



Department of Information Technology

Student Handbook – 2025

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ABOUT THE DOCUMENT AND CONTACT DETAILS

This Information guide contains important administrative and academic information for Information Technology Students.

For all academic enquiries and assistance, please contact the relevant lecturer. Students may call 06130 1032 should they need contact details of lecturers.

Contact Details

This Information guide contains important administrative and academic information. For all academic enquiries and assistance please feel free to contact the following should you have any queries:

Academic related queries

1. Mr. S. Musarurwa (Head of Department Information Technology)
Cell 0816856964 or smusarurwa@collegelingua.com
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Non-Academic related queries

1. Ms. L. Mafupe (IT Administrator) Cell 0814919371 or lmafupe@collegelingua.com

For any Examination related queries contact

2. The query/request may be sent via text, WhatsApp message or e-mail.
3. The contact number for the Examinations Department is +264 81 414 4542.
4. The e-mail address is examsdept@collegelingua.com
5. For results & general queries is Ms P. Coetzee.
6. For qualifications & general queries is Mrs T.A. Dunaiski.

INTRODUCTION

The vision of the department is to be the leading provider of Information and Communication Technology training in Namibia. The programmes are designed to give students adequate skills in programming, web development, database development, networking and management information systems.

The Department of Information Technology at International Training College-Lingua offers extensive computing programmes in Management Information Systems, Networking and Systems Administration and Software Development, which are accredited by the Namibia Qualifications Authority (NQA). The Department also offers the internationally acclaimed CISCO Certified Network Associate (CCNA) certification and other in-demand IT short courses.

PROGRAMME DETAILS

CERTIFICATE IN INFORMATION TECHNOLOGY – NQF LEVEL 3

Aim of the Programme

This qualification aims to develop the knowledge and skills required to understand the use of ICT in a modern business environment. This qualification is designed for students who are interested in an introduction to the study of creating IT systems to manage and share information, alongside other fields of study, with a view to progressing to a wide range of higher education courses.

The qualification has been formulated to reflect the latest workplace-based trends within the ICT industry to ensure that qualifying learners will have accessibility to employment within the industry. The project-based and problem-solving approach embedded in the qualification has the purpose of capacitating the student with workplace-applicable competencies. The qualification prepares learners for entry-level positions in the ICT or related industries. Learners are provided with a general all-round working knowledge of the ICT.

Exit Level Outcomes

This qualification will help to

- Define the principles of effective communication using Information Technology.
- Explain the role of computer systems and the implications of their use in personal and professional situations.
- Outline the challenges, tools and techniques used for technical support, use the acquired technical knowledge to help clients resolve technical problems and improve the performance of IT systems.
- Explain the purpose of software in a computer system and the need for upgrade, including demonstration of software installation and upgrade.
- Solve basic mathematical problems to develop skills in mathematical thinking, reasoning and communication.
- Demonstrate knowledge in problem solving techniques using computer applications

Entry requirements

Applicants who have obtained less than 14 points in 6 subjects in the Namibia Senior Secondary Certificate Ordinary/Advanced Subsidiary (NSSCO/AS) or equivalent thereof may enter this qualification.

- Or may enter with a Grade 10 certificate or the equivalent thereof
- Or enter with a (Level 2) qualification from any recognized institution.

Programme structure and duration

The Certificate in Information Technology NQF Level 3 is offered as a Six-month programme. This qualification consists of a minimum of 50 credits

A learner, who successfully completes the programme, will be awarded a certificate in Information Technology NQF Level 3. It is important to note that the Certificate in Information Technology Programme is structured in such a way that it provides entry into the NQF Level 4 certificate programme.

Modules	Level	Credits
English	3	10
IT Technical Support	3	10
Computer Operations and Packages	3	10
Installing and Upgrading Software	3	10
Basic Mathematics	3	10

Prerequisites

There are no prerequisites for this qualification

CERTIFICATE IN INFORMATION TECHNOLOGY – NQF LEVEL 4

Aim of the Programme

This qualification has been re-aligned to incorporate the latest ICT industry requirements. Furthermore, it addresses problems relating to number systems used in a computer to explain concepts and the role of operating systems. This qualification also aims to establish proper communication skills in the context of IT and the developing the ability and strategies for the interpretation and exchange of information technology (IT) related content.

Exit Level Outcomes

This qualification helps to

- Solve problems relating to number systems used in a computer and set theory.
- Explain the concepts and role of an operating system in a computer system
- Explain the anatomy of a computer system, both hardware and software, including application of skills in installation and configuration of computer components.
- Establish proper communication skills in the context of IT and develop the ability and strategies in the interpretation and exchange of information technology (IT) related content
- Describe and use computer hardware and applications, and explain the impact of IT on institutions and health and safety
- Describe computer hardware, software, file management and demonstrate the skills in the use of office applications which are Word, Excel and Access
- Identify and describe the purpose of different programming languages and demonstrate understanding of software development methodologies, program design, coding, testing, and documentation.

Entry requirements

Applicants who have obtained a minimum of 14 points in 6 subjects in the Namibia Senior Secondary Certificate Ordinary/Advanced Subsidiary (NSSCO/AS) or equivalent thereof may enter this qualification.

Or enter with a NQF Level 3 qualification from any recognized institution.

Programme structure and duration

The Certificate in Information Technology NQF Level 4 is offered as a One-year programme. This qualification consists of a minimum of 100 credits

A learner who successfully completes the programme, will be awarded a certificate in Information Technology NQF Level 4. It is important to note that the Certificate in Information Technology Programme is structured in such a way that it provides entry into the NQF Level 4 diploma programme.

Modules	Level	Credits
January to June Semester		
Computer Mathematics	4	12
English	4	12
Integrated Applications	4	12
IT Principles	4	12
July to November Semester		
Computer System Repair and Maintenance	5	16
Operating System Fundamentals	4	12
Programming Fundamentals	4	12
English	4	12

Prerequisites

There are no prerequisites for this qualification

DIPLOMA IN INFORMATION TECHNOLOGY – NQF LEVEL 5

Aim of the Programme

The Diploma in Information Technology NQF Level 5 builds on the Certificate in Information Technology NQF Level 4 and has been developed to focus on:

- Education and training of candidates who wish to be employed or are employed in an Information Technology (IT) related field such as in information system design and management, IT manufacturing, IT maintenance and technical services areas, e-business strategy and/or technical support, systems analysts, software engineers and developers.

- Giving candidates opportunities to gain a recognized qualification to enter employment as an IT professional or progress to higher education qualifications such as a full or part-time degree in computing or related area.
- Giving candidates opportunities to develop a range of skills and techniques and attributes essential for successful performance in working life.

Exit Level Outcomes

This qualification helps to

- Demonstrate a fundamental understanding of software development methodologies, including modular design, pseudo code, flowcharting, structure charts, data types, control structures, functions, and arrays.
- Write procedural programs based on a selected programming language and apply sound techniques on designing, developing, and documenting well-structured programs using proper software engineering principles.
- Explain what data is; differentiate between data and information, appreciate how data is handled and use statistical tools.
- Explain how a PC works and understand the relationship between hardware and software as well as classify and explain the function of different computer hardware components.
- Demonstrate understanding of the principles and concepts of process and resource management in operating systems. I/O programming; interrupt mechanism and memory management; processor management.
- Demonstrate understanding of and applying the concepts and theories underlying the administration of information systems security.
- Demonstrate understanding of the basics of computer hardware and how software interacts with computer hardware analyse and evaluate computer performance.
- Explain what a management information system (MIS) is and describe its role in decision making within organizations and explain how the four components of an MIS add value to an organization.
- Demonstrate appreciation of computer networks and concentrate on building a firm foundation for understanding data communications.

Entry requirements

Applicants who have obtained a minimum of 25 points in 6 subjects in the Namibia Senior Secondary Certificate Ordinary/Advanced Subsidiary (NSSCO/AS) or equivalent thereof may enter this qualification.

Or enter with a NQF Level 4 qualification from any recognized institution.

Programme structure and duration

The Diploma in Information Technology is offered as a One-year programme. This qualification consists of a minimum of 128 credits

A learner who successfully completes the programme, will be awarded a Diploma in Information Technology NQF Level 5. It is important to note that the Diploma in

Information Technology Programme is structured in such a way that it provides entry into the NQF Level 6 diploma programme.

Modules	Level	Credits
January to June Semester		
English	4	NCB
Programming 1A	5	16
Computer Networks & Applications 1	5	16
Operating Systems	5	12
Introduction to Statistics	5	16
July to November Semester		
English	4	NCB
Programming 1B	5	16
Computer System Repair and Maintenance	5	16
Information Security Fundamentals	5	12
Business Information Systems Fundamentals	5	12
Computer Organisation and System Architecture	5	12

NCB – Non-Credit Bearing

Prerequisites

There are no prerequisites for this qualification

DIPLOMA IN INFORMATION TECHNOLOGY – NQF LEVEL 6

Aim of the Programme

The Diploma in Information Technology NQF Level 6 builds on the Diploma in Information Technology NQF Level 5. The purpose of the Diploma in Information Technology NQF Level 6 is to provide a career-focused professional qualification featuring industry-referenced knowledge, skills and attitudes.

A learner will be knowledgeable and competent in the discourse and practice of the Information Technology (IT) discipline but will also have specialist knowledge of a particular sub-discipline of IT and will be subjected to a range of professional and personal development initiatives relevant to the IT industry.

A Qualifying learner at this level is competent in the development of IT systems in a distributed computing environment and will be competent in designing and producing software products and systems to meet specified needs so that they work reliably, and their production and maintenance is cost effective.

Exit Level Outcomes

This qualification helps to:

- Explain the characteristics that distinguish the database approach from the approach of programming with data files.
- Discuss the current architecture of the Internet and the entities involved with the day to day running of the Internet and the process involved with development of policy and new protocols.
- Describe web applications architecture and web programming and create web pages using HTML and CSS.
- Create algorithms for solving simple problems and use a programming language to implement, test, and debug algorithms for solving simple problems.
- Solve real world problems using object-oriented programming concepts by to creating, compiling and debugging computer programs.
- Discuss the processes, methods, techniques and tools that organizations use to manage their information systems projects.
- Discuss the systematic methodology for analysing a business problem or opportunity, determining what role computer-based technologies can play in addressing the business need.
- Apply the basics of the mobile development platforms, mobile application components, activities and their lifecycle, UI design, Multimedia, 2D graphics and networking support.
- Explain requirement analysis and modelling including use cases and use case paths, domain models, state transition diagrams.
- Design, document, model, assess, and improve core business processes.

Entry requirements

The candidate should have successfully completed the Diploma in Information Technology NQF Level 5 modules at International Training College Lingua or the equivalent thereof at a recognized institution.

Programme structure and duration

The Diploma in Information Technology NQF Level 6 is offered as a One-year programme. This qualification consists of a minimum of 160 credits

A learner who successfully completes the programme, will be awarded a Diploma in Information Technology NQF Level 5. It is important to note that the Diploma in Information Technology Programme is structured in such a way that it provides entry into the NQF Level 7 bachelor's degree programme.

Modules	Level	Credits
January to June Semester		
Database Development 1	6	16
IT Project Management	6	16
Data Structures and Algorithm Design	6	16
Software Engineering Fundamentals	6	16
Systems Analysis and Design	6	16

July to November Semester		
Managing Business Processes	6	16
Mobile Application Development 1	6	16
Object-Oriented Programming 1	6	16
Web Development 1	6	16
Computer Networks & Applications 2	6	16

Prerequisites

IMPORTANT: To continue with a module, the student must pass the modules that are listed as prerequisites.

Module	Prerequisites
Managing Business Processes	Business Information Systems Fundamentals
Object-Oriented Programming 1	Programming 1A
Computer Networks & Applications 2	Computer Networks & Applications 1

BACHELOR OF INFORMATION TECHNOLOGY (MANAGEMENT INFORMATION SYSTEMS) – NQF LEVEL 7

Aim of the Programme

Bachelor of Information Technology (Management Information Systems) Level 7 programme aims to analyze, design, develop, and implement information technology strategy to solve business problems.

A learner will be knowledgeable and competent in the discourse and practice of the Information Technology (IT) discipline but will also have specialist knowledge of a particular sub-discipline of IT and will be subjected to a range of professional and personal development initiatives relevant to the IT industry.

A Qualifying learner at this level is competent in the development of IT systems in a distributed computing environment and will be competent in Management Information Systems to meet specified needs so that they work reliably, and their production and maintenance is cost effective.

Exit Level Outcomes

This qualification helps to

- Analyse the information requirements of organisations.
- Discuss the types of information systems that are used within all levels of an organisation.
- Demonstrate the use of an information system to produce management information.
- Evaluate the effectiveness of strategic information systems.
- Implement an E-Commerce strategy

- Discuss the impact of business intelligence tools and technologies for effective decision-making purposes and the legal/regulatory context in which they are used.

Entry requirements

Applicants who have obtained a minimum of 25 points in 6 subjects in the Namibia Senior Secondary Certificate Ordinary/Advanced Subsidiary (NSSCO/AS) or equivalent thereof may enter this qualification.

- Or enter with a NQF Level 4 qualification from any recognized institution.
- Or a relevant Diploma at NQF level 6 for a NQF level 7 (One year Top up) qualification

Programme structure and duration

The Bachelor of Information Technology NQF Level 7 is offered as a Three– year programme or as a One-year top-up programme if the learner already holds a Diploma in IT at Level 6. This qualification consists of a minimum of 440 credits

A learner who successfully completes the programme, will be awarded a bachelor's degree in Information Technology (Management Information Systems) at NQF Level 7. It is important to note that the Bachelor of Information Technology Programme is structured in such a way that it provides entry into the NQF Level 8 honours degree programme.

YEAR 1 (Level 5)		
Modules	Level	Credits
January to June Semester		
English	4	NCB
Programming 1A	5	16
Computer Networks & Applications 1	5	16
Operating Systems	5	12
Introduction to Statistics	5	16
July to November Semester		
English	4	NCB
Programming 1B	5	16
Computer System Repair and Maintenance	5	16
Information Security Fundamentals	5	12
Business Information Systems Fundamentals	5	12
Computer Organisation and System Architecture	5	12
YEAR 2 (Level 6)		
Modules	Level	Credits
January to June Semester		
Database Development 1	6	16
IT Project Management	6	16

Data Structures and Algorithm Design	6	16
Software Engineering Fundamentals	6	16
Systems Analysis and Design	6	16
July to November Semester		
Managing Business Processes	6	16
Mobile Application Development 1	6	16
Object-Oriented Programming 1	6	16
Web Development 1	6	16
Computer Networks & Applications 2	6	16
YEAR 3 (Level 7)		
Modules	Level	Credits
January to June Semester		
Business Intelligence	7	12
E-Commerce and Strategy	7	12
Enterprise Architecture	8	16
July to November Semester		
Financial Accounting 1	7	16
Information Security Management	8	16
Strategic Information Systems	7	12
Work Related Learning (WRL)	7	48

Prerequisites

IMPORTANT: To continue with a module, the student must pass the modules that are listed as prerequisites.

Module	Prerequisite
Business Intelligence	Managing Business Processes
Strategic Information Systems	Systems Analysis and Design
Work Related Learning (WRL)	Must have passed Level 6

BACHELOR OF INFORMATION TECHNOLOGY (NETWORKING AND SYSTEMS ADMINISTRATION) – NQF LEVEL 7

Aim of the Programme

The purpose of this qualification is to equip students with advanced level knowledge, specific skills, applied competence and the necessary attitudes in a context that prepares them for professional careers within the Information technology field. It furthermore aims to give students an advantage in the workplace through direct practical association with prospective employers.

The main purpose of this qualification is to provide students with a wide spectrum of study covering the breadth of Information Technology in the sub-field of Networking and

Systems Administration. The Bachelor of Information Technology (Networking and System Administration) NQF (Level 7)'s programme has been designed with specific outcomes in mind and is aimed at developing both generic and specific skills required within networking and systems administration. This qualification has a work integrated learning component requires students to have practical experience.

The Bachelor of Information Technology (Networking and Systems Administration) combines detailed theoretical knowledge with technical skills that are relevant and responsive to the needs of industry in Namibia. This qualification prepares graduates for careers in networking and system administration.

Exit Level Outcomes

This qualification will help to

- Explain the concept, architecture, and services of Cloud Computing and configure a cloud service in the major providers such as ECM, Google, Amazon, Microsoft, IBM etc.,
- Design and implement a simple cloud platform using open-source software with an appropriate networking platform.
- Design, manage and support infrastructure for a networked IT system to meet an organisation's requirements and carry out management and support activities on a networked IT system.
- Discuss an Information Security Management System (ISMS) and explain how one is established, maintained and improved, and the role international standards play in developing an ISMS.
- Design, build and simulate an interrelated computing system application using any combination of hardware, software, data, platforms and services and discuss the problem this application solves as well as the potential impact on society, business and the end user and the problems encountered when integrating into the wider ecosystem.
- Examine the concepts, uses and implications of virtualization and implement a virtualised solution to meet identified requirements.

Entry requirements

A relevant Diploma at NQF level 6 for a NQF level 7 (One year Top up) qualification

Applicants who have obtained a minimum of 25 points in 6 subjects in the Namibia Senior Secondary Certificate Ordinary/Advanced Subsidiary (NSSCO/AS) or equivalent thereof may enter this qualification.

- Or enter with a NQF Level 4 qualification from any recognized institution.
- Or a relevant Diploma at NQF level 6 for a NQF level 7 (One year Top up) qualification

Programme structure and duration

The Bachelor of Information Technology is offered as a Three-year degree programme. This qualification consists of a minimum of 440 credits

A learner who successfully completes the programme, will be awarded bachelor's in information technology (Networking and Systems Administration) NQF Level 7.

It is important to note that the Bachelor of Information Technology Programme is structured in such a way that it provides entry into the NQF Level 8 Networking and Systems Administration (honours) degree programme.

YEAR 1 (Level 5)		
Modules	Level	Credits
January to June Semester		
English	4	NCB
Programming 1A	5	16
Computer Networks & Applications 1	5	16
Operating Systems	5	12
Introduction to Statistics	5	16
July to November Semester		
English	4	NCB
Programming 1B	5	16
Computer System Repair and Maintenance	5	16
Information Security Fundamentals	5	12
Business Information Systems Fundamentals	5	12
Computer Organisation and System Architecture	5	12
YEAR -2 (Level – 6)		
Modules	Level	Credits
January to June Semester		
Database Development 1	6	16
IT Project Management	6	16
Data Structures and Algorithm Design	6	16
Software Engineering Fundamentals	6	16
Systems Analysis and Design	6	16
July to November Semester		
Managing Business Processes	6	16
Mobile Application Development 1	6	16
Object-Oriented Programming 1	6	16
Web Development 1	6	16
Computer Networks & Applications 2	6	16
YEAR 3 (Level 7)		
Modules	Level	Credits
July to November Semester		
Client/Server Computing Systems	7	12
Cloud Computing	6	12
Server Administration	7	12

July to November Semester		
Information Security Management	7	12
Managing and Supporting Systems	7	12
Virtualization	7	12
Wireless Networks Solutions	7	12
Work Related Learning (WRL)	7	48

Prerequisites

IMPORTANT: To continue with a module, the student must have passed the modules that are listed as prerequisites.

Module	Prerequisite
Wireless Networks Solutions	Computer Networks & Applications 2
Work Related Learning (WRL)	Must have passed Level 6

BACHELOR OF INFORMATION TECHNOLOGY (SOFTWARE DEVELOPMENT) NQF LEVEL 7

Aim of the Programme

The purpose of this qualification is to develop in a student the competence required to assist in the implementation of Information Technology activities and skills with or without supervision depending on the level of tasks undertaken. The Bachelor of Information Technology (Software Development) builds on the skills acquired in the Diploma in Information Technology (Level 6).

The Bachelor of Information Technology (Software Development) combines detailed theoretical knowledge with technical skills that are relevant and responsive to the needs of industry in Namibia. This qualification prepares graduates for careers in the development of software.

Exit Level Outcomes

This qualification helps to

- Apply a range of concepts, principles and techniques of object-oriented software development to create object-oriented software solutions to problems.
- Examine various lifecycle models and appreciate their characteristics to understand which project environments they are most appropriate for.
- Discuss Information Security Management Systems (ISMS) and explain how it is established, maintained and improved, and the role international standards play in developing an ISMS.
- Discuss the impact of business intelligence tools and technologies for effective decision-making purposes and the legal/regulatory context in which they are used.

- Discuss the methodology, terminology and benefits of user experience (UX) and user interface (UI) Design in the development of software applications.
- Apply the principles of programming using a .NET framework as an underpinning technological concept in the fields of programming and systems development.
- Discuss the theory of relational model and relational programming languages.
- Apply knowledge and skills learned in the classroom in a work setting.

Entry requirements

Applicants who have obtained a minimum of 25 points in 6 subjects in the Namibia Senior Secondary Certificate Ordinary/Advanced Subsidiary (NSSCO/AS) or equivalent thereof may enter this qualification.

- Or enter with a NQF Level 4 qualification from any recognized institution.
- Or a relevant Diploma at NQF level 6 for a NQF level 7 (One year Top up) qualification

Programme structure and duration

The Bachelor of Information Technology is offered as a Three-year degree programme. This qualification consists of a minimum of 428 credits

A learner who successfully completes the programme, will be awarded a bachelor's in information technology (Software Development) NQF Level 7.

It is important to note that the Bachelor of Information Technology Programme is structured in such a way that it provides entry into the NQF Level 8 Software Development (honours) degree programme.

YEAR 1 (LEVEL 5)		
Modules	Level	Credits
January to June Semester		
English	4	(NCB)
Programming 1A	5	16
Computer Networks & Applications 1	5	16
Operating Systems	5	12
Introduction to Statistics	5	16
July to November Semester		
English	4	(NCB)
Programming 1B	5	16
Computer System Repair and Maintenance	5	16
Information Security Fundamentals	5	12
Business Information Systems Fundamentals	5	12
Computer Organisation and System Architecture	5	12
YEAR 2 (LEVEL 6)		

Modules	Level	Credits
January to June Semester		
Database Development 1	6	16
IT Project Management	6	16
Data Structures and Algorithm Design	6	16
Software Engineering Fundamentals	6	16
Systems Analysis and Design	6	16
July to November Semester		
Managing Business Processes	6	16
Mobile Application Development 1	6	16
Object-Oriented Programming 1	6	16
Web Development 1	6	16
Computer Networks & Applications 2	6	16
YEAR 3 (LEVEL 7)		
Modules	Level	Credits
January to June Semester		
Advanced Programming in .NET	7	12
Business Intelligence	7	12
Software Development Fundamentals	7	12
July to November Semester		
Database Development 2	7	12
Object-Oriented Programming 2	7	12
Information Security Management	7	12
User Experience & Interface Design	7	12
Work Related Learning (WRL)	7	48

Prerequisites

IMPORTANT: To continue with a module, the student must have passed the modules that are listed as prerequisites.

Modules	Prerequisites
Business Intelligence	Managing Business Processes
Database Development 2	Database Development 1
Object-Oriented Programming 2	Object-Oriented Programming 1
Work Related Learning (WRL)	Must have passed Level 6

BACHELOR OF INFORMATION TECHNOLOGY HONOURS (MANAGEMENT INFORMATION SYSTEMS) LEVEL 8

Aim of the Programme

The purpose of this qualification is to develop students with a broad understanding of the roles and uses of information systems in various functional areas of modern organisations. It is the understanding of this diversification of applications across a broad

spectrum of contextualized areas and needs that signals field competence. Theory, practice and adaptable applications reside at the center, and constitute the core skill-base, of Management Information Systems program.

The Bachelor of Information Technology Honours (Management Information Systems) combines detailed theoretical knowledge with technical skills that are relevant and responsive to the needs of industry in Namibia. This qualification prepares graduates for careers in the management of information systems found in various industries.

Exit Level Outcomes

This qualification helps to

- Define the principles of effective communication using Information Technology.
- Explain the role of computer systems and the implications of their use in personal and professional situations.
- Outline the challenges, tools and techniques used for technical support, use the acquired technical knowledge to help clients resolve technical problems and improve the performance of IT systems.
- Explain the purpose of software in a computer system and the need for upgrade, including demonstration of software installation and upgrade.
- Solve basic mathematical problems to develop skills in mathematical thinking, reasoning and communication.
- Demonstrate knowledge in problem solving techniques using computer applications

Entry requirements

Entry requirements to the Bachelor of Information Technology Honours (Management Information Systems) Degree NQF Level 8 shall be a Bachelor of Information Technology (Management Information Systems) Degree (NQF Level 7) or equivalent, obtained from any recognized institution.

Programme structure and duration

The Bachelor of Information Technology Honours is offered as a One-year degree programme. This qualification consists of a minimum of 125 credits

A learner who successfully completes the programme, will be awarded a bachelor's in Information Technology -Honours (Management Information Systems) NQF Level 8.

It is important to note that the Bachelor of Information Technology Honours Programme is structured in such a way that it provides entry into the NQF Level 9 Master's degree programme.

Modules	Level	Credits
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January to June Semester		
Web Science	8	16
Big Data: Systems, Programming and Management	8	16
Research Methods	8	16
July to November Semester		
Information Systems Governance	8	16
Business Continuity Management	8	16
Research Project (Mini-Thesis)	8	45

Modules and prerequisites

IMPORTANT: To continue with a module, the student must pass the modules that are listed as prerequisites.

Module	Prerequisite
Research Project (Mini-Thesis)	Research Methods

BACHELOR OF INFORMATION TECHNOLOGY HONOURS (NETWORKING AND SYSTEMS ADMINISTRATION) LEVEL 8

Aim of the Programme

Learners enrolling for the Bachelor of Information Technology (Honours) Networking & System Administration learn the theoretical concepts and practical applications of network communications, hardware and software involved in computer systems. The qualification will enable the learner to gain extensive knowledge and experience in designing, constructing, analysing, and securing networks.

The completion of this program qualifies graduates to manage computer systems and network infrastructures. Students who have earned honours degree may apply to a master's degree program in Information Technology with an emphasis in computer systems and networking, while others may choose to enter the workforce immediately.

Exit Level Outcomes

This qualification will help to

- Demonstrate the ability to document their work, write clearly and appropriately in an Information Technology context, respect user's data, including backup and security, and to think through the ethical consequences of Information Technology decisions.
- Demonstrate the ability to research technology problems, provide technological support, and to learn new technology tools.
- Develop the ability to model security problems and to write security proofs.

- Demonstrate expertise in configuring host and network level technical security controls to include host firewalls, user access controls, host logging, network filtering, intrusion detection and prevention and encryption at all levels;
- Describe the hardware, software and services that comprise an enterprise network and be able to articulate how these components integrate to form a network solution
- Build a multiple host and network architecture given business requirements and constraints; student will configure operating systems, network specific services, routing, switching, and remote access solutions

Entry requirements

Entry requirements to the Bachelor of Information Technology Honours (Networking & Systems Administration) Degree NQF Level 8 shall be a Bachelor of Information Technology (Networking & Systems Administration) Degree (NQF Level 7) or equivalent, obtained from any recognized institution.

Programme structure and duration

The Bachelor of Information Technology Honours (Networking and Systems Administration) is offered as a One-year degree programme. This qualification consists of a minimum of 120 credits

A learner, who successfully completes the programme, will be awarded a bachelor's in Information Technology -Honours (Networking and Systems Administration) NQF Level 8.

It is important to note that the Bachelor of Information Technology Honours Programme is structured in such a way that it provides entry into the NQF Level 9 Master's degree programme.

Modules	Level	Credits
January to June Semester		
Advanced Networking and Communications	8	18
Cybersecurity		18
Research Methods	8	16
July to November Semester		
Cryptography	8	18
Systems Administration	8	18
Research Project (Mini-Thesis)	8	32

Prerequisites

IMPORTANT: To continue with a module, the student must have passed the modules that are listed as prerequisites.

Module	Prerequisites
Research Project (Mini-Thesis)	Research Methods

BACHELOR OF INFORMATION TECHNOLOGY HONOURS (SOFTWARE DEVELOPMENT) LEVEL 8

Aim of the Programme

The purpose of the Bachelor of Information Technology Honours (Software Development) is to provide a career-focused professional qualification featuring the right balance of technical, interpersonal, project management and business skills needed as a software developer.

A learner will be knowledgeable and competent in the discourse and practice of the Information Technology (IT) discipline but will also have specialist knowledge of a particular sub-discipline of IT and will be subjected to a range of professional and personal development initiatives relevant to the IT industry.

Exit Level Outcomes

This qualification helps to

- Design an appropriate research approach for a given situation and conduct analysis of both qualitative and quantitative data at an advanced level.
- Apply techniques in Java to deal with a range of issues of program design using an object-oriented programming model; modelling data using programming language type systems; event and exception programming; providing a graphical user interface; thread programming; persistence; and distributed programming
- Write programs in a safe fashion, to avoid vulnerabilities that can be exploited by attackers and use security features provided by libraries, such as authentication and encryption, appropriately and effectively.
- Explore the use of modelling in software development document designs in the Unified Modelling Language, UML, with emphasis on class, sequence and state diagrams and the Object Constraint Language, OCL
- Use Software Architecture in the development process and management of systems.
- Conduct research, analyse data and develop defensible conclusions.

Entry requirements

Entry requirements to the Bachelor of Information Technology Honours (Software Development) Degree NQF Level 8 shall be a Bachelor of Information Technology (Software Development) Degree (NQF Level 7) or equivalent, obtained from any recognized institution.

Programme structure and duration

The Bachelor of Information Technology Honours (Software Development) is offered as a One-year degree programme. This qualification consists of a minimum of 120 credits

A learner, who successfully completes the programme, will be awarded a bachelor's in Information Technology -Honours(Software Development) NQF Level 8.

It is important to note that the Bachelor of Information Technology Honours Programme is structured in such a way that it provides entry into the NQF Level 9 Master's degree programme.

Modules	Level	Credits
January to June Semester		
Advanced Programming	8	18
Software Design and Modelling	8	18
Research Methods in Information Systems	8	16
Research Project (Mini-Thesis)(June intake)		
July to November Semester		
Secure Programming	8	18
Software Architecture, Process & Management	8	18
Research Project (Mini-Thesis)	8	32

Prerequisites

IMPORTANT: To continue with a module, the student must pass the modules that are listed as prerequisites.

Module: Software Development	Prerequisites
Research Project (Mini-Thesis)	Research Methods

MASTER OF SCIENCE IN COMPUTER SCIENCE – NQF LEVEL 9

Aim of the Programme

The Master of Science in Computer Science is a research-based qualification, which allows the student to conduct in-depth research in specific chosen area in Computer Science or Computing. The purpose of this qualification is to equip students with advanced specialist knowledge and skills in Computer Science, able to function as effective and critical researchers who can identify, investigate and answer relevant research questions and generate new knowledge in the chosen field of study, thus contributing towards the improved understanding of Computer Science.

Furthermore, the program's emphasis on developing critical and analytical skills will enable students to think critically and apply their knowledge in solving real-world problems. This programme will not only benefit the students but will also contribute to the development of Namibia's economy and society as a whole.

The programme will train students to carry out research in current and emerging fields within the Computer Science or Computing field. With the aim of expanding a student's

intellect by nurturing advanced knowledge in specialist technical subject areas, the focus of the program is to enable students to lead future developments be it in industry or in academia.

Candidates for the Master of Science in Computer Science qualification will be required to engage in independent learning under the guidance of a research supervisor.

Exit Level Outcomes

Holders of this qualification can:

- Demonstrate the ability to conduct independent research that shows potential to contribute to the discipline.
- Demonstrate in-depth knowledge as specified by the discipline or field of study.
- Formulate good research questions, hypothesis and aims
- Discuss and elaborate various research methodologies and analytical techniques to find solutions to the research questions, and understand the advantages and disadvantages of each
- Analyse, review and evaluate relevant Literature
- Examine appropriate qualitative and quantitative research methods applicable according to the research topic and the field of interest
- Analyse the findings and results in an appropriate form derived from the analysis of the qualitative and/or quantitative data
- Design and conduct a coherent, independent research in a self-directed manner
- Develop a sustainable argument in both verbal and written communication and defend the work.
- Effectively communicate the defined area of research within the discipline/field of study and the results of that research.

Entry requirements

Applicants who have obtained a relevant level 8 qualification or the equivalent thereof will be admitted to the Master of Science in Computer Science programme.

Programme structure and duration

The Master of Science in Computer Science programme should be completed in 2 to 4 years. This qualification consists of a minimum of 240 credits

The entire programme will be facilitated through independent learning, research and regular contact with the allocated supervisor. International Training College-Lingua will offer students the opportunity to attend seminars presented by experts and practitioners

giving them the chance to expand their knowledge and to meet others working in similar academic disciplines.

Students are expected to submit an outline of their research work and are required to submit a final research proposal as stipulated in the guidelines to the Research Committee for approval. Students whose proposals are not accepted are given an extension to resubmit the revised proposal as per the duration stipulated in the master's research guidelines document. Students are expected to submit a regular progress report to the department through the supervisor in the standard template provided. Students are expected to submit the final thesis for evaluation in the prescribed format of the institution and are expected to defend their thesis before the Research committee. Final marks will only be released after submission of the corrected thesis based on the feedback of the committee.

Upon successful completion of the Master of Science in Computer Science, successful candidates should be able to proceed to a PhD in Computer Science or Information Technology at Level 10 at any accredited institution.

Modules	Level	Credits
Advanced research methods	9	32
Research Dissertation	9	208

TEACHING AND LEARNING ARRANGEMENTS

Language

The language of teaching all the programmes is English. All assignments, tests and examinations should be submitted in English.

Study Material

- a. Prescribed books are indicated in the course outline which is available on the eLearning portal.
- b. Please consult your respective lecturer should your module not appear on the eLearning platform.
- c. Study guides and further information on additional study material and software are available on the eLearning platform
- d. All registered students have access to the college library

Modes of Learning

The Department delivers learning via a range of modes designed to suit different student groups' circumstances or lifestyles. Students can study full time, part time or on distance mode. All qualifications in the Department are available in all three modes.

Full Time Studies

Full time students spend most of their time during the week on their programme of study. The Department makes a provision of two hours a week for each subject running in each semester for full time students. Continuous assessment for full time students comprises of in class tests and assignments. Specific subjects may have additional forms of assessment.

Full time mode is suited for students who have no other engagements elsewhere and would want to concentrate on their studies only.

Part Time Studies

Part time students can only spend a few hours on their studies usually due to engagements elsewhere. Classes for part time students run only for the first week of the month in the evening during that week and on Saturday until 1300hrs. During that week, each subject runs for 2 hours.

This mode is designed to meet the needs of students wishing to obtain the qualification but are engaged elsewhere such as full-time workers.

Distance and Online Studies

Distance learning is for students who prefer to study on their own at home. At the beginning of the course, you receive self-paced, self-instructional learning materials via the eLearning portal.

Single subjects

Our single subject study is a flexible option that allows you to choose one or two subjects without committing to a full qualification. It is ideal if you are preparing for a career change, want to strengthen your academic record or want to pursue personal and professional interest. You can select from a wide range of subjects offered from our formal qualification programmes. If you are planning to do the full qualification at a later stage, the single subjects will be acknowledged, and you will get the necessary credits. Enrolling for single subjects allows a person to study according to his/her unique needs such as the availability of time and finances

Learning Material

WhatsApp

Once late registration is completed, all registered students will be added according to their field of study and level.

Email

A College email will be created for all registered students. Students are required to use the college email for all correspondence with the college

Zoom Classes

For online classes, the college makes use of the Zoom software. You can download the Zoom Desktop Client for Mac, Windows, Linux, and ChromeOS, as well as the Zoom Mobile App for iOS and Android from <https://www.zoom.us/download>. The following gadgets can all be used with Zoom (Smart Phones (Android, IOS), Tablets, Ipads, Laptops, MacBook).

E-learning Platform

All assignments and learning materials will be shared on the College's E-learning Platform. The platform is accessible to all registered students on www.collegelingua.net. For returning students, kindly use your old login credentials.

E-Learning Accounts will be created for all new students and log in details will be made available to each student. When one logs in for the first time, there is a step-by-step tutorial that pops up on the screen automatically, please follow through the steps so you can acquaint yourself with the platform. Members of staff will be ready to assist new students as they learn how to use the e-learning system.

For security reasons you are required to change the default password that you used when you logged in the first time. Passwords must never be shared with anyone.

Kindly note that all subject related content (Eg: course outline, notes, assignments, videos etc.) will be made available on E-learning platform and no such material will be printed and shared as hard copies.

Note: The e-learning Manual is available on the eLearning platform under downloads.

Assessments

- The formative assessment of the module is designed to test the acquisition and articulation of knowledge and critical understanding, and skills of application and interpretation within the business context.
- Please note that all modules will be assessed. You are expected to attempt all required assessments for each module for which you are registered, and to do so at the times scheduled unless authorised extensions, special arrangements for disability, or extenuating circumstances allow you to defer your assessment.
- Assignments allow you to develop your own arguments and conclusions related to set tasks as there are often many possible solutions to a particular problem.
- Assessment is largely based on the ability to demonstrate clearly which approach you have taken and why.
- The most appropriate method of assessment has been selected to meet the specified learning outcomes outlined in the module information pack.

Assessment methods used include:

- Formal essays and reports
- Practical observations and skill competence
- Individual and group presentations
- Seminar papers on nominated topics
- Log books diaries and portfolio of practical work
- Industry-based project.

Referencing

This is an important aspect of academic work and is very easy to understand. A key starting point in understanding referencing is to address the questions, what, why, when and how

What is referencing?

Referencing is a simple issue but one that many students avoid getting just right. Referencing is the process of ensuring that any sources used are appropriately acknowledged. It is about being fair. If the ideas presented are not those of the students, its sources and authors need to be highlighted.

Why reference?

Learning to be an effective student is also about learning to be an effective academic. In other words, it is important to understand the ways that effective academics carry out their work. Referencing is carried out by all academics in a specific way appropriate to their

discipline. Students' work becomes professional and demonstrates higher levels of academic attainment if methods and modes of reference are learnt. If referencing is not learnt and applied, students will be deemed to be incompetent academics at first glance, and this generally leads to a loss of substantial marks. Essentially the purpose of referencing is to ensure that presented work is substantiated with and supported by appropriate theories and evidence. When to reference? The need to reference occurs at either of two specific moments. If any ideas "that belong to an author" is being expressed, it must be identified as belonging to that author. If any words are written from the words of the author, then these must be clearly identified as not the students' but the author. There must be no doubt in the examiners mind as to when your words and ideas start and finish and where the words and ideas of others are included.

How to reference?

Referencing within assignments can take many different forms. The APA style of referencing is the style that must be adopted in your academic work unless it has been specified otherwise. The following are some of the more common approaches and techniques within the style. A common approach is to quote the work of other academic(s) or author(s) directly or explicitly. It is normal for the direct quotation to be placed in quotation marks, followed by the surname of the author(s), the year of the publication and the page number(s) where the quote may be found. Where the extract is longer than three lines of normal text, it is convention to have the quote as a separate paragraph indented from the left and right margins without quotation marks. An alternative is to refer to the work of others indirectly. In this case quotations marks are not used, and the page number is omitted.

EXAMINATIONS

(a) General Examination Procedures

- The release of the Examination Timetable will be announced.
- Students will have the choice to use the soft copy which is shared on the WhatsApp Groups or they may collect a hard copy at the campus.
- Students must make sure their accounts are up-to-date before the examination starts in order to be able to write the examination.
- On the day of the Examination, the student must present an identification document as well as the updated financial statement.

(b) Types of Examinations

- Semester Examination:
 - There are two Main Examinations per year; one at the end of each semester (June and November).
 - In order to write these examinations, the Examination Fees had to be paid before the examination starts and the student's financial status must be up-to-date.
 - The Fee Structures are available from the Finance Department (+264 81 688 3468); a student may request it to be sent via WhatsApp or e-mail.

- The End of the First Semester's Examination is planned for May - June while the End of the Second Semester's Examination will be in October – November.
- Supplementary/Second Opportunity:
 - Students whose final examination mark (in any subject) is between 45 and 49 are eligible to write the Supplementary Examination.
 - Students who could not write the First Opportunity Examination for any reason may write the Second Opportunity Examination. If their absence was because of an illness/death in the family/work related matters, the student must provide written proof and thus won't have to pay the prescribed fee.
 - For the relevant payment, please contact the Finance department for the latest fee
 - This Examination is written in January and July of each year. In January it will include the subjects of the November Examination of the previous year; in July it will include the subjects of the first semester of the current year.
 - Supplementary/ Second Opportunity examinations will be at the end of January and during July.
- Special Examination:
 - This Examination is written once per year, in February, to allow students to write off a subject which they still need to pass in order to graduate.
 - Any student whose subject mark is less than 45, may apply to write this examination.
 - The application form is available at the reception. A student may also request to receive the form via WhatsApp or e-mail. For the due date of this form, consult the Academic Calendar.
 - The Special Examination for this year will be written around the end of February.
 - For the relevant payment, please contact the Finance department for the latest fee.

(c) Assessments

- The Continuous Assessment and the Examination Mark are used in the ratio of 40 to 60 respectively in order to determine the Final Mark.
- Where a student fails to report for the Main Examination in any subject, the Continuous Assessment mark constitutes the Final Mark.
- In any subject where a student does not submit his/her Continuous Assessment tasks and do not write the Main Examination, a Final Mark of zero will be awarded.
- The Continuous Assessment includes the marks of three tests and two assignments. It is imperative to submit all so as to be assured of a good mark.

(d) Examination Related Information

- Examination dates and communication:
 - These dates are available in the Academic Calendar.
 - This Calendar is shared on the Facebook page of the College as well as on the different WhatsApp Groups.
 - Students may also collect a hard copy of this Calendar from the College.
 - Upon request via e-mail, it can also be sent to a student.

- Queries handling procedures:
 - Students report queries/make requests via e-mail, text messages, WhatsApp messages, phone calls or personal visits to the campus.
 - The query/request forms are then filed until they can be attended to.
 - The query/request will be investigated by the examination department.
 - When the query/request will be finalized, a new transcript/letter will be typed for the student.
 - The student will then be informed when to collect the duplicate/corrected transcript/letter.
 - A prescribed fee is payable for a duplicate transcript/qualification.

- Results publication:
 - The release date of the results (after each examination) is also available in the Academic Calendar.
 - This Calendar is shared on the Facebook page of the College as well as on the different WhatsApp Groups.
 - Students may also collect a hard copy of this Calendar from the College.
 - Upon request via e-mail, the Calendar can also be sent to a student.
 - Results are sent via e-mail and may also be collected personally.
 - Students whose study fees are not up-to-date, may not receive their results until such account is updated.

- Appeal:
 - A student who has failed a course may request for a re-mark from the Head of Examinations. A prescribed non- refundable fee must be paid before such remarking of the scripts for that affected course(s) may take place. Such an application for re-marking should not be later than two weeks after the release of the examination results. For the relevant payment, please contact the Finance department for the latest fee
 - For a script to be re-marked, a student shall have obtained an examination mark of at least 35% and a final mark of at least 44%. The marks obtained after the re-mark will be considered to be the final mark.
 - Remarking shall not be permitted for scripts already moderated, practical examinations or for a course of which all papers are marked entirely by computer

- Interpreting the results:
 - The Grading Scale > 0 - 44 = Fail

45 - 49 = Supplementary

50 -59 = Pass

60 - 69 = Credit

70 - 74 = Merit

75 - 100 = Distinction

ALTERNATIVE ENTRY CRITERIA

Recognition of Prior Learning:

The Bachelor of Education: Secondary level 7 makes provision for prior learning to be recognized if a candidate is able to demonstrate competence in the knowledge, skills, values and attitudes embedded in this qualification.

a) RPL for formal learning (Credit recognition):

Candidates may apply for credits or exemptions for subjects already passed at International Training College Lingua or at other recognized Institutions of Higher Learning.

International Training College-Lingua allows candidates with completed credits from recognized education institutions to apply for credit accumulation and transfer (CAT). In the case of complete qualifications, a maximum of 50% of the credits of a completed qualification may be transferred in. Credit transfers will only be considered if accompanied by full academic records.

Or

b) RPL for informal and non-formal learning:

Skills, knowledge and experience for competencies gained elsewhere, for example in the workplace are also evaluated in the RPL process as per Recognition for Prior Learning Policy of International Training College Lingua.

Or

Mature Age

Mature Age applicants aged 23 years with a grade 10 certificate with two years working experience or equivalent thereof or applicants with non-Namibian school-leaving qualifications or with previous tertiary experience will be considered individually by the Examination Committee headed by the Director of Academic Affairs