#### No. 1204

15 October 2004



#### SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

#### **Computer Sciences and Information Systems**

Registered by **NSB 10**, **Physical**, **Mathematical**, **Computer and Life Sciences** publishes the following qualification and unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the qualification and unit standards. The qualification and unit standards can be accessed via the SAQA web-site at <u>www.saqa.org.za</u>. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield Forum West, 1067 Arcadia Street, Hatfield.

Comment on the qualification and unit standards should reach SAQA at the address **below** and no later than 13 November 2004. All correspondence should be marked Standards Setting – SGB Computer Sciences and Information Systems and addressed to



JOE SAMUELS DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



#### QUALIFICATION:

National Certificate: Information Technology: Use of IT in Business

SAQA QUAL ID	QUALIFICAT	QUALIFICATION TITLE				
49077	National Cert	ficate: Information Techr	ology: Use of IT in Business			
SGB NAME	SGB Comput	er Sciences and Informat	tion Systems			
ABET BAND		PROVIDER NAME				
Undefined	Indefined					
QUALIFICATION CODE QUAL TYPE SUBFIELD						
PHY-3-National Certificate N		National Certificate	Information Technology and Computer Sciences			
MINIMUM CREDITS NQF		NQF LEVEL	QUALIFICATION CLASS			
135 Lev		Level 3	Regular-Unit Stds Based			
SAQA DECISIO	N NUMBER	REGISTRATION START	DATE REGISTRATION END DATE			

#### PURPOSE OF THE QUALIFICATION

The purpose of the qualification is to build the knowledge and skills required by learners in End User Computing. It is intended to empower learners to acquire knowledge, skills, attitudes and values required to operate confidently in the End User Computing environment in the South African community and to respond to the challenges of the economic environment.

The qualification addresses the need in the workplace for nationally recognised qualifications, based on unit standards, which will allow learners with workplace experience in End User Computing to obtain recognition for prior learning.

The qualification provides a framework for learners to develop skills that will enable them to become competent in End User Computing. It introduces theoretical concepts of End User Computing and requires the application thereof, to develop a range of skills that will enable learners to be better-informed workers in their chosen industry. It provides a balanced learning experience that lays the foundation for access to-further education, life long learning, higher education and to productive employment.

A qualifying learner will be able to:

> Competently apply the knowledge, techniques & skills of End User Computing applications in the workplace.

> Understand the impact and use Information Communication & Technology (ICT) in an organisation and society.

Improve Communication by combining communication skills with End User Computing skills.
Improve the application of mathematical literacy in the workplace, by better utilising of End User Computing Applications

The National Certificate in IT: End User Computing at NQF Level 3, is intended for learners already employed or new learners entering the workplace, requiring End User Computing skills. The unit standards of this qualification may be added to other industry qualifications to provide an End User Computing focus with comparison, choice, interpretation and the application of knowledge.

#### Rationale of the qualification

The National Certificate in IT: End User Computing - NQF Level 3, is designed to meet the needs of learners who require end user computing skills in all sectors of the economy, as End User Computing is an essential skill in any business today. The qualification is designed to accommodate both learners in formal education and learners already employed. It aims to develop informed and skilled learners that can apply the acquired skills in any industry and should contribute towards improved productivity and efficiency in the workplace.

This qualification is based on unit standards, to 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.

The qualification at this level is foundational and generic, allowing maximum mobility between qualifications. Apart from the workplace need the qualification will address, it is also designed as an entry-level qualification into most further education and training fields, because of the wide application of End User Computing in any environment. It will allow articulation into further qualifications in End User Computing or other IT qualifications, as well as entry into any other Further Education and Training where End User Computing is applied.

#### **RECOGNIZE PREVIOUS LEARNING?**

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#### LEARNING ASSUMED TO BE IN PLACE

It is assumed that the learner is competent in skills gained at the further education and training band up to NQF level 2. Further learning assumed is the ability to use a personal computer competently at NQF level 1.

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 has traditionally been acquired through short courses and on-the-job training, which did not provide formal recognition (at a national level) 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 national 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 any formal 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**

#### Rules regarding NQF levels of credits

The qualification consists of a minimum of 135 credits and has been designed in accordance with the SAQA rules of combination

Rules regarding Fundamental, Core and Electives

1. All fundamental outcomes are compulsory for this qualification. This is in excess of the 36 credits that are mandatory according to the SAQA FET Policy. The fundamental unit standard titles that are compulsory are listed in the qualification matrix.

2. All core outcomes are compulsory (62 credits)

Rules regarding Electives

1. A minimum of 20 elective credits needs to be completed out of one of the elective specialisation fields listed in the table below

2. A learner may specialise in more than one elective stream, as long as the rule listed in the previous point has been adhered to.

3. The qualification description will list the fields of specialisation that have been completed (according to the rules of the previous two points) on the qualification certificate.

4. Additional standards from any other SAQA field or sub-field may be added to the listed electives.

#### EXIT LEVEL OUTCOMES

Communicate effectively with fellow staff and users of information systems.

- 2. Demonstrate knowledge and understanding of HIV/AIDS in the workplace.
- 3. Use basic mathematics for financial aspects of personal life and in areas of business.

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4. Demonstrate an understanding of the use of Information Communications & Technology (ICT) in an organisation & the impact it has on societies.

5. Demonstrate an understanding of applying end user computing application skills in a business environment.

6. Manage time and the work process in a business environment.

7. Co-ordinate, plan and prepare meetings and meeting communications.

8. Demonstrate an understanding of fundamental knowledge of IT related to Personal Computers (PCs), networking and IT environments in business.

9. Demonstrate an understanding of the knowledge and skills needed in a personal assistant or receptionist environment in business.

10. Demonstrate an understanding of the knowledge and skills needed in a general office administration environment in business.

11. Demonstrate an understanding of the knowledge and skills needed in an administration role on a project team.

#### ASSOCIATED ASSESSMENT CRITERIA

#### 1.

Effective Communication is demonstrated with fellow staff and with users of end user computing technology, in the form of written and verbal communication.

#### 2.

Knowledge and understanding of HIV/AIDS in the workplace is demonstrated by covering the specific outcomes of the related unit standard specified.

#### 3.

Demonstrate a basic knowledge of mathematics in order to perform the tasks required by this qualification.

#### 4.

An understanding of impact of ICT and its use in an organisation is demonstrated by explaining its use and impact related to business and societies.

5.

The ability to apply end user computing skills in a business environment is demonstrated by skilfully using the following types of applications in a business environment:

- > Word processing
- > Presentation
- > Spreadsheets
- > Databases
- > Web Browsers and the Internet

#### 6.

Demonstrate an ability to manage time within his or her working environment.

#### 7.

Work effectively within a team, coordinating meetings and communications.

#### 8.

This is demonstrated by being able to cover the specific outcomes of the unit standards selected in the specialisation stream that covers this area

#### 9.

This is demonstrated by being able to cover the specific outcomes of the unit standards selected in the specialisation stream that covers this area.

#### 10.

This is demonstrated by being able to cover the specific outcomes of the unit standards selected in the specialisation stream that covers this area.

#### 11.

This is demonstrated by being able to cover the specific outcomes of the unit standards selected in the specialisation stream that covers this area.

#### Integrated Assessment.

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

The practical, applied, foundational and reflexive 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 reflexive competencies. Input to completing the Integrated Assessment typically makes use of combinations of the following assessment methods:

1. Time-constrained written examinations

2. Coursework Evaluations

3. Continuous Evaluation

4. Practical Evaluation

5. Evaluation of Portfolios of Evidence

#### INTERNATIONAL COMPARABILITY

The concept of qualifications based on unit standards is not unique to South Africa. This qualification and unit standards have been evaluated against, and are comparable to core knowledge and specialised knowledge elements found in the following International Qualifications Frameworks:

> New Zealand NQF,

> Australian NQF,

> British NVQs.

Furthermore input to the development of the qualification has been benchmarked against the following International sources, where the outcomes and assessment criteria, degree of difficulty and notional learning time has been compared:

> Edexcel gualification in Using IT, at UK NQF level 2 (refer NVQ code: Q1052641),

> Edexcel qualification in Operating IT Systems, at UK NQF level 2 (refer NVQ code: Q1052638).

> NCC Education's International Certificate in Computer Studies for IT Professionals,

> International certifications like Microsoft MOUS, IC3 and ICDL,

> It appears that the above certification are also used in many African and SADC countries as benchmark for End User Computing skills in a business environment. Countries referred to includes, but is not limited to: Mauritius, Tanzania, Kenya, Botswana, Zimbabwe and Zambia

This qualification combines the NQF principles and requirements, with Internationally accepted Knowledge Areas required in End User Computing, to address the specific needs of the South African environment.

#### ARTICULATION OPTIONS

Upon successful completion of the qualification, the learner will understand the role of End User Computing and be able to competently carry out the exit level outcomes of the qualification, in a business environment. The purpose of this qualification is stated as being a foundational qualification at the Further Education and Training band, allowing for further study in Information Technology and related fields at Higher Education levels. This will allow the qualified learner to progress to further qualifications either in Information and Communications Technology, or in other related industries where IT is a key component.

#### **MODERATION OPTIONS**

> Anyone assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor or moderator with the relevant ETQA.

> Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider with the relevant ETQA.

> Assessment and moderation of assessment will be overseen by the relevant ETQA according to the

ETQAs policies and guidelines for assessment and moderation.

> Moderation must include both internal and external moderation of assessments at exit points of the qualification, unless ETQA policies specify otherwise.

> Moderation should also encompass achievement of the competence described both in individual unit

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standards as well as the integrated competence described in the qualification.

> Anyone wishing to be assessed against this Qualification may apply to be assessed by any assessment agency, assessor or provider institution that is accredited for assessment by the relevant ETQA.

To ensure that national standards are maintained, the final assessment should be conducted on the following basis, which will be under the control of the relevant ETQA's (ISETT SETA or other relevant ETQA's):

> National assessment of written papers and/or practical assignments needs to be undertaken, by the relevant ETQA. This must include the necessary assessment tools (eg. marking schemes) to ensure consistent assessment. This function can be performed by the ETQA itself or a nominated body or bodies.
> Assessment can be institutional or workplace based and must be done by a registered assessor.
> External moderation will be undertaken as required, to ensure that the quality of NQF standards are maintained nationally.

#### CRITERIA FOR THE REGISTRATION OF ASSESSORS

The criteria to register as an assessor includes the following:

> Assessors should be registered as assessors with the relevant ETQA, in accordance with the policies and procedures defined by the ETQA.

> Have a relevant academic qualification or equivalent recognition, at a level higher that the qualification being assessed

> All registered assessors must have met the requirements of the generic assessor standard, and should be certificated by the ETDP SETA or by the relevant ETQA in agreement with the ETDP SETA in this regard.

#### NOTES

Knowledge Areas covered by the qualification

This qualification addresses the following knowledge areas being developed for the IT qualifications framework, inter alia:

> Competence in a variety of end user computing skills, with limited supervision and direction of others.

> Time Management in the workplace

> Planning and preparing meeting communications, control of office supplies

> Working as an administrator on a project team

> Application of a range of IT end user skills and knowledge to meet user needs, within designated responsibilities.

> Competence in dealing directly with customer staff

> Foundational knowledge of IT, as basis for further study in IT.

Qualification Naming and Specialisation Description

The Information Technology sub-field has been broken into various domains, of which "use of Information Technology" (End user computing) is one. Qualification names will be linked to these domains, with specialisation descriptions attached to the qualification certification document being produced. The reason for this is firstly to reduce the number of qualifications needed to be registered to a manageable level, and secondly to have the qualification linked to the typical structure of the Information Technology industry. Finally we want to have the qualification certification document to reflect fields of specialisation, for unit standards that has been achieved within listed fields of specialisation. These specialisation fields are defined as part of the elective unit standards for the qualification. This will allow flexibility in future to add new specialisation fields without having to redefine the whole qualification. This is very important to the IT industry, which is a very dynamic, and fast changing industry.

The naming of this qualification is as follows:

National Certificate in Information Technology: Use of IT in Business - (NQF Level 3),

Specialising in one or more of the following fields:

- > IT Fundamentals
- > Use of IT for Personal Assistants / Receptionists
- > Use of IT for Office Administrators
- > Use of IT for Project Administrators

> (and any new field not specified yet, allowing for new specialisations in this area)

A minimum of 20 credits from any one specialisation field is needed in order to be recognised as a specialisation field. Depending on the credits achieved, more than one specialisation field might be printed on the qualification certification documentation.

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#### UNIT STANDARDS

(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

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	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	116936 Use a Graphical User Interface (GUI)-based database application to work with simple databases	Level 1	3	Draft - Prep for P Comment
Core	116934 Use a Graphical User Interface (GUI)-based presentation application to produce a presentation for a specified purpose	Level 2	6	Draft - Prep for P Comment
Core	116935 Enhance, edit and organise electronic messages using a Graphical User Interface (GUI)- based messaging application	Level 2	2	Draft - Prep for P Comment
Core	116938 Use a Graphical User Interface (GUI)-based word processor to format documents	Level 2	4	Draft - Prep for P Comment
Core	116939 Describe the application and impact of Information and Communication Technologies (ICT) on societies and demonstrate an understanding of its security aspects an relevant legislation	Level 2	5	Draft - Prep for P Comment
Core	116940 Use a Graphical User Interface (GUI)-based spreadsheet application to solve a given problem	Level 2	6	Draft - Prep for P Comment
Core	14912 Investigate the use of computer technology in an organisation	Level 3	6	Registered
Core	114636 Demonstrate an understanding of preventative maintenance, environmental and safety issues in a computer environment	Level 3	6	Registered
Core	116930 Use a Graphical User Interface (GUI)-based presentation application to enhance presentation appearance	Level 3	3	Draft - Prep for P Comment
Core	116941 Use a Graphical User Interface (GUI)-based database application to solve a given problem	Level 3	6	Draft - Prep for P Comment
Core	116942 Use a GUI-based word processor to enhance document appearance and to create merged documents	Level 3	4	Draft - Prep for P Comment
Core	116943 Using a Graphical User Interface (GUI)-based spreadsheet application, enhance the functionality and apply graph /charts to a spreadsheet	Level 3	3	Draft - Prep for P Comment
Core	114076 Use computer technology to research a computer topic	Level 4	3	Registered
Core	115359 Demonstrate an understanding of the handling of error in a computer programming environment	Level 4	2	Recommended
Core	115391 Demonstrate an understanding of the principles of the internet and the world- wide-web	Level 4	3	Recommended
Elective	7177 Attend to customer enquiries face-to-face and on the telephone in a banking environment	Level 3	4	Reregistered
Elective	7785 Function in a business environment	Level 3	4	Reregistered
Elective	7790 Process incoming and outgoing telephone calls	Level 3	3	Reregistered
Elective	7860 Introduce new staff to the workplace	Level 3	1	Reregistered
Elective	8000 Applying basic business principles	Level 3	9	Reregistered
Elective	13928 Monitor and control reception area	Level 3	4	Registered
Elective	13931 Monitor and control the maintenance of office equipment	Level 3	4	Registered
Elective	13934 Plan and prepare meeting communications	Level 3	4	Registered
Elective	13937 Monitor and control office supplies	Level 3	2	Registered
Elective	14913 Explain the principles of computer networks	Level 3	5	Registered
Elective	14918 Describe the principles of Computer Programming	Level 3	5	Registered
Elective	14932 Describe Synchronous/ Asynchronous Communication with computers	Level 3	6	Registered
Elective	14947 Describe data communications	Level 3	4	Registered
Elective	7836 Monitor customer satisfaction	Level 4	3	Registered
Elective	10022 Comply with organisational ethics	Level 4	4	Registered
Elective	10135 Work as a project team member	Level 4	8	Registered
Elective	10139 Implement project administration processes according to requirements	Level 4	5	Registered
Elective	10140 Apply a range of project management tools	Level 4	8	Registered
Elective	10388 Interpret basic financial statements	Level 4	3	Registered
Elective	14917 Explain computer architecture concents	Level 4		Registered
Elective	14921 Describe the types of computer systems and associated hardware configurations			Registered
Flective	14924 Demonstrate an understanding of information sustains analysis	Level 4	2	Registered
Flective	14926 Describe information systems denortments in husiness amonications			Registered
Elective		Level 4	J	Pagistared
Elective	110021 Achieve personal effectiveness in business enviroment	Level 4	6	Registered

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Fundamental	7455 Identify and work with simple forms of complex numbers	Levei 3	1	Reregistered
Fundamental	7456 Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	Level 3	2	Registered
Fundamental	8968 Accommodate audience and context needs in oral communication	Level 3	5	Registered
Fundamental	8969 Interpret and use information from texts	Level 3	5	Registered
Fundamental	8970 Write texts for a range of communicative contexts	Level 3	5	Registered
Fundamental	8973 Use language and communication in occupational learning programmes	Level 3	5	Registered
Fundamental	9010 Demonstrate an understanding of the use of different number bases and measurement units and an awareness of error in the context of relevant calculations	Level 3	2	Registered
Fundamental	9012 Investigate life and work related problems using data and probabilities	Level 3	5	Registered
Fundamentai	9533 Use communication skills to handle and resolve conflict in the workplace	Level 3	3	Registered
Fundamental	11241 Perform Basic Business Calculations	Level 3	6	Registered
Fundamental	13915 Demonstrate knowledge and understanding of HIV/AIDS in a workplace, and its effects on a business sub-sector, own organisation and a specific workplace	Level 3	4	Registered
Fundamental	13918 Manage time and the work process in a business environment	Level 3	4	Registered
Fundamental	110023 Present information in report format	Level 4	6	Registered

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UNIT STANDARD:

1

#### Operate a personal computer system

SAQA US ID	UNIT STANDARD TITLE					
116932	Operate a personal computer system					
SGB NAME ABET BA				PROVIDER NAME		
SGB Computer Sciences and Information Systems			Undefined			
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION			
Physical, Mathematical, Computer and Life Sciences			Information	Technology and Com	puter Sciences	
UNIT STANDARD CODE UNIT STAN		DARD TYPE	NQF LEVEL	CREDITS		
PHY-ITC-0-SGB CS&IT Regular			Level 1	7		

## **Specific Outcomes:**

## SPECIFIC OUTCOME 1

Start up and shut down a personal computer system using standard and non standard methods.

#### SPECIFIC OUTCOME 2

Change the configuration of a personal computer.

# SPECIFIC OUTCOME 3

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Use personal computer operating system functions.

#### SPECIFIC OUTCOME 4

Use operating system utilities.

## SPECIFIC OUTCOME 5

Set up and manage a printer.

## SPECIFIC OUTCOME 6

Operate a personal computer printer.

## SPECIFIC OUTCOME 7

Operate personal computer peripheral equipment.

#### SPECIFIC OUTCOME 8

Replace consumables and maintain personal computer peripheral equipment.



## UNIT STANDARD:

2

# Understand the concepts of Information and Communication Technology (ICT) and the use of its components in a healthy and safe manner

SAQA US ID	UNIT STANDARD TITLE						
116944	Understand the concepts of Information and Communication Technology (ICT) and the use of its components in a healthy and safe manner						
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Computer Sciences and Information Systems			Undefined				
FIELD DESCH	RIPTION		SUBFIELD DESCRIPTION				
Physical, Mathematical, Computer and Life Sciences		ter and Life	Information	Technology and Comp	outer Sciences		
UNIT STANDARD CODE UNIT STAN		ARD TYPE	NQF LEVEL	CREDITS			
PHY-ITC-0-SC	B CS&IT	Regular		Level 1	5		

## Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the components of Information and Communication Technologies.

## SPECIFIC OUTCOME 2

Describe the hardware components of a personal computer.

## SPECIFIC OUTCOME 3

Describe software for personal computers.

## SPECIFIC OUTCOME 4

Understand information networks in relation to ICT.

## SPECIFIC OUTCOME 5

Explain the common applications of the Internet.

## SPECIFIC OUTCOME 6

Describe ergonomic principles for computer workstations.

## SPECIFIC OUTCOME 7

Understand health and safety when working with computers.

## SPECIFIC OUTCOME 8

Use a computer workstation taking ergonomic principles and health and safety issues into account.



## UNIT STANDARD:

3

#### Use Graphical User Interface (GUI) and text based operating systems

SAQA US ID	UNIT STANDARD TITLE					
116947	Use Graphical User Interface (GUI) and text based operating systems					
SGB NAME			ABET BAND	PROVIDER NAME		
SGB Compute	r Sciences and Info	ormation	Undefined			
Systems						
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION			
Physical, Math	ematical, Compute	r and Life	Information	Information Technology and Computer Sciences		
Sciences						
UNIT STANDARD CODE UNIT STANDA			ARD TYPE	NQF LEVEL	CREDITS	
PHY-ITC-0-SGB CS&IT Regular			Level 1	5		

## **Specific Outcomes:**

#### SPECIFIC OUTCOME 1

Understand the terms of a Graphical User Interface (GUI)-based operating system.

#### SPECIFIC OUTCOME 2

Work with a Graphical User Interface (GUI)-based operating system.

## SPECIFIC OUTCOME 3

Identify the storage devices on a computer.

#### SPECIFIC OUTCOME 4

Understand the concepts of files on a computer.

## SPECIFIC OUTCOME 5

Locate files in Graphical User Interface (GUI)-based operating systems.

#### SPECIFIC OUTCOME 6

Locate files in Text Interface-based operating systems.

## SPECIFIC OUTCOME 7

Work with computer files.

## SPECIFIC OUTCOME 8

Protect computer data.



## UNIT STANDARD:

4

#### Use a Graphical User Interface (GUI)-based database application to work with simple databases

SAQA US ID	UNIT STANDARD TITLE					
116936	Use a Graphical User Interface (GUI)-based database application to work with simple databases					
SGB NAME			ABET BAND	PROVIDER NAME		
SGB Computer Sciences and Information Systems			Undefined			
FIELD DESCR	IPTION		SUBFIELD DESCRIPTION			
Physical, Mathematical, Computer and Life Sciences			Information	Technology and Compu	ter Sciences	
UNIT STANDARD CODE UNIT STANDA		ARD TYPE	NQF LEVEL	CREDITS		
PHY-ITC-0-SG	C-0-SGB CS&IT Regular			Level 1	3	

## Specific Outcomes:

SPECIFIC OUTCOME 1

Understand the principles of databases.

## SPECIFIC OUTCOME 2

Create, open and save simple databases.

#### SPECIFIC OUTCOME 3

Produce and edit a database from given specifications.

#### SPECIFIC OUTCOME 4

Modify the design of a database table.

#### SPECIFIC OUTCOME 5

Create and use an index to locate and sort records.

## SPECIFIC OUTCOME 6

Create a data entry form for a database table.

## **SPECIFIC OUTCOME** 7 Print from a database.



## UNIT STANDARD:

5

#### Use a Graphical User Interface (GUI)-based presentation application to create and edit slide presentations

SAQA US ID	UNIT STANDARD TITLE					
116933	Use a Graphical User Interface (GUI)-based presentation application to create and edit slide presentations					
SGB NAME			ABET BAND	PROVIDER NAME		
SGB Computer Sciences and Information Systems			Undefined			
FIELD DESCR	PIPTION		SUBFIELD DESCRIPTION			
Physical, Mathematical, Computer and Life			Information	Technology and Comp	outer Sciences	
UNIT STANDA	RD CODE	UNIT STANDA	ARD TYPE	NOFIEVEL	CREDITS	
PHY-ITC-0-SG	IY-ITC-0-SGB CS&IT Regular			Level 1	3	

## **Specific Outcomes:**

#### SPECIFIC OUTCOME 1

Understand the principles of presentations.

#### SPECIFIC OUTCOME 2

Create a new slide presentation.

#### SPECIFIC OUTCOME 3

Produce a slide presentation from given text.

#### SPECIFIC OUTCOME 4

Format a slide presentation.

## SPECIFIC OUTCOME 5

Edit a slide presentation.

## SPECIFIC OUTCOME 6

Check spelling in a slide presentation.

## SPECIFIC OUTCOME 7

Print a presentation.



## UNIT STANDARD:

6

## Use a Graphical User Interface (GUI)-based spreadsheet application to create and edit spreadsheets

SAQA US ID	UNIT STANDARD TITLE					
116937	Use a Graphical User Interface (GUI)-based spreadsheet application to create and edit spreadsheets					
SGB NAME			ABET BAND	PROVIDER NAME		
SGB Computer Sciences and Information Systems			Undefined			
FIELD DESCR	IPTION		SUBFIELD DESCRIPTION			
Physical, Mathematical, Computer and Life Sciences		r and Life	Information	Technology and Compute	er Sciences	
UNIT STANDARD CODE UNIT STANDA		RD TYPE	NQF LEVEL	CREDITS		
PHY-ITC-0-SGB CS&IT Regular			Level 1	4		

## Specific Outcomes:

## SPECIFIC OUTCOME 1

Understand the principles of spreadsheets.

#### SPECIFIC OUTCOME 2

Create, open and save spreadsheets.

#### SPECIFIC OUTCOME 3

Produce a spreadsheet from a given specification.

#### SPECIFIC OUTCOME 4

Edit a spreadsheet.

## SPECIFIC OUTCOME 5

Format a spreadsheet.

## SPECIFIC OUTCOME 6

Check spelling in a spreadsheet.

## SPECIFIC OUTCOME 7

Print a spreadsheet.



### UNIT STANDARD:

7

#### Use a Graphical User Interface (GUI)-based web-browser to search the Internet

SAQA US ID	UNIT STANDARD TITLE						
116931	Use a Graphical U	Use a Graphical User Interface (GUI)-based web-browser to search the Internet					
SGB NAME ABET			ABET BAND	PROVIDER NAME			
SGB Computer Sciences and Information Systems			Undefined				
FIELD DESCR	IPTION		SUBFIELD DESCRIPTION				
Physical, Mathematical, Computer and Life Sciences			Information Technology and Computer Sciences				
UNIT STANDARD CODE UNIT STANDA		RD TYPE	NQF LEVEL	CREDITS			
PHY-ITC-0-SGB CS&IT Regular			Level 1	3			

## Specific Outcomes:

## SPECIFIC OUTCOME 1

Understand the concepts and terms of the Internet.

## SPECIFIC OUTCOME 2

Explain legal, ethical and organisational issues in relation to Internet use.

## SPECIFIC OUTCOME 3

Use a Graphical User Interface (GUI)-based browser to display a given Web Page.

## SPECIFIC OUTCOME 4

Adjust settings to customise the view and preferences of the browser application.

## SPECIFIC OUTCOME 5

Navigate on the Internet.

## SPECIFIC OUTCOME 6

Use a Search Engine to locate given information specifications.

# SPECIFIC OUTCOME 7

Obtain information from a Web site.

## SPECIFIC OUTCOME 8

Print a Web Page.



UNIT STANDARD:

8

#### Use a Graphical User Interface (GUI)-based wordprocessor to create and edit documents

SAQA US ID	UNIT STANDARD TITLE						
116946	Use a Graphical User Interface (GUI)-based wordprocessor to create and edit documents						
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Computer	Sciences and Info	rmation	Undefined				
Systems							
FIELD DESCR	IPTION		SUBFIELD	SUBFIELD DESCRIPTION			
Physical, Math	ematical, Compute	r and Life	Information	Information Technology and Computer Sciences			
Sciences							
UNIT STANDARD CODE UNIT STANDA		ARD TYPE	NQF LEVEL	CREDITS			
PHY-ITC-0-SG	B CS&IT	Regular		Level 1	3		

## Specific Outcomes:

SPECIFIC OUTCOME 1

Understand the principles of word processing.

## SPECIFIC OUTCOME 2

Create, open and save documents.

## SPECIFIC OUTCOME 3

Produce a document from given text.

#### SPECIFIC OUTCOME 4

Format a document.

#### SPECIFIC OUTCOME 5

Edit a document.

#### SPECIFIC OUTCOME 6

Check spelling and grammar in a document.

# SPECIFIC OUTCOME 7

Print a document.



UNIT STANDARD:

9

## Use electronic mail to send and receive messages

SAQA US ID	UNIT STANDARD TITLE						
116945	Use electronic mail to send and receive messages						
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Computer Sciences and Information			Undefined				
Systems							
FIELD DESCF	RIPTION		SUBFIELD DESCRIPTION				
Physical, Math	ematical, Compute	r and Life	Information Technology and Computer Sciences				
Sciences							
UNIT STANDARD CODE UNIT STANDA		ARD TYPE	NQF LEVEL	CREDITS			
PHY-ITC-0-SGB CS&IT Regular			Level 1	2			

# Specific Outcomes:

SPECIFIC OUTCOME 1

Understand the concepts and terms of electronic messaging.

#### SPECIFIC OUTCOME 2

Create and send an E-mail message.

#### SPECIFIC OUTCOME 3

Receive and respond to e-mails.

#### SPECIFIC OUTCOME 4

Print an E-mail message.

#### SPECIFIC OUTCOME 5

Work with multiple E-mail messages.

#### SPECIFIC OUTCOME 6

Adjust settings to customise the view and preferences of the presentation application.



## UNIT STANDARD:

10

# Describe the application and impact of Information and Communication Technologies (ICT) on societies and demonstrate an understanding of its security aspects an relevant legislation

SAQA US ID	UNIT STANDARD TITLE					
116939	Describe the application and impact of Information and Communication Technologies (ICT) on societies and demonstrate an understanding of its security aspects an relevant legislation					
SGB NAME			ABET BAND	PROVIDER NAME		
SGB Computer Sciences and Information Systems			Undefined			
FIELD DESCR	IPTION		SUBFIELD DESCRIPTION			
Physical, Mathematical, Computer and Life Sciences			Information	Technology and Compu	iter Sciences	
UNIT STANDARD CODE UNIT STANDA		RD TYPE	NQF LEVEL	CREDITS		
PHY-ITC-0-SGB CS&IT Regular			Level 2	5		

## Specific Outcomes:

## SPECIFIC OUTCOME 1

Understand Information and Communication Technology (ICT).

## SPECIFIC OUTCOME 2

Describe the applications of ICT in modern society.

## SPECIFIC OUTCOME 3

Describe the role of ICT professionals in modern organisations.

## SPECIFIC OUTCOME 4

Describe Information Security in ICT.

#### SPECIFIC OUTCOME 5

Describe the management of computer viruses using anti-virus software.

#### SPECIFIC OUTCOME 6

Describe legislation relating to information security in ICT in South Africa.



UNIT STANDARD:

11

# Enhance, edit and organise electronic messages using a Graphical User Interface (GUI)- based messaging application

SAQA US ID	UNIT STANDARD TITLE					
116935	Enhance, edit and organise electronic messages using a Graphical User Interface (GUI)- based messaging application					
SGB NAME			ABET BAND	PROVIDER NAME		
SGB Computer Sciences and Information Systems		ormation	Undefined			
FIELD DESCR	PIPTION		SUBFIELD DESCRIPTION			
Physical, Mathematical, Computer and Life		r and Life	Information Technology and Computer Sciences			
UNIT STANDARD CODE UNIT STAND		UNIT STANDA	RD TYPE	NQF LEVEL	CREDITS	
PHY-ITC-0-SGB CS&IT Regular			Level 2	2		

## **Specific Outcomes:**

## SPECIFIC OUTCOME 1

Explain legal, ethical and organisational issues in relation to Internet use.

#### SPECIFIC OUTCOME 2

Manage E-mail messages.

## SPECIFIC OUTCOME 3

Enhance electronic messages.

## SPECIFIC OUTCOME 4

Use the address book facilities of electronic mail applications.



## UNIT STANDARD:

12

# Use a Graphical User Interface (GUI)-based presentation application to produce a presentation for a specified purpose

SAQA US ID	UNIT STANDARD TITLE					
116934	Use a Graphical User Interface (GUI)-based presentation application to produce a presentation for a specified purpose					
SGB NAME			ABET BAND	PROVIDER NAME		
SGB Computer Sciences and Information Systems			Indefined			
FIELD DESCR	IPTION		SUBFIELD DESCRIPTION			
Physical, Mathematical, Computer and Life Sciences			Information	Technology and Compu	ter Sciences	
UNIT STANDARD CODE UNIT STANDAR		RD TYPE	NQF LEVEL	CREDITS		
PHY-ITC-0-SG	TC-0-SGB CS&IT Regular			Level 2	6	

## **Specific Outcomes:**

## SPECIFIC OUTCOME 1

Plan a presentation for a specified purpose.

## SPECIFIC OUTCOME 2

Adjust settings to customise the view and preferences of the presentation application.

#### SPECIFIC OUTCOME 3

Work with multiple presentations.

#### SPECIFIC OUTCOME 4

Format a presentation.

## SPECIFIC OUTCOME 5

Use special presentation effects.

#### SPECIFIC OUTCOME 6

Apply special formatting to a presentation.

## SPECIFIC OUTCOME 7

Print presentation notes and handouts.

## SPECIFIC OUTCOME 8

Use a presentation for a specified purpose.

## SPECIFIC OUTCOME 9

Evaluate a presentation produced for a specified purpose.



## UNIT STANDARD:

13

#### Use a Graphical User Interface (GUI)-based spreadsheet application to solve a given problem

SAQA US ID	UNIT STANDARD TITLE					
116940	Use a Graphical User Interface (GUI)-based spreadsheet application to solve a given problem					
SGB NAME A			ABET BAND	PROVID	ER NAME	
SGB Compute	r Sciences and Info	ormation	Undefined			
Systems						
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION			
Physical, Math	ematical, Compute	r and Life	Information Technology and Computer Sciences			
Sciences						
UNIT STANDARD CODE UNIT STANDA		ARD TYPE	NQF LEVE	L	CREDITS	
PHY-ITC-0-SC	GB CS&IT Regular			Level 2		6

2

### **Specific Outcomes:**

## SPECIFIC OUTCOME 1

Plan a spreadsheet to provide a solution to a given problem.

#### SPECIFIC OUTCOME 2

Adjust settings to customise the view and preferences of the spreadsheet application.

## SPECIFIC OUTCOME 3

Work with multiple worksheets and multiple spreadsheet files.

#### SPECIFIC OUTCOME 4

Apply formulae to worksheets.

#### SPECIFIC OUTCOME 5

Apply functions to worksheets.

#### **SPECIFIC OUTCOME** 6

Apply formatting to a spreadsheet.

#### SPECIFIC OUTCOME 7

Use special effects to improve the presentation of the spreadsheet.

#### SPECIFIC OUTCOME 8

Use a spreadsheet to provide a solution.

## SPECIFIC OUTCOME 9

Print a spreadsheet.

## SPECIFIC OUTCOME 10

Evaluate a spreadsheet.



UNIT STANDARD:

14

## Use a Graphical User Interface (GUI)-based word processor to format documents

SAQA US ID	UNIT STANDARD TITLE					
116938	Use a Graphical User Interface (GUI)-based word processor to format documents					
SGB NAME			ABET BAND	PROVIDER NAME		
SGB Computer	r Sciences and Info	rmation	Undefined			
Systems						
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION			
Physical, Math	ematical, Compute	r and Life	Information Technology and Computer Sciences			
Sciences						
UNIT STANDARD CODE UNIT STANDA		ARD TYPE	NQFLEVEL	CREDITS		
PHY-ITC-0-SGB CS&IT Regular			Level 2	4		

## Specific Outcomes:

SPECIFIC OUTCOME 1

Work with multiple documents.

#### **SPECIFIC OUTCOME** 2

Format a document.

## SPECIFIC OUTCOME 3

Use special word processing effects.

#### SPECIFIC OUTCOME 4

Apply special formatting to a document.

#### SPECIFIC OUTCOME 5

Adjust the display characteristics.



## UNIT STANDARD:

15

#### Use a GUI-based word processor to enhance document appearance and to create merged documents

SAQA US ID	UNIT STANDARD TITLE						
116942	Use a GUI-based word processor to enhance document appearance and to create merged documents						
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Computer Sciences and Information Systems			Jndefined				
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION				
Physical, Mathematical, Computer and Life Sciences		r and Life	Information Technology and Computer Sciences				
UNIT STANDARD CODE UNIT STANDA		RD TYPE	NQF LEVEL	CREDITS			
PHY-ITC-0-SC	BBCS&IT Regular			Level 3	4		

# Specific Outcomes:

SPECIFIC OUTCOME 1

Create and edit a table.

## SPECIFIC OUTCOME 2

Format a table.

## SPECIFIC OUTCOME 3

Insert and edit graphics.

## SPECIFIC OUTCOME 4

Understand the uses of merged documents.

## SPECIFIC OUTCOME 5

Create a merged document.



UNIT STANDARD:

16

## Use a Graphical User Interface (GUI)-based database application to solve a given problem

SAQA US ID	UNIT STANDARD TITLE						
116941	Use a Graphical L	Jse a Graphical User Interface (GUI)-based database application to solve a given problem					
SGB NAME AI			ABET BAND	PROVIDER NAME			
SGB Computer Sciences and Information			Undefined				
Systems		<u></u>					
FIELD DESCF	RIPTION		SUBFIELD DESCRIPTION				
Physical, Math	ematical, Compute	r and Life	Information Technology and Computer Sciences				
Sciences							
UNIT STANDARD CODE UNIT STANDA		ARD TYPE	NQF LEVEL	CREDITS			
PHY-ITC-0-SC	B CS&IT	Regular		Level 3	6		

## **Specific Outcomes:**

## SPECIFIC OUTCOME 1

Plan a database to provide a solution to a given problem.

#### SPECIFIC OUTCOME 2

Adjust settings to customise the view and preferences of the database application.

#### SPECIFIC OUTCOME 3

Create a relational database from a simple user document.

#### SPECIFIC OUTCOME 4

Retrieve information from a database.

#### SPECIFIC OUTCOME 5

Sort data in a database.

## SPECIFIC OUTCOME 6

Create a report for a database table.



UNIT STANDARD:

17

# Use a Graphical User Interface (GUI)-based presentation application to enhance presentation appearance

SAQA US ID	UNIT STANDARD TITLE						
116930	Use a Graphical User Interface (GUI)-based presentation application to enhance presentation appearance						
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Computer Sciences and Information Systems			Undefined				
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION				
Physical, Mathematical, Computer and Life Sciences		r and Life	Information	Technology and Comput	er Sciences		
UNIT STANDA	NIT STANDARD CODE UNIT STANDAR		ARD TYPE	NQF LEVEL	CREDITS		
PHY-ITC-0-SG	HY-ITC-0-SGB CS&IT Regular			Level 3	3		

## Specific Outcomes:

#### SPECIFIC OUTCOME 1

Create a chart graph in a presentation.

## SPECIFIC OUTCOME 2

Create an organisational chart in a presentation.

## SPECIFIC OUTCOME 3

Create a drawing in a presentation.

#### SPECIFIC OUTCOME 4

Import images into a presentation.

#### SPECIFIC OUTCOME 5

Chart graphs, organisational charts, drawing objects, images and objects are manipulated in presentation.