

Bachelor of Science in Network Security and Computer Forensics

The Bachelor of Science in Network Security and Computer Forensics is targeted at those wishing to enter the Information Technology (IT) sector as Computer Forensic Analysts, Vulnerability Security Research Engineers, Digital Forensic Examiners, Malware Media Forensic Analysts, Forensic Auditors, Network Security Specialists, Computer Crime Investigators or Security Analysts, among other things.

Programme details:

The curriculum consists of essential core modules and elective modules that are optional. Specific modules may require prerequisites, requiring students to successfully complete another module or set of modules before registering. Additionally, certain modules may be designated as co-requisite, meaning they must be taken concurrently. The credit load of each module is indicated by the number in parentheses at the end. Each credit is equivalent to approximately 10 hours of combined guided, in-class, and independent learning. Hence, a module with 10 credits generally involves around 100 hours of study.

Core modules:

- C5-CE1-20: Computer and its Essential 1 (10)
- C5-PLD-20: Programming Logic and Design (10)
- C5-MAT-20 : Mathematics (10)
- C5-OSH-11: Operating Systems and Hardware (20)
- C6-PIE-20 : Professional Issues and Ethics (10)
- 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 (10)
- C6-EOL-20 : Essentials of Linux (10)
- C6-CFO-23 : Computer Forensics (10)
- C6-IPC-11 : Introduction to Programming Using C++ (20)
- C6-CFL-23 : (Computer Forensics Lab (10)
- C6-RSW-20 : Routing and switching (10)
- C6-RSL-20 : Routing and Switching Lab (10)
- C7-SCS-23 : Scripting for Cyber Security (20)
- C6-PCS-23 : Principles of Cyber Security (10)
- C6-OSF-23 : Operating System Forensics (10)
- C6-NSE-20 : Network Security (10)
- C6-WMS-23 : Wireless and Mobile Security (10)
- C7-IDS-23 : Information and Data Security (10)
- C7-EHK-13 : Ethical Hacking (20)
- C7-SDN-20 : Software Defined Network Engineering (10)
- C7-FIT-23 : Forensics Investigation Techniques (10)
- C7-CGT-23 : Cryptographic Techniques (10)
- C7-RMS-20 : Research Methods for STEM (10)
- C7-MAN-13 : Malware Analysis (20)
- C7-AEH-23 : Advanced Ethical Hacking (10)
- C7-MFO-20 : Mobile Forensics (10)
- C8-CCI-23 : Cyber Crime Investigation (10)
- C7-RP1-20 : Research Project 1: Proposal Writing (10)
- C7-CYL-23 : Cyber Law (10)
- B8-ENI-20 : Entrepreneurship and Innovation (20)
- C8-RP2-20 : Research Project 2: Dissertation (20)
- C7-PPC-20 : Professional Practice in Computing (40)

Elective Modules:

- C7-IOT-23 : Internet of Things (10)

- C7-CCS-20 : Cloud Computing and Security (10)
- C7-SDE-20 : Security by Design (10)
- C8-MAS-20 : Media and Storage (10)
- C8-MEF-23 : Media Forensics (10)
- C8-ISG-23 : Information Security Management and Governance (10)

Recommended full-time study path - 4 Years.

Semester 1

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

Semester 2

- C6-NEF-20, C6-DBC-20, D6-AWS-20, C6-CE2-20, C6-EOL-20

Semester 3

- C6-CFO-23, C6-IPC-11, C6-CFL-23, C6-RSW-20, C6-RSL-20

Semester 4

- C7-SCS-23, C6-PCS-23, C6-OSF-23, C6-NSE-20, C6-WMS-23

Semester 5

- C7-IDS-23, C7-EHK-13, C7-SDN-20, C7-FIT-23, C7-CGT-23

Semester 6

- C7-RMS-20, C7-MAN-13, C7-AEH-23, C7-MFO-20, (Choose one from C7-IOT-23, C7-CCS-20, C7-SDE-20)

Semester 7

- C8-CCI-23, C7-RP1-20, C7-CYL-23, B8-ENI-20, (Choose one from C8-MAS-20, C8-MEF-23, C8-ISG-23)

Semester 8

- C8-RP2-20, C7-PPC-20

Admissions Criteria

1) Applicants are expected to have successfully completed secondary schooling. The typical entry requirement is BGCSE or IGCSE (in Botswana), LGCSE (in Lesotho) or other equivalent secondary school qualification.

2) BGCSE/equivalent with minimum Pass (D) in 5 subjects including English and Mathematics.

3) Diploma or equivalent qualification in a related field.

4) Applicants that do not meet the above criteria but possess relevant industry experience will be considered through recognition of prior learning (RPL).

