: Research Project 1: Proposal Writing (10)
- C7-SDN-20: Software Defined Network Engineering (10)
 • C7-PPC-20 : Professional Practice in
- Computing (40)
- C8-RP2-20 : Research Project 2: Dissertation (20)

Elective modules: Select one from the following:

- •C7-EIN-20: Enterprise and ISP Network Solutions (10)
- •C7-CCS-20: Cloud Computing and Security (10)
- •C7-SDE-20: Security by Design (10)

Select one from the following:

- C8-MAS-20: Media and Storage (10)
- C8-CYO-20: Cybersecurity Operations (10)
- C8-TRS-20: Troubleshooting Routing and Switching (10)

Recommended full-time study path Semester 1:

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

Semester 2:

• C6-NEF-20, C6-DBC-20, D6-AWS-20, C6-CE2-20, C6-CSA-20

Semester 3:

• C6-MDW-20, C6-PUC-20, C6-NSE-20, C6-RSW-20, .C6-RSL-20

Semester 4:

• C6-WDD-20, C6-WDP-20, C6-EOL-20, C6-DSA-20, C6-SCN-20

Semester 5:

• C7-LWD-20, C7-LWL-20, C7-WNS-20, C7-ITM-20, C7-PNA-20

Semester 6:

• C7-RMS- 20, C7-IPR-20, C7-ISM-20, C7-DAS-20, Select one from (C7-EIN-20, C7-CCS-20, C7-SDE-20)

Semester 7:

• B8-ENI-20, C7-ISN-20, C7-RP1-20, C7-SDN-20, Select one from (C8-MAS-20, C8-CYO-20, C8-TRS-20),

Semester 8:

• C7-PPC-20, C8-RP2-20

Admissions Criteria

- 1) Applicants are expected to have successfully completed secondary schooling. The typical entry requirement is LGCSE or other equivalent secondary school qualification.
- 2) LGCSE/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

Program Version Course List



14-07-2022

Course Code	Course Description	<u>Credits</u>	Elective List	Pre-Requisite List	Co-Requisite List	<u>PreElect</u>	ResourceList
CON-8BO-20	Bachelor of Science in Computer Networking			Weeks:208.00 Credits: 480.00			
Core							
B8-ENI-20	Entrepreneurship and Innovation	20.00					
C5-CE1-20	Computer and its Essentials 1	10.00					
C5-MAT-20	Mathematics	10.00					
C5-OSH-11	Operating Systems and Hardware	20.00					STDOS -
C5-PLD-20	Programming Logic and Design	10.00					Standard OS
C6-CSA-20	Computer System Architecture	10.00					
C6-DBC-20	Database Concepts	10.00					
C6-NSE-20	Network Security	10.00					
C6-PIE-20	Professional Issues and Ethics	10.00					
C6-RSL-20	Routing and Switching Lab	10.00					
C7-ISM-20	IT Service Management	10.00					
C7-ITM-20	IT Infrastructure Management	10.00					
C7-PNA-20	Principles of Network	20.00					
	Administration						
C7-PPC-20	Professional Practice in Computing	40.00					
C7-SDN-20	Software Defined Network	10.00					
	Engineering						
D6-AWS-20	Academic Writing for STEM	10.00					
C6-CE2-20	Computer and its Essentials 2	10.00		C5-CE1-20 - Computer			
C7-RMS-20	Research Methods for STEM	10.00		and its Essentials 1 C5-MAT-20 - Mathematics			
C6-EOL-20	Essentials of Linux	10.00		C5-OSH-11 - Operating Systems and Hardware			
C6-MDW-20	Managing Business Desktops using Windows	10.00		C5-OSH-11 - Operating Systems and Hardware			
C6-NEF-20	Networking Fundamentals	20.00		C5-OSH-11 - Operating Systems and Hardware			

Course Code	Course Description	Credits	Elective List	Pre-Requisite List	Co-Requisite List	<u>PreElect</u>	ResourceList
C6-PUC-20	Programming using C++	20.00		C5-PLD-20 -			
				Programming Logic and			
				Design			
C7-DAS-20	Database Administration and	20.00		C6-DBC-20 - Database			
OC DOW 00	Security	40.00		Concepts			
C6-RSW-20	Routing and Switching	10.00	1	C6-NEF-20 - Networking Fundamentals			
C7-WNS-20	Wireless Networks	10.00	1	C6-NEF-20 - Networking			
07-77110-20	WITCHCOS INCLWOTES	10.00	,	Fundamentals			
C6-DSA-20	Data Structures and Algorithms	10.00		C6-PUC-20 -			
				Programming using C++			
C6-WDD-20	Web Design and Development	10.00	1	C6-PUC-20 -			
				Programming using C+			
				+C5-PLD-20 -			
				Programming Logic and			
				Design			
C6-WDP-20	Web Design Practice Lab	10.00		C6-PUC-20 -			
				Programming using C+ +C5-PLD-20 -			
				Programming Logic and			
				Design			
C6-SCN-20	Scaling Networks	20.00	1	C6-RSW-20 - Routing			
00 00.1.20		_0.00		and SwitchingC6-RSL-20			
				- Routing and Switching			
				Lab			
C7-LWD-20	LAN and WAN design	20.00		C6-SCN-20 - Scaling			
				Networks			
C7-LWL-20	LAN and WAN Design Lab	10.00)	C6-SCN-20 - Scaling			
07.101.00	10.0 11.1 11.1	40.00		Networks			
C7-ISN-20	IP Switched Networks	10.00	1	C7-IPR-20 - Implementing IP Routing			
C7-IPR-20	Implementing IP Routing	10.00	1	C7-LWD-20 - LAN and			
G7-11 1X-20	implementing in reducing	10.00	,	WAN designC7-LWL-20 -			
				LAN and WAN Design			
				Lab			
C7-RP1-20	Research Project 1 : Proposal	10.00)	C7-RMS-20 - Research			
	Writing			Methods for STEM			
C8-RP2-20	Research Project 2 : Dissertation	20.00		C7-RP1-20 - Research			
				Project 1 : Proposal			
			_	Writing			
35		470.00	0				

Course Code	Course Description	Credits	Elective List	Pre-Requisite List	Co-Requisite List	<u>PreElect</u>	ResourceList
Elective							
ELEC	Elective 1	10.00	C7-EIN-20 - Enterprise and ISP Network Solutions, C7-CCS-20 - Cloud Computing and Security, C7-SDE-20 - Security by Design				
ELEC	Elective 2	10.00	C8-MAS-20 - Media and Storage, C8-CYO-20 - Cybersecurity Operations, C8-TRS-20 - Troubleshooting Routing and Switching			C7-LWD-20 - LAN and WAN designC7-LWL-20 - LAN and WAN Design Lab, C7-IPR-20 - Implementing IP Routing	
2		20.00	•				
37		490.00					