

TVET CERTIFICATE II

in

COMPUTER APPLICATION

ICTCOA2001

RQF LEVEL

2

CURRICULUM STRUCTURE



**Kigali, September 2022**

텍스트이(가) 표시된 사진

자동 생성된 설명



ICTCOA2001-TVET CERTIFICATE II

Computer Application

RQF Level 2 CURRICULUM

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Table of Contents

[Copyright ii](#_Toc127284247)

[List of Abbreviations iv](#_Toc127284248)

[Acknowledgments v](#_Toc127284249)

[Production team v](#_Toc127284250)

[FOREWORD vii](#_Toc127284251)

[1. GENERAL INTRODUCTION 1](#_Toc127284252)

[2. QUALIFICATION DETAILS 2](#_Toc127284253)

[2.1. Description 2](#_Toc127284254)

[2.2 Graduate profile 2](#_Toc127284255)

[2.3 Minimum entry requirements and pathways 3](#_Toc127284256)

[2.4 Rationale of the Qualification 3](#_Toc127284257)

[2.5 Job related information 4](#_Toc127284258)

[2.6 Information about competencies 5](#_Toc127284259)

[2.7 Allocation of Learning Hours 7](#_Toc127284260)

[3. TRAINING PACKAGE 10](#_Toc127284261)

[3.1 Course structure 10](#_Toc127284262)

[3.2. Flowchart 10](#_Toc127284263)

[11](#_Toc127284264)

[4. ASSESSMENT GUIDELINES 12](#_Toc127284265)

[4.1 Assessment Methodology 12](#_Toc127284266)

[4.2 Portfolio 12](#_Toc127284267)

[Formative Assessment 12](#_Toc127284268)

List of Abbreviations

|  |  |
| --- | --- |
|  |  |
| **ICT** | Information and CommunicationTechnology |
| **IPRC** | Integrated Polytechnic Regional Center |
| **IT** | Information Technology |
| **NISR** | National Institute of Statistics of Rwanda |
| **NST1** | National Strategic Transformation 1 |
| **RQF** | Rwanda Qualification Framework |
| **RTB** | Rwanda TVET Board |
| **SDG** | Sustainable Development Goals |
| **TQUM** | TVET Quality Management |
| **TVET** | Technical Education and Vocational Training |

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FOREWORD

The global rapid changes in the labour market tends do call for appropriate training and skills development through outcome-based training approaches. Skills development and employment promotion are central to Rwanda’s transformative Vision 2050, aiming to secure high standards of living for all Rwandans. In a bid to transform Rwanda into a knowledge based economy, the National Strategic Transformation 1 (NST1) calls socio-economic transformation through TVET skills development. The Rwanda TVET Board (RTB) was established to promote quality education in technical and vocation education and training from level one (1) to five (5) aimed at fast tracking socio-economic development of the country. Designing and distributing curricula, teaching materials, trainer’s guides, methodologies and establish training methods for technical and vocation education and training from level one (1) to five (5); is among other RTB’s responsabilities

The existing curricula were limited and narrowed in terms of acquired skills and knowledge and were not meeting the requirements of the current labour market at both national and regional level. In addition there were. Barriers in vertical mobility and pathways in TVET which resulted in negative TVET perception. Furthermore, There were barriers to admission of TVET graduates of certain programs into higher learning institutions.

The TVET modernization process has begun with a clear picture of the programs focusing on sector with the high employment potential like Computer application among others. In this respect, Rwanda TVET Board, is honoured to avail the curriculum of Computer application which serves as the official document and respond to the above mentioned concerns.

With the help of the training providers, trainers, parents whose role is central to the success of this curriculum, the trainees will gain appropriate hand on skills which will make a difference not only to their own lives but also to the success of Rwanda’s economy.

I wish to sincerely extend my appreciation to the people who contributed towards the development of this document.

**Dipl.-Ing. Paul UMUKUNZI**

Director General/ RTB

1. G**E**NERAL INTRODUCTION

The curriculum presents a coherent and significant set of competencies to acquire to perform the occupation of an Audio & Video content Distributor, Data Entry Clerk, Photo /Video editor, end-user IT assistant, Graphic designer. It is designed with an approach that takes into account the training needs, the work situation, as well as the goals and the means to implement training.

The modules of the curriculum include a description of the expected results at the end of training. They have a direct influence on the choice of the theoretical and practical learning activities. The competencies are the targets of training: the acquisition of each is required for certification.

The curriculum is the reference to carry out the assessment of learning. Assessment tools of learning are developed on the basis of this document.

The curriculum consists of three parts. The first part is of general interest and shows the nature and goals of a program and the key concepts and definitions used in the document. The second part presents the qualification, its level in the qualification framework, its purpose, its rationale and the list of modules it comprises. The third part deals with the training package. It includes the competencies chart, the sequencing of module learning, the description of each module and the course structure.

The pages describing the modules are the heart of a curriculum. They present the title of the module, the length of training, the amount of credits, the context in which the competency is performed, the prerequisite competencies, the learning units and the performance criteria.

In each module, a course structure is provided. The course structure describes the learning outcomes (knowledge, skills and attitude) and the learning contents related to each learning unit. Also, the learning activities and resources for learning are suggested.

Finally, the assessment specifications and guidelines are included in each module.

1. QUALIFICATION DETAILS

2.1. Description

|  |  |
| --- | --- |
| Title: | TVET Certificate II in Computer Application |
| Level: | RQF Level 2 |
| Credits: | 156 |
| Sector: | ICT and Multimedia |
| Sub-sector: | Computer Application |
| Issue date: | December, 2022 |

2.2 Graduate profile

This qualification provides the skills, knowledge and attitudes for a learner to be competent in tasks and activities that require the application of practical skills in a defined context. Work would be undertaken in various Computer Applications sector/industries where computer applications includes graphical object designing, using Microsoft office essential products and distributing audio/visual contents. Learners may work with some autonomy or in a team but usually under close supervision.

At the end of this qualification, qualified learners will be able to:

1. Describe the occupation and learning process
2. Apply SHE policies, procedures and policies
3. Apply basic entrepreneurial skills
4. Apply basic Communication skills at workplace
5. Communicate using basic English at the workplace
6. Gukoresha Ikinyarwanda gikwiye
7. Apply citizenship
8. Apply Basic mathematics at the workplace
9. Use computer and its peripherals
10. Use essential Microsoft office products
11. Use online essentials and platforms
12. Edit audio & visual contents
13. Apply basic graphic design
14. Manage data and storage
15. Integrate the work place

2.3 Minimum entry requirements and pathways

The minimum entry requirement to this qualification is to be physically and mentally fit with knowledge, skills and attitude of technological background.

2.4 Information about pathways

|  |  |  |  |
| --- | --- | --- | --- |
| D:\Bizs\Wda Docs\RTQF LEVEL 4 CURRICULA\Interior Design\exiticon.png | Pathways into the qualification | Pathways from the qualification | D:\Bizs\Wda Docs\RTQF LEVEL 4 CURRICULA\Interior Design\exiticon.png |
| Preferred pathways for candidates entering this qualification include:   * To have completed primary school but did not complete Senior three(S3) * Recognition of prior learning related to this qualification | | Progression route of candidates achieving this qualification include:  ▪ A range of other related TVET Certificate III qualifications after fullfilling all requirements | |

2.5 Rationale of the Qualification

A Digital Services Assistant contributes to Rwanda’s digital transformation and  Internet based services as stated in ICT Sector Strategic Plan (2018-2024), several achievements have been registered by the sector in areas related to ICT infrastructure, service development, business and investments, cyber security, global partnerships, among others.

Over the last decade and half, the Gross Domestic Product of the ICT sector in Rwanda has been growing at a median rate of 15.3% (NISR,2016). Internet Penetration in Rwanda is increasing steadily. For instance, internet penetration increased from 7% in 2011 to 39.76% mid 2017. While mobile increased from 639,673 to 9.7 million over the period 2010 -2017

In order to attain long term developmental goals of Rwanda and Africa, such as the Sustainable Development Goals (SDG), Rwanda’s Vision 2050 and African Union’s common goals under the Agenda 2063, it is essential to maximize the power of ICT as a true enabler of socio-economic development. The ICT sector remains one of the primary targets to boost country’s economy,  which will be achieved through:

- Positioning Rwanda as a world class and high end ICT hub

- Job creation that reduces the poverty

- Contribution to GDP growth

- Facilitation of cost-effective public and private services

- Impact of ICT-related capital investments on overall capital deepening

- Increase of labor productivity & significant contribution to value-added by ICT jobs

- Digital Literacy for all to promote integration of isolated communities into the national economy & Increase the access of larger markets coverage

- Developing the ICT industry and build the capacity of the private sector to provide high levels of service delivery.

2.5 Job related information

This qualification prepares individuals to integrate in small and medium ICT companies, he/she can also work in other public and/or private sectors that require ICT related services with the professionalization of Computer application.

|  |  |
| --- | --- |
| D:\Bizs\Wda Docs\RTQF LEVEL 4 CURRICULA\Interior Design\Men_at_work.png | Possible jobs related to this qualification |
|  | Data Entry Clerk  End-user IT assistant  Photo /Video editor  Audio & Video content Distributor  Graphic designer |

2.6 Information about competencies

|  |  |  |  |
| --- | --- | --- | --- |
| No | Code | Complementary competencies | Credit |
| 1 | CCMOL202 | Describe the occupation and learning process | 3 |
| 2 | CCMHE202 | Apply SHE policies, procedures and policies | 3 |
| 3 | CCMES202 | Apply basic entrepreneurial skills | 4 |
| 4 | CCMCW202 | Apply basic Communication skills at workplace | 3 |
| 5 | CCMEN202 | Communicate using basic English at the workplace | 4 |
| 6 | CCMKN202 | Gukoresha Ikinyarwanda gikwiye | 4 |
| 7 | CCMCZ201 | Apply citizenship | 3 |
| Total | | | 24 |

|  |  |  |  |
| --- | --- | --- | --- |
| No |  | Co-curricular activities | credit |
| 1 |  | Sports/clubs | 1 |
| 2 |  | Self-study/library research | 1 |
| Total |  |  | 2 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **No** | **Code** | | **Core competencies** | | **Credit** | | |
| **GENERAL** | 1. | | GENBM201 | Apply Basic mathematics at the workplace | | | | 12 |
| **SPECIFIC** | 2. | | COACP201 | | Use computer and its peripherals | | 15 | |
| 3. | | COAMO201 | | Use essential Microsoft office products | | 15 | |
| 4. | | COAOP201 | | Use online essentials and platforms | | 12 | |
| 5. | | COAAV201 | | Edit audio & visual contents | | 15 | |
| 6. | | COAGB201 | | Apply basic graphic design | | 15 | |
| 7. | | COADS201 | | Manage data and storage | | 14 | |
|  | 8. | | COAIA201 | | Integrate at the workplace | | 32 | |
|  | Total   * Number of competencies: 15 * Core competencies :8 * Complementary competencies: 7 * Co-curricular activities: 2 * The total number of Credits: 156 | | | | | 130 | | |

2.7 Allocation of Learning Hours

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| N0 | Module name | Learning outcomes | Theoretical hours | Practical hours | Total hours |
| 1 | COMPUTER AND ITS PERIPHERALS | 1. Introduce  computing  fundamentals | 30 | 10 | 40 |
| 2. Apply computer  basic operations | 15 | 55 | 70 |
| 3. Apply basic  computer  maintenance | 10 | 30 | 40 |
| Total hours module 1 | | | 55 | 95 | 150 |
| 2 | ESSENTIAL MICROSOFT OFFICE SKILLS | 1.Use Microsoft Office word | 15 | 40 | 55 |
| 2.Use Microsoft Office Excel | 10 | 40 | 50 |
| 3.Use Microsoft Office PowerPoint | 10 | 35 | 45 |
| Total hours module 2 | | | 35 | 115 | 150 |
| 3 | ONLINE ESSENTIALS and PLATFORMS | 1.Introduce online essentials | 25 | 0 | 25 |
| 2.Use web browsers,  emails and E-Platforms | 20 | 40 | 60 |
| 3.Secure online information | 10 | 25 | 35 |
|  | | | 55 | 65 | 120 |
| 4 | BASIC GRAPHIC DESIGN | 1.Describe Graphical Objects | 20 | 0 | 20 |
| 2.Use MS Office publisher | 5 | 10 | 15 |
| 3.Use adobe illustrator | 5 | 20 | 25 |
| 4.Create card | 0 | 20 | 20 |
| 5.Create Label | 0 | 15 | 15 |
| 6.Create Banner | 0 | 15 | 15 |
| 7.Create Calendar | 0 | 15 | 15 |
| 8.Create Logo | 0 | 25 | 25 |
|  | | | 30 | 120 | 150 |
| 5 | AUDIO and VISUAL CONTENTS | 1.Introduce audio and visual contents | 25 | 0 | 25 |
| 2.Prepare the workspace | 10 | 30 | 40 |
| 3.Manipulate photo | 8 | 42 | 50 |
| 4.Edit audio and video | 3 | 32 | 35 |
|  | | | 46 | 104 | 150 |
| 6 | DATA and STORAGE MANAGEMENT | 1.Introduce digital data management | 20 | 0 | 20 |
| 2.Use data storage | 10 | 35 | 45 |
| 3.Manipulate data and storage | 10 | 65 | 75 |
|  | | | 40 | 100 | 140 |
| Total hours modules | | | 261 hours | 599hours | 860 hours |
| Total hours for all modules | | |  |  | 1560hours |

1. TRAINING PACKAGE

The training package includes the competencies chart, the flowchart, the modules, the course structure, and the assessment guidelines.

3.1 Course structure

The course structure describes the learning outcomes for each learning unit. These learning outcomes are the essential skills and knowledge to be acquired. The contents to be covered for each learning outcome are prescriptive. The Learning Activities contain a series of suggestions, usually with several options, that will guide the learner and the trainer.

3.2. Flowchart

The flowchart of sequencing of learning is a schematic representation of the order of acquisition of the competencies. It provides an overall planning of the entire training programme and shows the relationship between the modules. This type of planning is to ensure consistency and progression of learning. For each module, the flowchart shows the learning that is already in place, the learning that is to take in parallel or later. The positions defined will have a decisive impact on all subsequent pedagogical choices. The flowchart of the sequence of learning of the modules of the training programme is presented on the following page.

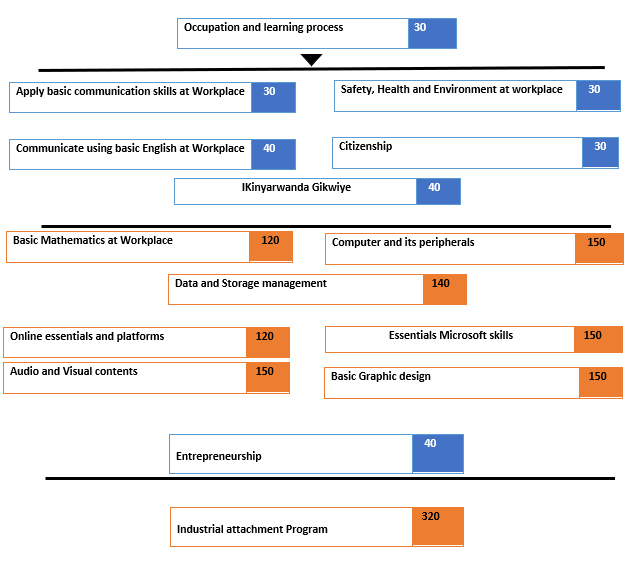


Figure 2: *Flowchart*

1. ASSESSMENT GUIDELINES

4.1 Assessment Methodology

To assess knowledge, practical, and application skills through a jury system of continuous evaluation that encourages learners to display understanding of the principles in application to set practical tasks and their attendant theory to assess self-learning.

## 4.2 Portfolio

A portfolio is a collection of learner work representing learner performance. It is a folder (or binder or even a digital collection) containing the learner’s work as well as the learner’s evaluation of the strengths and weaknesses of the work. Portfolios reflect not only work produced (such as papers and assignments, direct demonstration, indirect demonstration, products, documents), but also it is a record of the activities undertaken over time as part of learner learning. The portfolio is meant to show learner growth, development, and achievements in the education system. It also shows that you have met specific learning goals and requirements. A portfolio is not a project; it is an ongoing process for the formative assessment. The portfolio output (formative assessment) will be considered only as enough for complementary and general modules. Besides, it will serve as a verification tool for each candidate that he/she attended the whole training before he/she undergoes the summative assessment for specific modules

There are two types of assessment (Formative Assessment and Summative/Integrated Assessment). Each assessment has its own rule for passing to be declared competent.

Formative Assessment

This is applied on all types of modules (e.g. Complementary, General and Specific modules)

A trainee to be competent for a Specific module must have at least 70%

A trainee to be eligible to undertake integrated assessment of specific modules must have at least 50% as passing line for general and complementary modules.

Each trainee should be competent on all formative assessments to be declared competent on that module

All formative assessment should be declared competent before taking the summative/integrated assessment

Summative Assessment

All Summative/Integrated assessment should match with the content of the module in the curriculum.

Summative/Integrated Assessment is always in practical, giving it as a theoretical type of assessment is not acceptable.

The integrated situation provided in the curriculum is a sample of the assessment to be carried out, the Trainer/Teacher has the role of developing another one referring to the task to be carried out in the integrated situation in accordance to the circumstances inside school, but the integrated situation should stick on the components of a task.

During Summative/Integrated assessment, assessor panel members should be three (3).

The trainee can be declared competent based on the assessment CRITERIA and its respective assessment indicators

The Passing Line for the modules is:

* 50 % for general and complementary modules
* 70 % for specific modules

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Training delivery | | 100% | Assessment | | Total 100% |
| Theoretical content | | 30% | Formative assessment | 30% | 50% |
| Practical work: | | 70% | 70% |
| Group project and presentation | 20% |
| Individual project /Work | 50% |
|  | | Summative Assessment | | | 50% |

1. Summative assessment is always conducted at the completion of module delivery. It should be practical through an integrated situation for specific modules and in any other forms of assessment for complementary and general modules.

2. Learning hours assigned to specific module includes the duration assigned to integrated assessment