

# Curriculum Outline



**78965**

**Further Education and Training**

**Certificate:**

**Information Technology:**

**System Development Level 4**

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## Part 1

### Programme Overview

#### **Purpose of the qualification:**

The purpose of this qualification is to build a foundational entry into the field of Computer Sciences and Information Technology, specifically into the field of Systems Development, covering basic knowledge needed for further study in the field of Systems Development at Higher Education Levels.

The qualification can be acquired in the traditional way of formal study as well as in the workplace, through learnerships. Acquiring the qualification through learnerships has the potential of addressing the problems of the past, where newly qualified people getting into the industry struggled to get employment, because they were required to have practical experience.

The workplace experience can now be gained while acquiring the qualification through the various learnership schemes that are planning to use this qualification.

A qualifying learner at this level will be a well-rounded entry-level Systems Developer with a good fundamental knowledge of the Information Technology field, coupled with interpersonal and business skills, preparing for later specialisation in Systems Development fields.

The qualification is designed to:

- ☐ provide learners with an entry level for further study in Information Technology and related fields, as well as for initial employment in the computer industry.
- ☐ allow many of the listed unit standards to be used in Learnership Schemes in the Information Systems and Technology sector, as well as other sectors where Information Technology is a key requirement.
  
- ☐ provide a foundational qualification for people who are pursuing a career in the computer industry, or related fields. People with this qualification have an introductory level of understanding about computer

industry concepts and/or are able to work in areas of Information Technology with little technical complexity, for example entry-level computer programming, as junior project team member.

☐ allow the credits achieved in the National Certificates in Information Technology (Level 2 & 3) to be used as foundation (i.e. learning assumed to be in place) for the requirements of this qualification.

☐ have a flexible structure to allow for changing requirements in the computer industry, and to allow providers to create learning programmes with a predominantly Information Technology component but tailored to meet local, national or international needs.

**Rationale of the qualification:**

This qualification has been formulated such that it reflects the workplace-based needs of the Information Technology Industry as expressed by its stakeholders.

The input has been used to ensure that the qualification provides the learner with accessibility to be employed within the IT Industry.

The introduction of national qualifications in Information Technology based on unit standards will allow learners to qualify for a national qualification by accumulating the required credits via short learning programmes or workplace practical experience or both.

It also allows learners to achieve the qualifications through recognition of prior learning and/or learnerships schemes, overcoming past barriers in the methods of achieving formal qualifications.

Academically this National Certificate is intended to be an entry-level qualification in the area of Systems Development. The qualification builds on knowledge areas covered in National Certificates and short learning programmes at NQF level 2 to 4, and it facilitates entry into the Systems Development field.

It aims to enhance readiness for further study in Information Technology and related fields at the Further Education level, provides a pathway into further study at Higher Education level, as well as providing for initial employment in the computer industry.

One of the most important needs for this qualification is to provide for the recognition of prior learning. There are currently no unit standards based registered qualifications for Software Development.

However, programs are written, installed, maintained and upgraded on a daily basis in a number of different industry sectors. People with workplace experience in the areas covered by this qualification will now be allowed to request assessment and get recognition for prior learning.

The qualification provides the learner with the flexibility to articulate in the Telecommunications, Information Technology and Electronic Industries and other industries where IT is a key component, like the Financial Services Industry.

### **Learning assumed to be in place**

It is assumed that the learner is competent in skills gained at the further education and training band, with exposure to computing as an advantage, but not a requirement.

A learning assumption of this qualification is foundational skills in English and Mathematics at NQF level 3. Further learning assumed is the ability to use a personal computer competently, and competence in the unit standard, "Participate in formal meetings", NQF Level 2 (ID 14911).

The assumed learning can be acquired in the traditional way of formal study as well as in the workplace. Acquiring the competencies in a workplace (either via formal learnerships or normal on-the-job training) has the potential of addressing the problems of the past, where formal qualifications were only obtainable by way of formal study.

### **Recognition of prior learning (RPL):**

Many of the competencies used in the Information Technology profession have traditionally been acquired through short courses and on-the-job training, which did not provide formal recognition of the knowledge and skills acquired. These competencies are still today viewed by most industries as invaluable, with the sad reality that there is no formal recognition.

The nature of the Information Technology field means that competence is developed experientially, therefore the assessment processes should recognise experience versus theoretical knowledge.

Recognition of prior learning will now allow people with these valuable competencies to be assessed and recognised formally.

Any learner wishing to be assessed may arrange to do so without having to attend further education or training. For recognition of prior learning the learner will be required to submit a portfolio of evidence of relevant experience, in a prescribed format, to be assessed for formal recognition.

The assessor and learner will decide jointly on the most appropriate assessment procedures, subject to the assessment rules of the relevant ETQA. Learning assumed to be in place must be assessed by the assessor prior to any assessment relating to this qualification.

### **Qualification rules**

The Qualification consists of a Fundamental, a Core and an Elective Component. To be awarded the Qualification learners are required to obtain a minimum of 165 credits as detailed below.

#### **Fundamental Component**

The Fundamental Component consists of Unit Standards in:

- ☑ Mathematical Literacy at Level 4 to the value of 16 credits
- ☑ Communication at Level 4 in a First South African Language to the value of 20 credits
- ☑ Communication in a Second South African Language at Level 3 to the value of 20 credits

It is compulsory therefore for learners to do Communication in two different South African languages, one at Level 4 and the other at Level 3

All Unit Standards in the Fundamental Component are compulsory. The Fundamental Component consists of Unit Standards to the value of 56 credits all of which are compulsory.

#### **Core Component**

The Core Component consists of Unit Standards to the value of 63 credits all of which are compulsory.

#### **Elective Component**

For the achievement of the minimum 165 credits required, learners are required to do at least 46 credits in the elective component.

### **Exit Level Outcomes**

A learner will be able to:

1. Communicate effectively with fellow IT staff & users of information systems.
2. Demonstrate an understanding of different types of computer systems and the use of computer technology in business.
3. Demonstrate an understanding of problem-solving techniques, and how to apply them in a technical environment.
4. Demonstrate an understanding of Computer Technology Principles.
5. Demonstrate an understanding of Computer Programming Principles.
6. Work effectively as a team member within a development project environment.
7. Carry out, under supervision, a small size task to demonstrate an understanding of the knowledge, techniques & skills needed to understand the fundamentals of Computer Programming.

### **Associated Assessment Criteria**

In particular, assessors should check that the learner is able to demonstrate an ability to consider a range of options and make decisions, meeting the following criteria:

1. Effective Communication is demonstrated with fellow IT staff & with users of information systems, in the form of written and verbal communication.
2. An understanding of different types of computer systems and the use of computer technology in business is demonstrated, being able to describe the different computers systems and associated hardware and network configurations and investigate (sometimes under supervision) its use within organisations.
3. The ability to identify different problem solving techniques, and when and how to apply them, is demonstrated.

4. A fundamental understanding of Computer Technology Principles are demonstrated by explaining computer architecture, networking and operating systems concepts, as well as different data storage methods.

5. An understanding of Computer Programming Principles is demonstrated by producing program segments explaining various programming principles.

6. Working effectively as a team member within a development project environment, taking part in team activities and understanding different roles within different support teams.

7. Knowledge of the techniques & skills needed to understand fundamental programming principles are demonstrated by creating a computer program that combines the assessed outcomes in fundamental programming.

**Integrated Assessment:**

Development of the competencies may be through a combination of formal and informal learning, self-learning, training programmes and work-based application.

The practical, applied, foundational and reflective competencies demonstrated for the group of assessment criteria in this qualification, must prove that the whole competence is more than the sum of the parts of the competencies. Providers should conduct diagnostic and formative assessment. Formative, continuous and diagnostic assessments should also take place in the work place, if applicable. The learner should also be able to assess him or herself and determine readiness for a summative assessment against this qualification. During integrated assessments the assessor should make use of formative and summative assessment methods and should assess combinations of practical, applied, foundational and reflective competencies. Input to completing the Integrated

Assessment typically make use of combinations of the following assessment methods:

1. Time-constrained written examinations
2. Coursework Evaluations
3. Continuous Evaluation

#### 4. Practical Evaluation.

##### **Articulation Options**

This qualification has been developed for professional practice across the industry and is intended to ensure professionalism within junior positions in the industry ensuring the upliftment of the standards in general. It is applicable to small and large businesses alike, and builds on other certificates from a range of sub-sectors and will provide articulation with a range of qualifications.

Upon successful completion of the qualification, the learner will be a Systems Developer able to carry out competently the exit level outcomes in a business environment. The purpose of this qualification is stated as being a foundational qualification at the Further Education band, allowing for further study in Information Technology and related fields at Higher Education entry level (National Certificate). This will allow the qualified learner to progress to further qualifications either in Systems Development or other IT domains, or in other related industries where IT is a key component.

In particular, this qualification has been designed to allow entry into either the National Certificates in Systems Support at NQF level 5 or the National Certificate in Systems Development at NQF level 5, but can also be used as foundational to other IT qualifications that will be defined in future.

## Part 2 Programme Alignment

### Notional Hour Matrix

The delivery strategy below indicates the relationship between theory, practical, workplace and FSA component

ELO	Component	US ID	Title of unit standards		L	C	Module Cr
<b>1</b>	<b>Module 1 – Communicate effectively with IT staff and users</b>						
	Fundamental	12154	Apply comprehension skills to engage oral texts in a business environment		4	5	<b>20</b>
	Fundamental	119462	Engage in sustained oral/signed communication and evaluate spoken/signed texts		4	5	
	Fundamental	119469	Read/view, analyse and respond to a variety of texts		4	5	
Fundamental	119459	Write/present/sign for a wide range of contexts		4	5		
<b>Date:</b>	Contact / Facilitation Days		8	DAYS	Workplace Application Days 14 DAYS		
	Theory		60	Hours			
	Practical		112	Hours			
	Assessments		28	Hours			

ELO	Component	US ID	Title of unit standards		L	C	Mod/Cr
<b>1</b>	<b>Module 1.1 – Communicate effectively with IT staff and users (Second Language Component)</b>						
	Fundamental	119472	Accommodate audience and context needs in oral/signed communication		3	5	<b>20</b>
	Fundamental	119458	Analyse and respond to a variety of literary texts		3	5	
	Fundamental	119457	Interpret and use information from texts		3	5	
Fundamental	119465	Write/present/sign texts for a range of communicative contexts		3	5		
<b>Date:</b>	Contact / Facilitation Days		8	DAYS	Workplace Application Days 14 DAYS		
	Theory		60	Hours			
	Practical		112	Hours			
	Assessments		28	Hours			

ELO	Component	US ID	Title of unit standards		L	C	Module Cr
<b>2</b>	<b>Module 2 – Different types of computer systems and the use of computer technology in business</b>						
	Core	14944	Explain how data is stored on computers		4	7	<b>27</b>
	Core	14913	Explain the principles of computer networks		3	5	
	Core	14924	Demonstrate an understanding of information systems analysis		4	3	
	Elective	14912	Investigate the use of computer technology in an organisation		3	6	
	Elective	14921	Describe the types of computer systems and associated hardware configurations		4	6	
<b>Date:</b>	Contact / Facilitation Days	10	DAYS	Workplace Application Days			
	Theory	81	Hours	19 DAYS			
	Practical	151	Hours				
	Assessments	38	Hours				

ELO	Component	US ID	Title of unit standards		L	C	Mod/Cr
<b>3</b>	<b>Module 3 – Problem solving techniques, and how to apply them in a technical environment</b>						
	Fundamental	7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues		4	6	<b>26</b>
	Fundamental	9015	Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems		4	6	
	Fundamental	9016	Represent analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts		4	4	
	Core	14927	Apply problem solving strategies		4	4	
	Elective	114636	Demonstrate an understanding of preventative maintenance, environmental and safety issues in a computer environment		3	6	
<b>Date:</b>	Contact / Facilitation Days	10	DAYS	Workplace Application Days			
	Theory	78	Hours	18 DAYS			
	Practical	146	Hours				
	Assessments	36	Hours				

ELO	Component	US ID	Title of unit standards			L	C	Mod/Cr
4	<b>Module 4 – Computer Technology Principles</b>							
	Core	14917	Explain computer architecture concepts			4	7	22
	Core	14933	Demonstrate an understanding of creating multimedia/web-based computer applications with scripting			4	6	
	Core	14930	Demonstrate an understanding of the principles of developing software for the internet			4	3	
	Elective	14908	Demonstrate an understanding of testing IT systems against given specifications			4	6	
<b>Date:</b>	Contact / Facilitation Days		8	DAYS	Workplace Application Days 15 DAYS			
	Theory		66	Hours				
	Practical		123	Hours				
	Assessments		31	Hours				

ELO	Component	US ID	Title of unit standards			L	C	Mod/Cr
5, 7	<b>Module 5 – Computer Programming Principles and Fundamentals</b>							
	Core	14918	Describe the principles of Computer Programming			3	5	28
	Core	14910	Apply the principles of Computer Programming			4	8	
	Core	14909	Describe differences between programming in Object Orientated, Procedural Languages			4	4	
	Core	14915	Design a computer program according to given specifications			4	8	
	Elective	14926	Describe information systems departments in business organisations			4	3	
<b>Date:</b>	Contact / Facilitation Days		11	DAYS	Workplace Application Days 20 DAYS			
	Theory		84	Hours				
	Practical		157	Hours				
	Assessments		39	Hours				

ELO	Component	US ID	Title of unit standards			L	C	Mod/Cr
6	<b>Module 6 – Work effectively as a team member within a development project environment</b>							
	Core	14920	Participate in groups and/or teams to recommend solutions to problems			4	3	23
	Elective	118028	Supervise customer service standards			4	8	
	Elective	120379	Work as a project team member			4	8	
	Elective	252210	Handle a range of customer complaints			4	4	
<b>Date:</b>	Contact / Facilitation Days		9	DAYS	Workplace Application Days 16 DAYS			
	Theory		69	Hours				
	Practical		129	Hours				
	Assessments		32	Hours				

<b>Part 7</b>	<b>FINAL SUMMATIVE ASSESSMENT</b>
<b>Part 8</b>	<b>FINALISING PORTFOLIOS OF EVIDENCE</b>

## **Part 3**

### **Assessment Strategy**

#### **1. Instructions & Memorandum of Assessment**

##### 1.1 Classroom: Formative Learner Workbook Questionnaires / Activities

These activities will be completed during the classroom or facilitation session and can be found in the learning material. Activities may include questioning, case studies, group activities and assignments.

##### 1.2 Classroom: Formative Assessment Instrument

These knowledge-based questions will be based on the outcomes and Unit Standards addressed in this module. This component will consist of both direct and multi-choice questions. You are required answer all the questions provided as this will also form part of your portfolio of evidence.

#### Assessment Section 2:

##### 2.1 Summative Knowledge Assessment

You are required to complete the knowledge assessment by answering all the questions provided in filled giving examples where asked.

##### 2.2 Workplace Assignments

This section will consist of Workplace assignments and projects which you will need to complete which will form part of your Portfolio of Evidence.

##### 2.3 Summative Practical / Observational Assessment

The practical / observational assessment will be completed by the assessor based on your performance against the outcomes of this module to determine your competence.

## 2.4 Personal Narrative

The personal narrative requires you to reflect on the reflexive competence requirements needed to be deemed competent in this module. This section will include critical cross field outcomes.

## 2.5 Witness Testimony

The witness testimony consists of a testimonial based on your performance as observed / reviewed by your Supervisor / Manager in the workplace.

## 2. Assessment appeals procedures

1. A learner has the right to appeal under the following circumstances

- If the laid down assessment procedures were not followed during assessments
- If not all evidence available was taken into account during the assessment
- The assessor was not a subject matter expert or did not have a subject matter expert during the assessment process
- The assessor did not assess according to the performance criteria and range statement stipulated in the unit standard
- Not all the range items were available for assessment

2. A learner bringing an appeal against a decision of the assessment will lodge such an appeal with the assessor and the internal moderator within 2 days of the assessment feedback session.

3. A learner bringing an appeal should complete the "Learner's Notice of Assessment Appeal" form before the Appeal Hearing. The form should be handed to the internal moderator or a representative of the SETA.

4. Should the internal moderator re-affirm the assessor's decision, the learner may appeal to the external verifier within 2 days after the initial moderator's feedback session. The external verifier's decision will be final. Should the external verifier re-affirm the assessors' decision, the cost for re-evaluation will be upon the learner. Should the verifier's decision differ from the assessor's decision, the cost for re-evaluation will be borne by the assessor.

### 3. Pre-assessment meeting checklist

Item	Points to be covered	Tick
1	Welcome the candidate <b>and put them at ease</b>	
2	<b>Explain the purpose of the meeting</b> (why you are there and how long the meeting will take)	
3	<b>Explain the</b> <ul style="list-style-type: none"> <li>▪ NQF</li> <li>▪ Credits</li> <li>▪ Certification process</li> <li>▪ Learning pathways</li> </ul>	
4	<b>Explain</b> <ul style="list-style-type: none"> <li>▪ Who is involved in the assessment and their role (learners, coach, assessors, managers, moderators)</li> <li>▪ Principles of assessment (fairness, confidentiality, validity, sufficiency)</li> </ul>	
5	<b>Explain the assessment process?</b> <ul style="list-style-type: none"> <li>▪ Check learner readiness for assessment (logbook / self assessment)</li> <li>▪ Assessment contract to be completed</li> <li>▪ Preparation of learner (this meeting)</li> <li>▪ The assessment (observation and knowledge questionnaire)</li> <li>▪ Judgement of the evidence</li> <li>▪ Outcome of assessment (competent, not yet competent, need further evidence)</li> </ul>	
6	<b>Give Learner copies of the following documentation and explain each document</b> <ul style="list-style-type: none"> <li>▪ The Assessment Guide which includes <ul style="list-style-type: none"> <li>○ The relevant unit standard (s)</li> <li>○ Assessment contract</li> <li>○ Assessment plan</li> <li>○ Observation checklist</li> <li>○ Knowledge checklist</li> </ul> </li> </ul>	
7	<b>Discuss the assessment plan</b> (complete the assessment plan document) <ul style="list-style-type: none"> <li>▪ Allow the learner to participate in the decisions made</li> <li>▪ Agree on dates, time and venue for the assessment and feedback</li> <li>▪ Agree on evidence the learner can submit</li> <li>▪ Agree and explain the assessment methods</li> <li>▪ Identify and discuss special assessment needs of the candidate</li> <li>▪ Identify and eliminate unfair barriers (language, disability etc)</li> <li>▪ Discuss and agree on witness requirements</li> </ul>	
8	<b>Tell the candidate his/her rights and responsibilities, the assessment procedures and policies</b> <ul style="list-style-type: none"> <li>▪ How many times they may be assessed</li> <li>▪ Appeals process / procedure</li> <li>▪ Reassessment policy</li> </ul>	
9	<b>Ensure the assessment environment is appropriate</b> or make special arrangements	
10	Discuss moderation	
11	Allow the learner opportunity to clarify any items discussed	

#### 4. Assessment evaluation

EVALUATION OF ASSESSMENT					
Learner Name		Assessor name			
Unit Stds		Date			
Review dimension	Learner Yes No		Assessor Yes No		Action
Were the principles / criteria for good assessment achieved?					
Did the assessment relate to the registered standard?					
Was the assessment practical?					
Was it time efficient and cost-effective?					
The assessment did not interfere with my normal responsibilities?					
Was the assessment instrument fair, clear, and understandable?					
The assessment judgment was made against set requirements?					
Was the venue and equipment functional?					
Were special needs identified and the assessment plan adjusted?					
Was feedback and communication constructive?					
Was an opportunity to appeal given?					
Was all evidence recorded?					
Were the review / evaluation process apparent and user friendly?					

Learner Declaration of Understanding					
I am aware of the moderation process and understand that the moderator could declare the assessment decision invalid					
Learner Name & Sign	Date	Assessor Name & Sign	Date	Moderator Name & Sign	Date

## Part 4

# Design Strategy

### 1 - Learning aims and objectives

#### Clarity on focus on outcomes and design down:

- Outcomes that focused on what learners should do at the end of a series of significant, meaningful and coherent learning experiences were analysed and identified.
- Outcomes are expressed as a set of broad, comprehensive, assessable and observable indicators of student achievement at each stage of the learning programmes.
- Learning programmes include not only specific outcomes (observable outcomes), but also critical crossfield (adaptive ability such as problem solving).
- Learning programmes are designed back from the outcomes.

### 2 - Theoretical content

#### Content relevance:

- Content was designed to include knowledge and skills that are relevant and connected to real-life situations.
- Content and activities present authentic tasks.
- Learning programmes were designed to include theoretical and practical learning components and, wherever possible and appropriate, experiential learning.
- Delivery methodology allows for flexibility, a variety of methods, environments and resources.

### 3 - Teaching and learning

#### Learner centered and expanded opportunities:

- Learners are expected to take responsibility for their own learning in order to reach the required standard or outcome.
- The emphasis is on whether the learner reaches the required standard or outcome and not on procedure.
- Learning is value adding: it builds contextually on the learner's existing frames of reference.
- Learners given multiple opportunities to demonstrate if the outcome has been reached.

**High participation and co-operative learning:**

- Learning activities are inductive and allow learners to construct knowledge for themselves.
- Learning activities allow learners to engage in group/team/pair work, debate, role-play, research, experiment to discover for themselves.
- Learners are encouraged to form own insights and create own solutions based on successful attainment of predetermined performance outcomes.
- Learners are motivated by constant feedback and affirmation of their worth by means of assessment.

**Integration**

- Learning is designed to integrate a wider social and economic understanding and awareness.
- Learning methodology allows for clear integration between theory, practical / workplace components.
- Learning programmes are designed to focus on learning that integrates critical thinking, reasoning, reflection and action.

**4 - Assessment****Principles of assessment**

Assessments meet the following criteria for SAQA's principles of assessment:

- Assessment methods are; appropriate, fair, manageable, integrated into work or learning
- Assessment evidence is; valid, current, authentic, sufficient
- Assessment process is systematic, open and consistent

**Clarity of focus on outcomes**

- Assessments are focused on what the learner has achieved in relation to learning outcomes.
- Learner achievements are measured solely on whether a learner has reached the required outcomes or not.
- Assessment criteria are clearly defined and are derived from the unit standard.

### **High expectations**

- Assessment tasks are challenging, not simply routine.
- Evidence collected is governed by quality criteria (criterion-referenced).
- Assessments discriminate between low and high levels of achievement.
- Advancement is based on demonstrated achievement.

### **Expanded opportunity**

- Assessments lead toward achievement of qualifications or part qualifications.
- Learners advance through the system when they are able to demonstrate attainment of the desired outcomes.
- Learners' prior knowledge is taken into consideration when organising learning experiences
- Learners are supported to attain these desired outcomes

### **Continuous integrated assessment**

- Formative (during learning, informal and not for credits) and summative (after learning, formal and for credits) assessment are used.
- Learners are assessed on an on-going basis – Assessment is towards life-long learning.
- A variety of assessment techniques are used, for example simulations, portfolios, self-assessment, workplace assessment.
- Assessment is broad, covering a number of assessment standards, which include skills, knowledge, understanding, attitudes and values.
- Assessment is integrative and focuses on the application of competence.

## **5 – Evaluation**

### **Facilitator**

Learners will be required to evaluate the performance of the Facilitator on completion of the learning programme.

Facilitators will be evaluated against the following criteria:

- The learning outcomes were clearly stated.
- Key learning points were illustrated and clarified.
- The learning outcomes were met.
- Key learning points were summarised.
- The principles of adult learning were applied

## **Programme**

Learners will be required to evaluate the value of the learning experience against the following criteria:

- The extent to which the learning programme achieved the learning outcomes.
- The overall reaction of the learner to the programme.
- The relevance of the learning material content.
- The sequence, pace and timing of the lessons

## **Logistics**

Learners will also be required to evaluate the value of:

- The physical classroom environment.
- The seating arrangements.
- Meals and refreshments.
- Room Layout.
- Accommodation (if applicable)

## **Design Methodology**

The design of the materials strictly follows and adheres to the rules and requirements of the Qualification and the Unit Standards as contained within. The Unit Standards are clustered to promote the logical sequence and achievement of the outcomes in relation to the Exit Level Outcomes of the Qualification. The programme is structured through strategic grouping / clustering of Unit Standards into Modules as aligned to the Exit Level Outcomes of the Qualification.

This alignment is demonstrated as follows:

### **EXIT Level Outcomes Alignment:**

1. Work with others to undertake or support the project management activities.
2. Assist the project manager and/or project team by contributing and participating in planning, execution and control activities.
3. Provide support to the administration of a project.

For electives:

4. Supervise a project team of a small project to deliver project objectives

ELO	Comp	US ID	Title of unit standards	L	C	Module Cr
<b>1</b>	<b>Module 1 – Communicate effectively with IT staff and users</b>					
	Fund	12154	Apply comprehension skills to engage oral texts in business	4	5	<b>20</b>
	Fund	119462	Engage in sustained oral/signed communication and evaluate spoken/signed texts	4	5	
	Fund	119469	Read/view, analyse and respond to a variety of texts	4	5	
Fund	119459	Write/present/sign for a wide range of contexts	4	5		
<b>Date:</b>	Contact / Facilitation Days		8	DAYS	Workplace Application Days 14 DAYS	
	Theory		60	Hours		
	Practical		112	Hours		
	Assessments		28	Hours		

ELO	Comp	US ID	Title of unit standards	L	C	Mod/Cr
<b>1</b>	<b>Module 1.1 – Communicate effectively with IT staff and users (Second Language Component)</b>					
	Fund	119472	Accommodate audience and context needs in oral/signed communication	3	5	<b>20</b>
	Fund	119458	Analyse and respond to a variety of literary texts	3	5	
	Fund	119457	Interpret and use information from texts	3	5	
Fund	119465	Write/present/sign texts for a range of communicative contexts	3	5		
<b>Date:</b>	Contact / Facilitation Days		8	DAYS	Workplace Application Days 14 DAYS	
	Theory		60	Hours		
	Practical		112	Hours		
	Assessments		28	Hours		

ELO	Comp	US ID	Title of unit standards	L	C	Module Cr
<b>2</b>	<b>Module 2 – Different types of computer systems and the use of computer technology in business</b>					
	Core	14944	Explain how data is stored on computers	4	7	<b>27</b>
	Core	14913	Explain the principles of computer networks	3	5	
	Core	14924	Demonstrate an understanding of information systems analysis	4	3	
	Elective	14912	Investigate the use of computer technology in an organisation	3	6	
	Elective	14921	Describe the types of computer systems and associated hardware configurations	4	6	
<b>Date:</b>	Contact / Facilitation Days		10	DAYS	Workplace Application Days 19 DAYS	
	Theory		81	Hours		
	Practical		151	Hours		
	Assessments		38	Hours		

ELO	Comp	US ID	Title of unit standards	L	C	Mod/Cr
<b>3</b>	<b>Module 3 – Problem solving techniques, and how to apply them in a technical environment</b>					
	Fund	7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	4	6	<b>26</b>
	Fund	9015	Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems	4	6	
	Fund	9016	Represent analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	4	4	
	Core	14927	Apply problem solving strategies	4	4	
	Elective	114636	Demonstrate an understanding of preventative maintenance, environmental and safety issues in a computer environment	3	6	
<b>Date:</b>	Contact / Facilitation Days		10	DAYS	Workplace Application Days 18 DAYS	
	Theory		78	Hours		
	Practical		146	Hours		
	Assessments		36	Hours		

ELO	Comp	US ID	Title of unit standards	L	C	Mod/Cr
4	<b>Module 4 – Computer Technology Principles</b>					
	Core	14917	Explain computer architecture concepts	4	7	22
	Core	14933	Demonstrate an understanding of creating multimedia/web-based computer applications with scripting	4	6	
	Core	14930	Demonstrate an understanding of the principles of developing software for the internet	4	3	
Elective	14908	Demonstrate an understanding of testing IT systems against given specifications	4	6		
<b>Date:</b>	Contact / Facilitation Days		8	DAYS	Workplace Application Days 15 DAYS	
	Theory		66	Hours		
	Practical		123	Hours		
	Assessments		31	Hours		

ELO	Comp	US ID	Title of unit standards	L	C	Mod/Cr
5, 7	<b>Module 5 – Computer Programming Principles and Fundamentals</b>					
	Core	14918	Describe the principles of Computer Programming	3	5	28
	Core	14910	Apply the principles of Computer Programming	4	8	
	Core	14909	Describe differences between programming in Object Orientated, Procedural Languages	4	4	
	Core	14915	Design a computer program according to given specifications	4	8	
Elective	14926	Describe information systems departments in business organisations	4	3		
<b>Date:</b>	Contact / Facilitation Days		11	DAYS	Workplace Application Days 20 DAYS	
	Theory		84	Hours		
	Practical		157	Hours		
	Assessments		39	Hours		

ELO	Comp	US ID	Title of unit standards	L	C	Mod/Cr
6	<b>Module 6 – Work effectively as a team member within a development project environment</b>					
	Core	14920	Participate in groups and/or teams to recommend solutions to problems	4	3	23
	Elective	118028	Supervise customer service standards	4	8	
	Elective	120379	Work as a project team member	4	8	
	Elective	252210	Handle a range of customer complaints	4	4	
<b>Date:</b>	Contact / Facilitation Days		9	DAYS	Workplace Application Days 16 DAYS	
	Theory		69	Hours		
	Practical		129	Hours		
	Assessments		32	Hours		

## Part 5

### Delivery Strategy

#### 1 - Materials

##### Participant's materials

- Participant's guides – This is a comprehensively structured guide for the learner and includes all theory and activities.
- Workplace / Practical Guide – This is a comprehensively structured workplace guide for the learner to use during practical/workplace/assessment

##### Facilitator's materials:

- Facilitator Guide – This is the guide for the facilitator on how to manage the learning
- Activities and Handouts – These are the activities that the facilitator will implement to help the learners achieve the lesson outcomes.

##### Assessor's guide:

- Assessment Strategy – This is the approach and rules which govern company assessments and can also be found in the Assessment Policy documents
- Assessment Plan – This is the plan on what outcomes are being assessed, using relevant criteria and the evidence that the candidate must produce to prove competence
- Assessment Instruments – These are the assessment instruments used to collect evidence from the candidate to display competence in an outcome.

#### 2 – Notional hours of learning

70% practical (80% workplace implementation, 20% assessment) and 30 % theory (workshop).	
Theory / contact time	<ul style="list-style-type: none"> <li>• 498 hours required for formal learning.</li> </ul>
Workplace	<ul style="list-style-type: none"> <li>• 930 hours required for workplace practice and transferring the learning. Formative assessment activities are included in the workplace learning time.</li> </ul>
Assessment	<ul style="list-style-type: none"> <li>• 232 hours required for assessment preparation, evidence collection and submission.</li> </ul>
<b>TOTAL NOTIONAL HOURS</b>	<ul style="list-style-type: none"> <li>• 1660 HOURS = 166 UNIT STANDARD CREDITS</li> </ul>

Module	Credits	Notional Hours	Days	Contact Session 30% (Hours)		Experiential Learning 70% (Hours)		FSA Days (8 hours per day)	Total Notional Hours
				Theory	Practical	WPE	Ass Prep		
1	20	200	25	20	40	98	42	1	200
2	20	200	25	20	40	98	42	1	200
3	27	270	34	27	54	132	57	1	270
4	26	260	33	26	52	127	55	1	260
5	22	220	28	22	44	108	46	1	220
6	28	280	35	28	56	137	59	1	280
7	23	230	29	23	46	113	48	1	230
Totals	166	1660	208	166	332	813	349	66	1660

### 3 – Training media aids and equipment

#### Classroom set-up and space requirements

- U-shape room layout is preferable in order to facilitate learner interaction.
- Breakaway areas would be helpful for group work.

#### Training media and equipment

- Flipchart, flipchart markers, pens, laptop with windows media player
- Proxima or overhead projector and screen

#### Training aids

- Flash cards
- Learner guides
- Handouts

#### Learner support Strategy

### 1 - Learner roles and responsibilities

The learner is expected to actively participate by:

- Taking part in and completing group activities, practical assignments and discussions.
- Planning and preparing for the training.
- Asking for support when needed.
- Giving meaningful input into and challenging the status quo.
- Finding new and better ways of doing things
- Developing sound and effective practices given the input from the facilitator and the rest of the group
- Complying with assessment requirements

## 2 – Provider roles and responsibilities

### FACILITATOR/ECF/ASSESSOR/COACH/MENTOR:

The facilitator's role is that of; facilitation of learning, facilitation of evidence collection for assessment, preparation of candidates for assessment and assessment of learners. All of these roles require degrees of coaching and mentoring.

The relevant coaches/mentors will provide guidance and support before, during and after the learning intervention.

### **Before:**

- The facilitator will prepare the learner for the learning by ensuring that the purpose and pre-requisites of the course have been understood and met.

### **During:**

- The facilitator will provide all materials and resources necessary for learning to take place.
- The facilitator will guide and support the learner during learning - ensure that learners understand and can practice the necessary skills.
- The facilitator will ensure that learning outcomes are achieved according to the learning and unit standard outcomes
- The facilitator will identify learners who are experiencing difficulties – content or otherwise – and take appropriate action to assist the learner in joining the main stream of learning.
- The facilitator will conduct formative assessments to determine learner level of competence and take corrective action based on the results of formative assessment.

### **After:**

- The facilitator/workplace coach will assist the learner in implementing skills learnt in the workplace in the form of structured on-the-job activities, which are outlined in the Workplace Guide.
- The facilitator/workplace coach will conduct formative assessment for workplace activities to determine the learner's level of competence and take corrective action based on the results of formative assessment.
- The Evidence Collection Facilitator will assist the candidate in identifying and preparing for evidence collection for assessment.
- The Evidence Collection Facilitator will judge the evidence produced by the candidate and advise whether or not it is ready for assessment submission.
- The Assessor will plan and prepare the candidate for assessment as per the Assessment Guide.

- The Assessor will conduct the assessment, provide developmental feedback to the candidate and make an assessment judgment.
- The Assessor will guide and support the candidate for re-assessment purposes and communicate the company's appeals policy.

This Qualification will be delivered to successfully registered learners enrolled into the Qualification programme and in accordance with the identified target market. The training programme will be delivered on a face-to-face basis in direct contact with the learner for both training and assessment purposes.

The delivery of the Qualification is done in accordance with the Modular structure of the programme. This Qualification is structured to be completed over a period of 12 months as a 1 year programme. The detailed roll out / delivery strategy on the following pages in this document outlines the delivery of the Qualification programme in relation the contact time, experiential learning and final assessment applicable to the programme.

The included delivery / roll-out plan below illustrates the effective delivery of the Qualification programme over this period and in accordance with the programme's modular design. In summary the delivery of the Qualification Programme as per Modular Structure will be as follows:

ELO	Comp	US ID	Title of unit standards		L	C	Module Cr
1	<b>Module 1 – Communicate effectively with IT staff and users</b>						
	Fund	12154	Apply comprehension skills to engage oral texts in business		4	5	20
	Fund	119462	Engage in sustained oral/signed communication and evaluate spoken/signed texts		4	5	
	Fund	119469	Read/view, analyse and respond to a variety of texts		4	5	
	Fund	119459	Write/present/sign for a wide range of contexts		4	5	
<b>Date:</b>	Contact / Facilitation Days		8	DAYS	Workplace Application Days 14 DAYS		
	Theory		60	Hours			
	Practical		112	Hours			
	Assessments		28	Hours			

ELO	Comp	US ID	Title of unit standards		L	C	Mod/Cr
1	<b>Module 1.1 – Communicate effectively with IT staff and users (Second Language Component)</b>						
	Fund	119472	Accommodate audience and context needs in oral/signed communication		3	5	20
	Fund	119458	Analyse and respond to a variety of literary texts		3	5	
	Fund	119457	Interpret and use information from texts		3	5	
	Fund	119465	Write/present/sign texts for a range of communicative contexts		3	5	
<b>Date:</b>	Contact / Facilitation Days		8	DAYS	Workplace Application Days 14 DAYS		
	Theory		60	Hours			
	Practical		112	Hours			
	Assessments		28	Hours			

ELO	Comp	US ID	Title of unit standards	L	C	Module Cr
2	<b>Module 2 – Different types of computer systems and use of computer technology in business</b>					
	Core	14944	Explain how data is stored on computers	4	7	27
	Core	14913	Explain the principles of computer networks	3	5	
	Core	14924	Understanding of information systems analysis	4	3	
	Elective	14912	Investigate use of computer technology in an organisation	3	6	
	Elective	14921	Describe the types of computer systems and associated hardware configurations	4	6	
<b>Date:</b>	Contact / Facilitation Days	10	DAYS	Workplace Application Days 19 DAYS		
	Theory	81	Hours			
	Practical	151	Hours			
	Assessments	38	Hours			

ELO	Comp	US ID	Title of unit standards	L	C	Mod/Cr
3	<b>Module 3 – Problem solving techniques, and how to apply them in a technical environment</b>					
	Fund	7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	4	6	26
	Fund	9015	Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems	4	6	
	Fund	9016	Represent analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	4	4	
	Core	14927	Apply problem solving strategies	4	4	
	Elective	114636	Demonstrate an understanding of preventative maintenance, environmental and safety issues in a computer environment	3	6	
<b>Date:</b>	Contact / Facilitation Days	10	DAYS	Workplace Application Days 18 DAYS		
	Theory	78	Hours			
	Practical	146	Hours			
	Assessments	36	Hours			

ELO	Comp	US ID	Title of unit standards	L	C	Mod/Cr
4	<b>Module 4 – Computer Technology Principles</b>					
	Core	14917	Explain computer architecture concepts	4	7	22
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	Practical	157	Hours			
	Assessments	39	Hours			

ELO	Comp	US ID	Title of unit standards		L	C	Mod/Cr
6	<b>Module 6 – Work effectively as a team member within a development project environment</b>						
	Core	14920	Participate in groups and/or teams to recommend solutions to problems		4	3	<b>23</b>
	Elective	118028	Supervise customer service standards		4	8	
	Elective	120379	Work as a project team member		4	8	
Elective	252210	Handle a range of customer complaints		4	4		
<b>Date:</b>	Contact / Facilitation Days		9	DAYS	Workplace Application Days 16 DAYS		
	Theory		69	Hours			
	Practical		129	Hours			
	Assessments		32	Hours			

## Part 6

### Learner support Strategy

#### 1 - Learner roles and responsibilities

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- Planning and preparing for the training.
- Asking for support when needed.
- Giving meaningful input into and challenging the status quo.
- Finding new and better ways of doing things
- Developing sound and effective practices given the input from the facilitator and the rest of the group
- Complying with assessment requirements

#### 2 – Provider roles and responsibilities

FACILITATOR/ECF/ASSESSOR/COACH/MENTOR:

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- The Assessor will guide and support the candidate for re-assessment purposes and communicate the company's appeals policy.

## **Part 7**

# **Evaluation Strategy**

### **1 – Evaluation purpose**

To judge the value and effectiveness of the learning programme in terms of learner reactions, learning and change in behaviour

### **2 – Evaluation instruments**

#### **Assessment Instruments**

Summative assessment conducted to judge the extent to which learners were able to competently perform the activities on – the – job

#### **Moderation strategy**

It is clearly indicated in the Moderation Policy and the Moderation Guide of the college

#### **Post Course Learner Evaluations**

Evaluation checklists completed by the learner at the end of the workshop to measure the level of learner satisfaction.

## Evaluation Strategy

Learner End of Course Evaluation sheet.

### End of Course Evaluation

Date: \_\_\_\_\_ Venue: \_\_\_\_\_

Please give honest feedback to assist us in future planning.

Question	Happy	Undecided	Unhappy
Were the objectives of the workshop clearly explained to you?			
Was there enough theory?			
Were there enough practical activities?			
Was the language used clear and accessible?			
Was the facilitator well prepared?			
How do you feel about the training methods			
Do you think the training will help you to become an entrepreneur?			
Do you think the training will make any difference to your life / attitude?			
How do you feel about the facilitator/s?			
Did you learn anything from the other participants during the course?			
Did the course meet your expectations?			
<b>REMARKS (Any changes?)</b>			
Name (Optional)			

### Post Course Facilitator Evaluations

Evaluation checklists completed by the facilitator at the end of the workshop to indicate the extent to which the programme achieved the learning outcomes and criteria of the programme strategy

### Facilitators'/Trainers Report

Course Name	
Client	
Venue	
Facilitator	
Training Dates	
No of registered learners	
No of learners present	
U/S Covered	

NB Kindly attach the following documents to this report:

1. Signed learner attendance register for the period of training being reported  
(Register must also be signed by the facilitator)
2. Assignment hand in register

**Summary of work covered from day 1 to day 5****Day 1**


**Day 2**


**Day 3**


**Day 4**


**Day 5**


Use a separate sheet if necessary

### Learners

Briefly outline how learners are coping with the programme. Comment on learner's attendance, participation and understanding of material.

#### Attendance


#### Participation


#### Understanding of material


#### Issues raised by learners that need attention of Training Provider


### Overview of training provision process

No	Criteria / Question	Poor	Below Standard	Sufficient	Above Standard	Excellent
		1	2	3	4	5
1	Was communication regarding attendance of the programme efficient and effective?					
2	Was the Programme Coordinator helpful and efficient?					
3	Was the training equipment and material used effective and prepared?					
4	Was the training venue conducive to learning (set-up for convenience of learners, comfortable in terms of temperature, etc.)?					
<b>Additional Comments on Logistics and Support</b>						

No	Criteria / Question	Poor	Below Standard	Sufficient	Above Standard	Excellent
		1	2	3	4	5
<b>B Facilitator Evaluation</b>						
1	Learners were prepared and motivated to attend the programme					
2	Learners participated well and provided constructive input					
3	The programme allows for the use of a variety of methods, exercises, activities and discussions					
4	Learners were punctual and kept to the schedule					
<b>Additional Comments on Facilitation</b>						

No	Criteria / Question	Poor	Below Standard	Sufficient	Above Standard	Excellent
		1	2	3	4	5
<b>C</b>	<b>Learning Programme Evaluation</b>					
1	The learning outcomes of the programme are relevant and suitable.					
2	The content of the programme was relevant and suitable for the target group.					
3	The length of the facilitation was suitable for the programme.					
4	The learning material assisted in learning new knowledge and skills to apply in a practical manner.					
5	The Learning Material was free from spelling and grammar errors					
6	Hand-outs and Exercises are clear, concise and relevant to the outcomes and content.					
7	Learning material is generally of a high standard, and user friendly					
<b>Spelling/ Grammatical Errors</b>						
<b>Trainer/Learner File, etc.</b>		<b>Section/Page</b>		<b>What?</b>		
<b>Additional Comments on Learning Material</b>						

Signature of Facilitator: \_\_\_\_\_

Date: \_\_\_\_\_