FACULTY OF ENGINEERING AND TECHNOLOGY

(Continued)

Bachelor of Science in **Cyber Security and Risk** Management

Programme details:

The programme consists of core (required) and elective modules as indicated below. Some modules may have prerequisites (i.e may require students 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 an average of 100 hours of learning from the student.

Core modules:

- C5-CTW-23: Communication and Technical Writing (10)
- C5-ICS-23: Introduction to computer in Cyber Security (10)
- C6-BCS-23: Basics for Corporate Security and Risk Management (10)
- C5-OSC-23: Operating Systems Concepts (10)
- C5-CSE-23: Cybercrime and Society (10)
- C5-FIS-23: Fundamentals of Information System security (10) C6-COA-23: Computer Organization
- (10)
- C6-TCS-23: Technology and Cyber Security (10)
- C6-CNW-23: Computer Networks (10)
- C6-PLC-23: Programming languages for cyber security (10)
- C6-RL1-23: Introduction to Risk Analysis and Loss Prevention (10)
- C6-BMA-23: Business Mathematics
- C6-SPI-23: Security Policies and Implementation Issues (10)

- C6-NFV-23: Network security, firewalls and VPNs (10)
- C6-ISS-23: Information Systems
- and Strategy (10)

 C7-SWL-23: Security strategies in windows and Linux platforms (10)
- C7-DFM-23: Database fundamentals (10)
- C7-PSM-23: Principles of Security Management (10)
- C7-AIC-23: Auditing IT Infrastructures for Compliance (10)
- C7-MRI-23: Managing risk in information systems (10)
- C7-ISC-23: Internet Security (10)
- C7-PMA-23: Project Management (10)
- C7-WMS-23: Wireless and mobile device security (10)
- C7-IKM-23: Information and Knowledge Management (10)
- C7-CWP-23: Cyber Security and Workplace Safety programs (10)
- C7-CSM-23: Cyber security risk management (10)
- C7-CAP-23: Cyber Security and Asset Protection (10)
- C7-LCS-23: Legal issues in Cyber Security (10)
- C7-CMÉ-23: Cybersecurity Metrics and Evaluation (10)
- C7-EHK-23: Ethical Hacking (10)
- C7-RME-23: Research Methods (10)
 C7-CPT-23: Crime Protection (10)
- C7-IRI-23: Incident Response and Investigation (10)
- C7-WPB-23: Workplace Safety Programs in Botswana and the SADC Region (10)
- C7-ISM-23: Institutional Security Management (10)
- C7-INM-23: Innovation Management (10)
- C7-RCP-23: Research Capstone Project (20)

FACULTY OF ENGINEERING AND TECHNOLOGY

(Continued)



- C7-CEM-23: Crisis and Emergency Management (10)
- C7-ENT-23: Entrepreneurship (10)
- C7-RL2-23: Advanced Risk Analysis and Loss Prevention (10)
- C7-IAT-23: Industrial Attachment (40)
- C7-DIS-23: Dissertation (10)

Elective Modules:

- C7-ORB-23: Organizational Behaviour (10)
- C7-SMA-23: Strategic Management (10)
- C7-PRC-23: Public Relations and Customer Care (10)
- C8-CCJ-23: Criminology and Criminal Justice (20)
- C8-FAC-23: Forensic Accounting (20)
- Č8-FIM-23: Fraud Investigation and Management (20)

Recommended full-time study path

Semester 1

 C5-CTW-23, C5-ICS-23, C6-BCS-23, C5-OSC-23, C5-CSE-23, C5-FIS-23

Semester 2

 C6-COA-23, C6-TCS-23, C6-CNW-23, C6-PLC-23, C6-RL1-23, C6-BMA-23

Semester 3

 C6-SPI-23, C6-NFV-23, C6-ISS-23, C7-SWL-23, C7-DFM-23, C7-PSM-23

Semester 4

 C7-AIC-23, C7-MRI-23, C7-ISC-23, C7-PMA-23, C7-WMS-23, C7-IKM-230

Semester 5

 C7-CWP-23, C7-CSM-23, C7-CAP-23, C7-LCS-23, C7-CME-23, C7-EHK-23

Semester 6

 C7-RME-23, C7-CPT-23, C7-IRI-23, C7-WPB-23, C7-ISM-23, C7-INM-23 Select one (C7- ORB- 23, C7-SMA-23, C7-PRC-23)

Semester 7

 C7-RCP-23, C7-CEM-23, C7-ENT-23, C7-RL2-23 Select one (C8-CCJ-23, C8-FAC-23, C8-FIM-23)

Semester 8

• C7-IAT-23, C7-DIS-23

Admissions Criteria

- 1) Certificate IV (NCQF level 4) with 6 subjects and passes in English, Mathematics and Science subject or equivalent..
- 2) Applicants who do not meet the above criteria but possess relevant industry experience may be considered through Recognition of Prior Learning (RPL) and Credit Accumulation and Transfer (CAT) policies for access. This consideration will be done following guidelines of the ETP which are aligned with BQA/ National policies.
- 3) Recognition of Prior Learning (RPL) and CATS will also be provided for, and candidates will have to meet the necessary criteria set by individual ETPs in accordance with the BQA respective policies and regulations for RPL and CATS.
- **4)** For enquiries and more information please visit our website: **www.bothouniversity.com**

^{*}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

Management



ResourceList

04-08-2023

Course Code	Course Description	Credits	Elective List	Pre-Requisite List	Co-Requisite List	PreElect
CSM-7B0-23	Bachelor of Science in Cyber Securi	ty & Risk		Weeks:208.00 Credits: 480.00		
	Management					
Core						
C5-CSE-23	Cyber crime and Society	10.00				
C5-CTW-23	Communication and Technical Writing	10.00				
C5-FIS-23	Fundamentals of Information System security	10.00				
C5-ICS-23	Introduction to computer in Cyber Security	10.00				
C5-IRM-23	Introduction to Risk Management	10.00				
C5-OSC-23	Operating Systems Concepts	10.00				
C6-BMA-23	Business Mathematics	10.00				
C6-CAO-23	Computer Architecture and Organization	10.00				
C6-CNW-23	Computer Networks	10.00				
C6-PUC-23	Programming using C++	10.00				
C6-PYP-23	Python Programming	10.00				
C6-RL1-23	Introduction to Risk Analysis and Loss Prevention	10.00				
C6-SPI-23	Security Policies and Implementation Issues	10.00				
C7-CAP-23	Cyber Security and Asset Protection	10.00				
C7-CME-23	Cybersecurity Metrics and Evaluation	10.00				
C7-DSA-23	Data Structures and Algorithms	10.00				
C7-EHK-23	Ethical Hacking	10.00				
C7-ENT-23	Entrepreneurship	10.00				
C7-IAT-23	Industrial Attachment	40.00				
C7-IKM-23	Information and Knowledge	10.00				

Course Code	Course Description	Credits	Elective List	Pre-Requisite List	Co-Requisite List	PreElect	ResourceList
C7-IOS-23	IOT and Cyber Security	10.00					
C7-ISC-23	Internet Security	10.00					
C7-RCP-23	Research Capstone Project	20.00					
C7-RL2-23	Advanced Risk Analysis and Loss Prevention	10.00					
C7-RME-23	Research Methods	10.00					
C7-SSE-23	Software Security	10.00					
C7-WMS-23	Wireless and mobile device security	10.00					
C7-WPG-23	Workplace Safety Programs in Ghana and the West Africa Sub Region	10.00					
CC7-CCM-23	Cyber Security Compliance Methodologies	10.00					
C6-TCS-23	Technology and Cyber Security	10.00		C5-CSE-23 - Cyber crime and Society			
C7-CWP-23	Cyber Security and Workplace	10.00		C5-CSE-23 - Cyber crime			
	Safety programs			and Society			
C7-PSM-23	Principles of Security Management	10.00		C5-FIS-23 - Fundamentals of Information System security			
C7-DFM-23	Database fundamentals	10.00		C5-ICS-23 - Introduction to computer in Cyber Security			
C7-SWL-23	Security strategies in windows and Linux platforms	10.00		C5-OSC-23 - Operating Systems Concepts			
C6-NFV-23	Network security, firewalls and	10.00		C6-CNW-23 - Computer			
OZ MDI 00	VPNs	40.00		Networks			
C7-MRI-23	Managing risk in information systems	10.00		C6-RL1-23 - Introduction to Risk Analysis and Loss Prevention			
C7-CPT-23	Crime Protection	10.00		C7-CAP-23 - Cyber Security and Asset			
C7-IRI-23	Incident Response and Investigation	10.00		Protection C7-CME-23 - Cybersecurity Metrics and Evaluation			
C7-CEM-23	Crisis and Emergency Management	10.00		C7-ISM-23 - Institutional Security Management			

Course Code	Course Description	Credits	Elective List	Pre-Requisite List	Co-Requisite List	<u>PreElect</u>	ResourceList
C7-CSM-23	Cyber security risk management	10.00		C7-MRI-23 - Managing risk in information systems			
C7-LCS-23	Legal issues in Cyber Security	10.00		C7-PSM-23 - Principles of Security Management			
C7-DIS-23	Dissertation	10.00		C7-RCP-23 - Research Capstone Project			
42		460.00	•				
Elective							
ELEC	Semester 6 Electives	10.00	C7-ORB-23 - Organizational Behaviour, C7-SMA-23 - Strategic Management, C7-PRC-23 - Public Relations and Customer Care				
ELEC	Semester 7 Eectives	10.00	C8-ISM-23 - Institutional Security Management, C8-CAC-23 - Criminology and Criminal Justice, C8-FOC-23 - Forensic Accounting, C8-FIA-23 - Fraud Investigation and Management				
2		20.00	•				
44		480.00					