Republic of Rwanda
Ministry of Education

RTB | RWANDA TVET BOARD

CURRICULUM STRUCTURE



RQF LEVEL

3

TVET CERTIFICATE III
in
MANUFACTURING TECHNOLOGY

MAMMAT3001

Kigali, August 2022

MAMMAT 3001-TVET CERTIFICATE III

Manufacturing Technology

RQF Level 3 CURRICULUM

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List of Abbreviations

CBA	: Competency-Based Assessment
GDP	: Gross Domestic Product
IAP	: Industrial Attachment Program
IPRC	: Integrated Polytechnic Regional College
LO	: Learning Outcome
NST1	: National Strategic Transformation 1
RP	: Rwanda Polytechnic High Learning Institution
RPL	: Recognition of prior learning
RQF	: Rwandan Education Qualification Framework
RTB	: Rwanda Technical and Vocational Education and Training Board
SHE	: Safety, Health and Environment
TVET	: Technical and Vocational Education and Training
TQUM	: TVET Quality Management
EDP	: Entrepreneurship Development Policy
SEZ	: Special Economic Zone
DMRS	: Domestic Market Recapturing Strategy
SME	: Small and Medium Enterprises
UMIC	: Upper-Middle Income Country
HIC	: High-Income Country

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FOREWORD

The global rapid changes in the labour market tends to 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 responsibilities.

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, the 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 high employment potential like Manufacturing Technology among others. In this respect, Rwanda TVET Board, in collaboration with TQUM Project, is honoured to avail the revised curriculum of Manufacturing Technology 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._Eng. Paul UMUKUNZI

Director General/ RTB

GENERAL INTRODUCTION

The curriculum presents a coherent and significant set of competencies to perform the occupation/s of a machine tools operator and metal fabricator. 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 the training.

The modules of the curriculum include a description of the expected results of the training. They have a direct influence on the choice of the theoretical and practical learning activities. The competencies are the targets of the 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 based on this document.

The curriculum consists of three parts. The first part is of general interest and shows the nature and goals of the 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 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 outcomes and the performance criteria.

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

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

Rationale of the Qualification

Rwanda's manufacturing technology sector is still small, but it has been growing steadily. several critical policy interventions and strategies have been developed such as Made in Rwanda policy, Entrepreneurship Development Policy (EDP), SEZ policy, the Domestic Market Recapturing Strategy (DMRS), the National Export Strategy, SMEs strategy, the National Export Strategy and the Cross Border trade strategy.

It is estimated that the manufacturing sector contributes the highest to the country's industrial GDP. However, there has been an over dependence on imported raw materials, which depletes the foreign exchange resources while denying the citizens the opportunities to the production of spares and both domestic and industry equipment's. The manufacturing industry contributes immensely to the GDP of the Country mainly through direct income and employment opportunities generated from various jobs.

Manufacturing is the process of mass-creating objects after they have been transformed from raw ingredients to more attractive products. People who work in secondary activities transform raw resources into completed products. Workers at steel mills, car factories, breweries, textile mills, bakeries, and other sectors come into this category. Some people work in the service industry. Manufacturing industry development is used to assess a country's economic strength, with the output aims of transform Rwanda into an Upper-Middle Income Country by 2035, and into a High-Income Country by 2050 to increase the local domestic and foreign supply of manufactured goods, the Government has put in place the Special Economic Zone and 9 Industrial parks to offer diversity opportunities : Employ large numbers of low – to – medium skilled workers, easy standardised and scaled which complements economic clustering in country, technological change and productivity growth, thus exhibiting positive learning and process development opportunities, tradable and allowing developing countries to tap into global value chains as well as new markets for buying and selling goods. The constraints and weaknesses to development of this industry were identified as follows: an inefficient, inconsistent supply of raw materials, limited skilled manpower, capital-acquisition difficulties, high

competition from other regional actors (East African), inconsistent and inadequate energy/power supply and low-quality production output.

QUALIFICATION DETAILS

1.1. Description

Title:	TVET Certificate 3 in Manufacturing Technology
Level:	RQF Level 3
Credits:	156
Sector:	Manufacturing and Mining
Sub-sector:	Manufacturing Technology
Issue date:	August, 2022

1.2. Graduate profile

This qualification provides the skills, knowledge, and attitude for a learner to be competent in a range of routine tasks and activities that require the application of practical skills in a defined context. Work would be undertaken in various Manufacturing enterprises where bench work, bending operation, rolling operations, punching operations, drilling machine operations, basic sand casting, aluminium profiles assembling, metal cutting, SMAW on Mild steel, oxy acetylene gas welding on mild steel and mechanical fastening are carried out. 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. Maintain SHE at workplace
3. Create a business
4. Apply computer literacy
5. Demonstrate citizenship
6. Communicate simply using English in familiar situations
7. Gukoresha Ikinyarwanda kiboneye
8. Pratiquer l'activité de communication en français dans le métier
9. Communicate effectively at workplace
10. Kiswahili wastani
11. Apply algebra and trigonometry
12. Apply general physics
13. Demonstrate basics of chemistry
14. Apply technical drawing
15. Apply basics of electricity
16. Perform bench work
17. Perform Bending Operations
18. Perform Rolling Operations

19. Perform Punching Operations
20. Perform Drilling Machine Operations
21. Perform basic sand casting
22. Assemble Aluminium profiles
23. Perform metal cutting
24. Perform SMAW on Mild steel
25. Perform oxy acetylene gas welding on mild steel
26. Perform mechanical fastening
27. Integrate in the workplace

1.3. Minimum entry requirements and pathways

The minimum entry requirement to this course is to be physically and mentally fit with an interest in Manufacturing Technology and related areas.



Pathways into the qualification

- To be admitted, prospective candidates must have completed successfully 9 Years Basic Education in National examination of Ordinary Level with at least principal passes in the following subjects: Mathematics and chemistry which are considered as key prerequisites to pursue trade of Manufacturing.

Pathways from the qualification



Progression route of candidates achieving this qualification include:

- TVET Certificate IV in Manufacturing Technology
- A range of other related TVET Certificate IV qualifications.

1.4. Job related information

This qualification prepares individuals to integrate the Manufacturing Technology industry with the professionalism of machine tools operator and metal fabricator while ensuring that safety, security and environmental regulations are respected.



Possible jobs related to this qualification

Machine tools operator,
Metal fabricator.

1.5. Information about competencies

No	Code	Cross-cutting competencies	Credit
1.	CCMOL302	Describe the occupation and learning process	3
2.	CCMHE302	Maintain SHE at workplace	3
3.	CCMBC302	Create a business	3
4.	CCMEN302	Communicate simply using English in familiar situations	3
5.	CCMCL302	Apply computer literacy	3
6.	CCMCZ301	Comply with Citizenship values	3
7.	CCMKN302	Gukoresha Ikinyarwanda kiboneye	3
8.	CCMFR301	Pratiquer l'activité de communication en français dans le métier	3
9.	CCMSW302	Kutumia Kiswahili Wastani	3
Total			**27**

	No	Code	Core competencies	Credit
GENERAL	**10.**	GENBT302	Apply basic algebra and trigonometry	6
	11.	GENGP302	Apply general physics	4
	12.	GENAC302	Demonstrate basics of chemistry	3
	13.	GENTD301	Apply technical drawings	4
	14.	GENBE302	Apply basics of electricity	6
SPECIFIC	**15.**	MATBW301	Perform bench work	5
	16.	MATBO301	Perform Bending Operation	3
	17.	MATRO301	Perform Rolling Operation	3
	18.	MATPO301	Perform Punching Operation	3
	19.	MATDO301	Perform Drilling Machine Operation	3
	20.	MATBC301	Perform basic sand casting	5
	21.	MATAA301	Assemble Aluminium profiles	4
	22.	MATMC301	Perform metal cutting	4
	23.	MATSW301	Perform SMAW on Mild steel	8
	24.	MATOA301	Perform oxy acetylene gas welding on mild steel	6
	25.	MATMF301	Perform mechanical fastening	4
	26.	MATIA302	Integrate the workplace	20
	Total			**91**

- **Number of competencies: 26**
- **Core competencies: 17**
- **Cross-cutting competencies: 9**
- **The total number of Credits: 120**

1.6. Allocation of Learning Hours

N0	Module name	Learning Outcome	Theoretical hours	Practical hours	Total hours
1	**Occupation and Learning Process**	LO1: Participate in a team and respect the rules and regulations of training.	3	7	10
		LO 2: Explain the occupation and learning process	1	4	5
		LO3: Respect the facilitation and apply learning methods.	1	4	5
		LO4: Develop personal plans based on self assessment practices	3	7	10
Total hours			**8**	**22**	**30**
2	**Safety, Health and Environment at Workplace**	LO1: Maintain personal hygiene, health and safety	7	8	15
		LO2: Sustain a safe and healthy environment at workplace	3	4	7
		LO3: Ensure environmental sustainability	4	4	8
Total hours			**14**	**16**	**30**
3	**Français**	LO1: Lire un texte lié à son métier	2	6	8
		LO 2:Pratiquer l'expression orale	2	6	8
		LO 3: Accorder les verbes	2	12	14
Total hours			**6**	**24**	**30**
4	**Entrepreneurship**	LO1: Describe basic aspects of Entrepreneurship	5	5	10
		LO2: Assess Business Environment	2	3	5
		LO3: : Generate Business Idea	7	8	15

Total hours			**6**	**24**	**30**
5	**Citizenship**	LO1: Describe Rwanda colonization period	6	2	8
		LO2: : Describe the Independent Rwanda	7	3	10
		LO3: E Patriotism and Heroism in Rwanda	5	1	6
		LO4: Examine leadership and management	5	1	6
Total hours			**23**	**7**	**30**
6	**English**	LO 1: Narrate about familiar events and activities	1	6	7
		LO2: Write short compositions on familiar topics	2	6	8
		LO3: Read and interpreting messages from simple texts and social letter	1	6	7
		LO4: React to common trade-related oral English.	2	6	8
Total hours			**6**	**24**	**30**
7	**Information and Communication Technology**	LO1: Apply computer basics	3	7	10
		LO2: Use a current Word processing package	1	4	5
		LO3: Use current spreadsheet package	1	4	5
		LO4: Use current power point presentations	1	4	5
		LO5: Use Internet/Intranet (outlook)	1	4	5
Total hours			**7**	**23**	**30**
8	**Ikinyarwanda**	LO1: Gukoresha ubuvanganzo gakondo ashyikirana n'abandi	1	5	6
		LO 2: Gukoresha Ikinyarwanda kiboneye agaragaza itandukaniro ry'amazina bwite n'amazina rusange n'imiterere y'isanisha ryo mu bisekuru.	1	5	6
		LO3 :Kugaragaza amategeko y'igenamajwi	1	5	6

		mu izina mbonera.			
		LO 4: Kugaragaza intêgo ya ntera n'amategeko y'igenamajwi.	1	5	6
		LO5: Gukoresha imyandikire ikwiye y'Ikinyarwanda.	1	5	6
Total hours			5	25	30
9	**Kiswahili Wastani**	LO1: Kutumia msamiati wa Kiswahili katika maandishi na mazungumzo kimsingi	2	8	10
		LO2: Kutumia aina za maneno ya lugha ya Kiswahili kimazungumzo na kimaandishi.	2	8	10
		LO3: : Kutumia nyakati za Kiswahili kimaandishi na kimazungumzo.	2	8	10
Total hours			**6**	**24**	**30**
10	**Applied Mathematics**	LO1: Solve algebraically or graphically linear and quadratic equations	10	10	20
		LO2: Apply matrices in solving simultaneous linear equations	5	5	10
		LO3: Apply fundamentals of trigonometry	7	8	15
		LO4: Apply fundamentals of complex numbers	8	7	15
Total hours			**30**	**30**	**60**
11	**Applied Chemistry**	LO1: Describe the structure of atom and molecules	5	5	10
		LO2: Apply the basics of inorganic chemistry	5	5	10
		LO3: Perform acid-base titration	5	5	10
Total hours			**15**	**15**	**30**
12	**Applied Physics**	LO1: Describe basic measurements in physics	4	4	8
		LO2: Describe Motion in 1-Dimension	2	3	5
		LO3: Analyse motion in two dimensions	3	3	6
		LO4: Demonstrate	4	4	8

		electrostatic phenomena			
		LO5: Apply Geometric optics	4	3	7
		LO6: Characterize sources of energy in the world	3	3	6
Total hours			**20**	**20**	**40**
13	**Basics of electricity**	LO1:Apply Basic concept of electricity	10	15	25
		LO2: Perform domestic electrical installation	15	15	30
		LO3: Prepare technical report and invoice	0	5	5
Total hours			**25**	**35**	**60**
14	**Basics of technical drawings**	LO1: identify materials, instrument and equipment	5	10	15
		LO2: Draw symbols, geometric figures and solids used in technical drawing	5	10	15
		LO3: Apply 2&3 dimensional	3	7	10
Total hours			**13**	**27**	**40**
15	**Bench Work**	LO1: Prepare thework	5	10	15
		LO2: Carry out bench work operation	5	25	30
		LO3: Perform post operationactivities	1	4	5
Total hours			**11**	**39**	**50**
16	**Bending Operation**	LO1: Prepare for bending operation	3	5	8
		LO2: Carry out bending operation	5	10	15
		LO3: Perform post-operation activities	2	5	7
Total hours			**10**	**20**	**30**
17	**Rolling Operation**	LO1: Prepare for rolling operation	3	5	8
		LO2: Carry out rolling operation	5	10	15
		LO3: Perform post-operation activities	2	5	7

Total hours			**10**	**20**	**30**
18	**Punching Operation**	LO1: Prepare for punching operation	3	5	8
		LO2: Carry out punching operation	5	10	15
		LO3: Perform post-operation activities	2	5	7
Total hours			**10**	**20**	**30**
19	**Drilling Machine Operation**	LO1: Prepare for drilling machine operation	3	5	8
		LO2: Carry out drilling machine operation	5	10	15
		LO3: Perform post-operation activities	2	5	7
Total hours			**10**	**20**	**30**
20	**basic casting**	LO1: Prepare for casting process	3	7	10
		LO2: Carry out low temperature casting	9	21	30
		LO3: Perform post-casting activities	3	7	10
Total hours			**18**	**42**	60
21	**Aluminium profiles assembling**	LO1: Prepare the workplace	3	7	10
		LO2: Carry out aluminium assembling operation	9	16	25
		LO3: Conduct aluminium post-assembling activity	1	4	5
Total hours			**13**	**27**	**40**
22	**metal cutting**	LO1: Prepare the workplace	3	7	10
		LO2: Carry out metal cutting	6	14	20
		LO3: Perform post-casting activities	3	7	10
Total hours			**12**	**28**	**40**
23	**SMAW on Mild steel**	LO1: Prepare for SMAW operation	4	11	15
		LO2: Apply SMAW on mild steel	16	39	55
		LO3: Perform post-operation activities	3	7	10
Total hours			**23**	**57**	**80**
24	**oxy-acetylene gas welding on mild**	LO1: Prepare for oxy-acetylene gas welding	5	10	15

	steel	operation			
		LO2: Apply oxy-acetylene gas welding on mild steel	10	25	35
		LO3: Perform post-operation activities	3	7	10
Total hours			**21**	**49**	**70**
25	**Industrial Attachment Program (IAP)**	LO1: Apply for internship	10	0	10
		LO2: Demonstrate workplace behavior and attitudes	10	0	10
		LO3: Analyze own professional gaps in line with industry demands	10	0	10
		LO4: Enhance acquired competencies at the workplace	0	170	170
Total hours			**30**	**170**	**200**
26	**mechanical fastening**	LO1: Prepare for mechanical fastening	2	6	8
		LO2: Carry out mechanical fastening	7	17	24
		LO3: Perform post-operation activities	2	6	8
Total hours			**11**	**29**	**40**
Total hours					**1180**

TRAINING PACKAGE

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

1.7. 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.

1.8. 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.

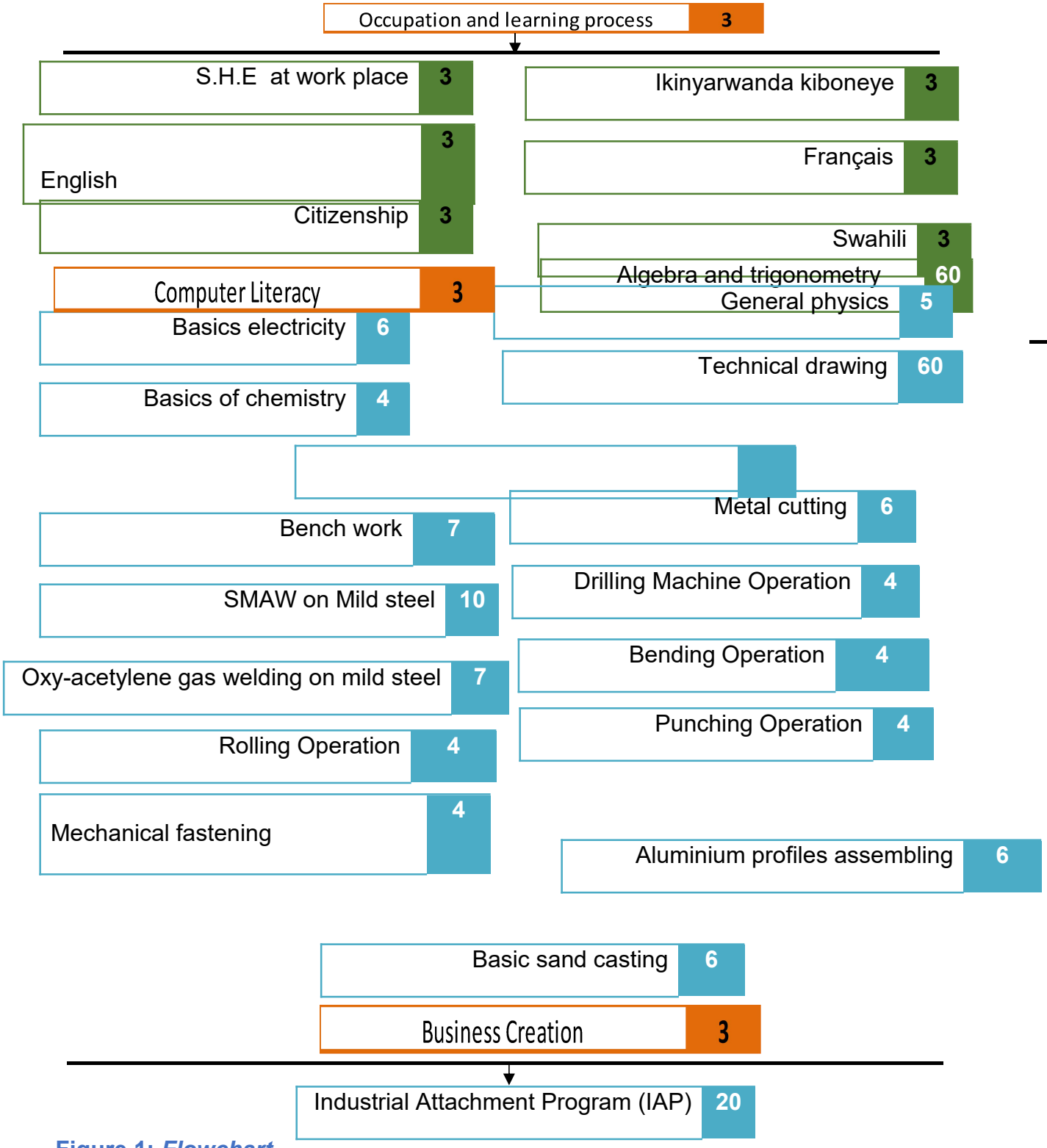


Figure 1: ***Flowchart***

ASSESSMENT GUIDELINES

1.9. 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.

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

1.10.Formative Assessment

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

A trainee to be competent for a formative 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.

1.11.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

<table>
<tr><th colspan="2">Training delivery</th><th>100%</th><th colspan="2">Assessment</th><th>Total 100%</th></tr>
<tr><td colspan="2">Theoretical content</td><td>30%</td><td rowspan="4">Formative assessment</td><td>30%</td><td rowspan="4">50%</td></tr>
<tr><td colspan="2">Practical work:</td><td rowspan="3">70%</td><td rowspan="3">70%</td></tr>
<tr><td>Group project and presentation</td><td>20%</td></tr>
<tr><td>Individual project /Work</td><td>50%</td></tr>
<tr><td colspan="3"></td><td colspan="2">Summative Assessment</td><td>50%</td></tr>
</table>

Note: 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.

GLOSSARY

Assessment: A process of gathering and judging evidence in order to decide whether a person has attained a standard of performance.
Assessment criteria: Statements which describe performances and place them in context with sufficient precision to allow valid and reliable assessment.
Best practice: Management practices and work processes that lead to outstanding or top-class performance and provide examples for others.
Competency standard: An industry-determined specification of performance which sets out the skills, knowledge and attitudes required to operate effectively in employment. Competency standards are made up of units of competency, which are themselves made up of elements of competency, together with performance criteria, a range of variables, and an evidence guide.
Competency: means the ability to apply knowledge, skills and personal, social and methodological skills in the workplace or during learning, as well as in personal and professional development. This ability or capacity is acquired through leaning, exposure to the tasks and series of training allowing one to perform specific task autonomously. Reason why in the context of the CBE Framework competencies are described as responsibility and independence.
Competency-based assessment (or CBA): The gathering and judging of evidence in order to decide whether a person has achieved a standard of competency.
Complementary competencies: Set of knowledge, skills and attitudes which are not directly linked to a specific occupation or industry, but which are important for work, education and life in general, such as communication, mathematics, organizational aptitude, and computer literacy, interpersonal and analytical competency.
Core modules: Modules leading to competencies' acquisition that an industry sector has agreed upon as essential for a person to be accepted as competent at a particular level. All modules may be core, but in many cases competency at a level will involve core modules plus optional or specialization modules. Core competencies are normally those central to work in a particular industry.
Credential: Formal certification issued for successful achievement of a defined set of outcomes, e.g. successful completion of a course in recognition of having achieved particular knowledge, skills or competencies; successful completion of an apprenticeship or traineeship.
Credit: The acknowledgement that a person has satisfied the requirements of a module.
Curriculum: The specifications for a course or subject (module) which describe all the learning experiences a learner undergoes, generally including objectives, content, intended learning outcomes, teaching methodology, recommended or prescribed assessment tasks, assessment exemplars, etc.
Evidence guide: The part of a competency standard which provides a guide to the interpretation and

assessment of the unit of competency, including the aspects which need to be emphasized in assessment, **relationships to other units, and the required evidence of competency.**
Flexible delivery: A range of approaches to providing education and training, giving learners greater choice of when, where and how they learn. Flexible delivery may involve distance education, mixed-mode delivery, online education, self-paced learning, self-directed learning, etc.
Formal education: Also formal training education or training provided in educational institutions such as schools, universities, colleges, etc. or off the job in a workplace, usually involving direction from a teacher or instructor.
General competencies: competencies correspond to larger operations that go beyond the tasks, but generally contribute to their implementation. These activities require more fundamental learning and are generally common to several tasks and transferable to many work situations.
Generic modules: Modules leading to the attainment of complementary competencies.
Informal education: The acquisition of knowledge and skills through experience, reading, social contact, etc.
Internship: An opportunity for a learner to integrate career related experience by participating in planned, supervised work.
Key competencies: Any of several generic skills or competencies considered essential for people to participate effectively in the workforce. Key competencies apply to work generally, rather than being specific to work in a particular occupation or industry. The following are key areas of competency which were developed into seven key competencies: collecting, analysing and organizing information; communicating ideas and information; planning and organizing activities; working with others and in teams; using mathematical ideas and techniques; solving problems; and using technology.
Knowledge: means the result of the adoption of information through the learning process. Knowledge is a set of facts, principles, theories and practices related to area of work or study. In CBE context lifelong learning knowledge is described as theoretical and / or factual.
Learning outcomes: are statements of what learner knows, understands and can perform, based on the completion of the learning process, defined by knowledge, skill and competency.
Learning activities: Suggested activities that can be developed during lesson planning and activity preparation. The choice of learning activities must be tailored according to group size, available material resources and communication tools.
Learning hours: Amount of hours required to acquire the competency, including the time allocated to evaluation, which is estimated between 5 and 10% of the total learning time of the competency.
Learning outcomes: Statements that indicate what learners will know or be able to do as a result of a learning activity. Learning outcomes are usually expressed as knowledge, skills, or attitudes.
Learning unit: Any of the basic building blocks of a module, which describes the key activities or the

elements of the work covered by the module

Module: A unit of training which corresponds to one competency and which can be completed on its own or linked to others.

Occupation: The principal business of one's life.

Performance criteria The part of a competency standard specifying the required level of performance in terms of a set of outcomes which need to be achieved in order to be deemed competent. It describes the quality requirements of the result obtained in labor performance.

Qualification: means the formal name for the result of a process of assessment and validation, which is obtained when a competent body determines that an individual has achieved learning outcomes to the standards laid down.

Quality assurance: The systems and procedures designed and implemented by an organization to ensure that its products and services are of a consistent standard and are being continuously improved.

Recognition of prior learning (or RPL): The acknowledgement of a person's skills and knowledge acquired through previous training, work or life experience, which may be used to grant status or credit in a subject or module.

Skills: are the ability to apply knowledge and use the principle of "know how" to perform a specific task and to solve the problem. In the context of the CBE Framework, skills are defined as cognitive (involving the use of logical, intuitive and creative thinking), practical (including physical skill and use of methods, materials, devices and instruments) and social skills (communication and cooperation skills, emotional intelligence and other).

Specific competencies: Competencies that are directly related to the tasks of the occupation in the workplace context. They refer to concrete, practical, and focused aspects

Traineeship: A system of vocational training combining off-the-job training at an approved training provider with on-the-job training and practical work experience. Traineeships generally take one to two years and are now a part of the New Apprenticeships system.

Unit of competency: A component of a competency standard. A unit of competency is a statement of a key function or role in a particular job or occupation. See also element of competency, performance criteria, range of variables.

Employable Skills for Sustainable Job Creation

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