FACULTY OF ENGINEERING AND TECHNOLOGY (CONTINUED)

Certificate Level 3 in Computer Hardware Maintenance and Networking

Programme details:

The purpose of this certification is to produce Computer Hardware Technicians for the IT industry. This certificate is designed for individuals interested in acquiring advanced technical skills and knowledge to maintain and repair personal computers and basics of networking.

Students gain skills in selecting parts, upgrading, building and configuring personal computers. installing and configuring operating systems and learn basics of network protocols and internetworking.

The Certificate in Computer Hardware Maintenance and Networking is a one year programme and is a Level 3 programme, at Botho University. There are two semesters in the programme, out of which the students will be expected to do an internship (Industrial training) in the second semester.

Core modules: Semester 1

- C3 ECO 15: Essential of Computers (30)
- C3 DHT 15: Desktop Hardware and Troubleshooting (30)

Semester 2

- C3 NPI 15: Network Protocols and Internetworking (40)
- C3 PPR 15: Professional Practice (20)

Admissions Criteria

Junior secondary school leaving certificate such as JCE or equivalent. Mature Age entry criteria: Candidates above 20 years with at least 5 years of work experience, of which at least 2 years must be at Level 2 equivalent may be considered under mature entry criteria.

Certificate in Network Administration

Programme details:

The Certificate in Network Administration is a 6 months programme at Botho University.

The students enrolled in this programme will study operation of Computer Networks, Build a small switched network. Implementing an IP addressing scheme for a small branch office, Implement a small routed network, WLAN, Implement and verify WLAN links, Configure, verify and troubleshoot a switch with VLANs and inter switch communications, Implement an IP addressing scheme and IP Services to meet network requirements in a medium-size Enterprise branch office network, Configure and troubleshoot basic operation and routing on Cisco devices, Implement, verify, and troubleshoot NAT and ACLs in a medium-size Enterprise branch office network.

The Students will also learn about the functions of network communications, TCP/IP, Ethernet/ Wireless LANs and CISCO IOS Software. Switch issues and CISCO router concepts and configurations.

The Students will also be equipped with knowledge and skills to work with VLANs and trunks, routing between VLANs, switched networks, medium sized routed network constructions, single area OSPF, and access control lists, address space management and VPN.

Core module:

• Managing Networking and Hardware (24)

Admissions Criteria

This is open to any candidate ideally who finished BGCSE or an equivalent qualification. Any relevant prior learning will be taken into consideration

^{*}The programmes offered in this document are accredited by BQA 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.

Program Version Course List



26-07-2022

Course Code	Course Description	<u>Credits</u>	Elective List	Pre-Requisite List	Co-Requisite List	<u>PreElect</u>	ResourceList
EIM-3CE-16	Certificate in Electrical Installation a Maintenance	nd_		Weeks:52.00 Credits: 120.00			
Core							
E3-BPS-15	Basic Professional Skills	20.00	1				
E3-EET-15	Electrical and Electronics Theory	40.00	1				
E3-EIM-15	Practice of Electrical installation and Maintenance	30.00	1				
E3-ITR-15	Industrial Training	30.00	1				
4		120.0	_)				
4		120.00	- <u>-</u>				