

Republic of Rwanda



Ministry of Education

WORKFORCE DEVELOPMENT AUTHORITY – WDA



Empowering people with employable skills and entrepreneurship capacity

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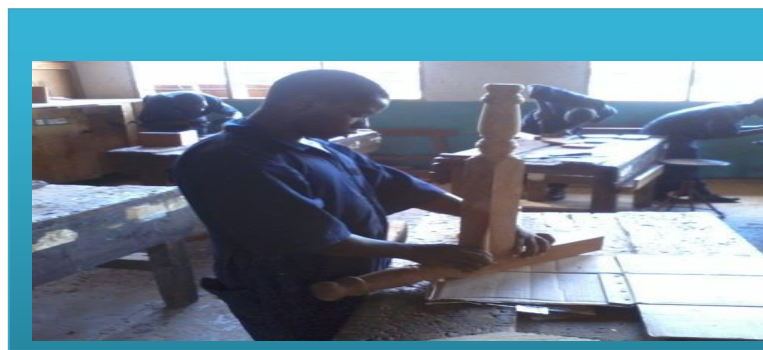
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CSTCA1001-TVET FOUNDATION CERTIFICATE IN CARPENTRY

RTQF LEVEL 1 CURRICULUM



Kigali, March 2014

ACRONYMS

CM	Complimentary modules
CDU	Curriculum Development Unit
CSTCA	Construction Carpentry
ICT	Information Communication Technology
ILO	International Labour Organization
LG	Languages
NTQF	National Technical Qualification Framework
PPE	Personal Protective Equipment
RTQF	Rwanda Technical Qualification Framework
TVET	Technical and Vocational Education and Training
TSAU	Technical Servicing Automotive
WDA	Workforce Development Authority
VIH	the Human Immunodeficiency Virus
AIDS	Acquired Immunodeficiency syndrome
STI	Sexual Transmission Infection

PDA Personal Digital Assistance

CD Compact Disc

DVD Digital Video Disc

ROM Read Only Memory

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SECTION 1: GENERAL INTRODUCTION

The curriculum presents a coherent and significant set of competences to acquire in order to perform the occupation of a basic skilled cabinet-maker. The curriculum design approach has taken 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 competences 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 are developed on the basis of this document.

The present curriculum consists of three sections. The first section 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 section deals with the qualification the learner will achieve at the end of training. The last section is the actual training package containing all the modules of the qualification.

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 competence is performed, the prerequisite competences, 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 attitudes) and the learning contents related to each learning unit. Also, learning activities and resources for learning are suggested.

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

CONCEPTS AND DEFINITIONS

Assessment: the process of gathering and judging evidence in order to decide whether a person has attained a standard of performance.

Competence: A competence is the result of a combination of knowledge and skills. This integration is demonstrated when the learner is able to achieve specific results and performances, understand what he/she does and do it autonomously.

Complementary competences: (also known as employability skills or key skills) skills which are not specific to work in a specific occupation or industry, but are important for work, education and life generally, such as communication skills, mathematical skills, organisational skills, computer literacy, interpersonal competence and analytical skills.

Core modules: describe the competencies within a competency standard that an industry sector has agreed are essential to be achieved if a person is 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 specialisation modules. Core competencies are normally those central to work in a particular industry.

Credit: the acknowledgement that a person has satisfied the requirements of a module.

Elective modules: are modules that can be used to complete a qualification and broaden the competencies of the learners. The electives are not part of the qualification and the learner does not have to succeed in the assessment of elective modules in order to progress to the next level.

General competences: competences 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: describe the complementary competences.

Internship: an opportunity for a learner to integrate career related experience by participating in planned, supervised work.

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 assumed to be in place: a requirement for the attainment of a specific module or modules prior to commencement of another module.

Learning hours : amount of hours required to acquire the competence, including the time allocated to evaluation, which is estimated between 5 and 10% of the total learning time of the competence.

Learning outcomes: are 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 elements of the work covered by the module.

Module: a unit of education or training which corresponds to one competence and can be completed on its own or as part of a qualification.

Occupation: the principal business of one's life.

Performance criteria: are descriptions of the quality requirements of the result obtained in labour performance.

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

Module code: each module has its own code for identification purpose and in order to easy transferability of credits.

SECTION 2 : QUALIFICATION

TITLE OF THE QUALIFICATION:	TVET Foundation Level
LEVEL:	1
CREDITS:	99
SECTOR:	CONSTRUCTION
SUB-SECTOR:	CARPPENTRY
ISSUE DATE:	March 2014
REVIEW DATE:	

PURPOSE

This qualification provides the skills, knowledge and attitudes for a learner to be competent in limited range of skills required to carry out simple tasks. Work would be undertaken in various carpentry enterprises where cabinet making activities are carried out. Learners may work under close supervision in a structured context.

RATIONALE OF THE QUALIFICATION

Rwanda is striving to build a knowledge-based economy, with a particular emphasis on creating 200, 000 off-farm jobs a year. The focus is to reduce under-employment substantively, particularly in rural areas, and urban unemployment with rising basic vocational skills. To rationalize this, the government of Rwanda through WDA has put in place a tool, the TVET qualification framework, which comprises 7 levels that focus on job-oriented and transferable skills to increase productivity and employability. It is in this regard that this qualification –level one- emphasizes on active population, be it illiterate or literate in order to equip them with the necessary skills to meet labour demand in key economic sectors. This qualification constitutes a baseline for further learning in TVET, especially in the carpentry domain. The individuals with this qualification can enter the TVET Basic Vocational Skills Level in order to be equipped with the necessary skills to enable them to pursue the TVET Certificate I and work as a carpenter.

Learners with this qualification are able to :

1. Describe the occupation and the learning process
2. Apply safety, health and security procedures and maintain environment in the workplace
3. Communicate effectively in the workplace
4. Apply computer skills
5. Use wood working machines
6. Use carpentry hand tools
7. Apply timber technology
8. Estimate cost
9. Apply basic mathematics
10. Perform basic drawing
11. Construct non upholstered furniture
12. Create and manage a small business
13. Integrate the workplace

ENTRY REQUIREMENTS TO THE QUALIFICATION

No entry requirements needed to this qualification as long as the person has the ability to acquire the competences. Only the consideration for age limitation, as the Rwandan labour law stipulates that nobody should be employed under 16 years old. (Direct Access)

EMPLOYABILITY AND LIFE SKILLS

Through the generic modules, individuals with this qualification have acquired the life skills and employability skills that are described in the table below.

Personal development	- determine own personal values, strengths and areas of challenge or weakness and are able to effectively use or address them; - develop, implement and evaluate progress toward personal goals; - Identify own preferred way of learning, take initiative for learning new skills, and know how to monitor own learning progress.
Interpersonal communication	- communicate and get along well with others, in a variety of settings and for a range of purposes; - speak and listen actively and appropriately, one-on- one and in groups; - cooperate and work effectively within a group; - provide good customer service.
Health, hygiene and safety	- be aware of the standard, health and safety practices and regulations in the workplace; - maintain hygiene and personal grooming; - identify unsafe situations; - respond to emergencies and accidents at work; - prevent HIV/AIDS and sexual violence.
Environment sustainability	- respect the environmental regulations in Rwanda; - dispose of waste ; - recycle waste ; - report environmental hazards to appropriate person.
Integration of the workplace	- be aware of how to apply for and present themselves for employment; - demonstrate good time management and show up for work on time; - demonstrate behaviour and attitudes that are appropriate for the workplace and informed that workplaces have policies and procedures that need to be followed; - take initiative and responsibility for own work and know how to work under and respect supervision; - Determine the rights and responsibilities of workers and employers and explore ways to exercise rights in the workplace.

Financial fitness	- recognize principles and tools behind personal and family money-management; - identify the importance of saving and reducing expenses; - organize and manage personal and household finances; - create a personal budget and think strategically about their finances; - evaluate their options for earning money and are familiar with ways to establish and maintain personal credit; - be aware of the risks associated with credit.
Management of a small business	- simulate income-generating activities with the basic cycles of business; - plan for income-generating activity expenses and loan repayments; - keep basic business financial records; - evaluate the risks and opportunities of using credit in income generating contexts; - distinguish between money to be used for investment into own income-generating activities, for family expenses, and for savings; - distinguish the different market actors.
Computer skills	- operate a computer - use word processing applications in the production of workplace or personal documents - create and use spreadsheets and charts through the use of spreadsheet software - send, receive and manage electronic mail (email). -
Language skills	- communicate orally to simple discussion in English language in familiar context.

MODULES AND QUALIFICATION RULES

To achieve the *TVET foundation level in Construction: Carpentry*, 13 modules must be completed:

- 6 generic modules
- 8 mandatory modules

Module code	Module types and title	Credit Value
Generic modules		
CM101	Occupation and learning process	2
CM102	Safety, security and environment in the workplace	3
CM104	Computer literacy	3
CM103	Communication in the workplace	3
CM106	Entrepreneurship	3
CM105	Oral English communication	3
Mandatory modules		
CSTCA101	Timber technology	5
CSTCA102	Hand tools	7
CSTCA103	Woodworking machines	11
CSTCA104	Basic technical drawing	5
CSTCA107	Cost estimation	5

CSTCA108	Basic workplace calculations	8
CSTCA105	Non upholstered furniture	12
CSTCA106	Internship	30

SECTION 3: TRAINING PACKAGE

The training package includes the sequencing of module learning, the description of each module, the course structure, and the assessment specifications.

COMPETENCES CHART

The competences chart is a table that presents an overview of the specific competences, the general competences, the work process and the time allocated to each competence. This table provides an overall view of the competences of the training programme and allows to identify the logical sequence of the learning of these competences.

The competences chart shows the relationship between general competences and specific competences that are particular to the occupation, as well as the key stages of the work process. It shows the links between the elements in the horizontally axis and those vertical axis. The symbol (○) marks a relationship between a general competence and specific competence. The symbol (△) indicates a relationship between a specific competence and a step in the process of work. When the symbols are darkened, it indicates that the link is taken into account in the description of the specific competence.

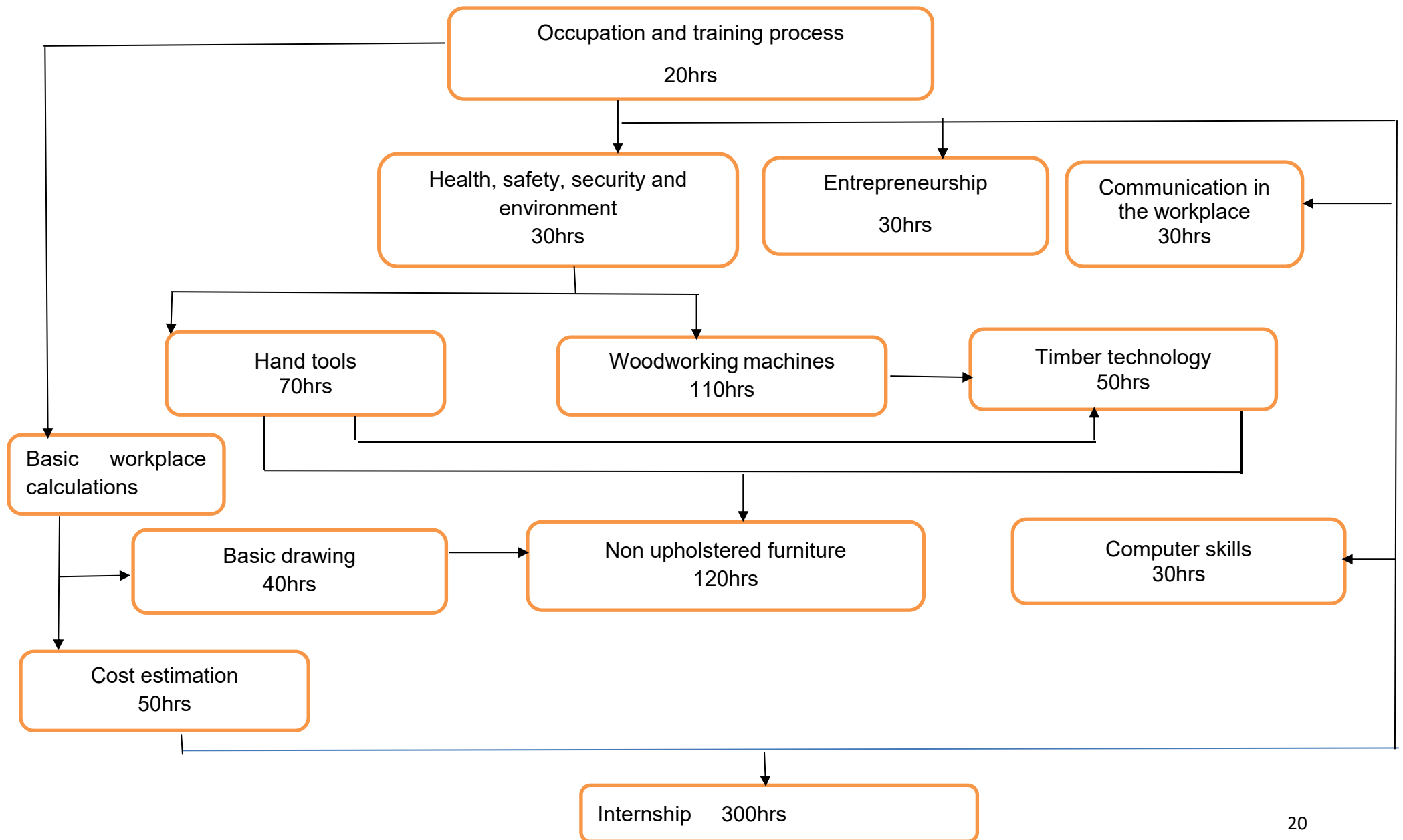
The competences chart allows the trainer to consider the complexity of the competences in the organization of the progress of learning. Therefore, the vertical axis shows the specific competences in the order they should be acquired. This is the starting point of the presentation of the competences in the flowchart presented in the following pages.

Basic skilled Cabinet maker		Level of complexity	Duration	PROCESS								GENERAL COMPETENCES						
				Sketch the building lines	Prepare the workplace, tools and equipment	Prepare materials	Perform assembling	Perform finishing				Apply timber technology in the workplace	Communicate effectively on the workplace	Perform Basic drawing	Cost estimation	Use carpentry hand tools	Create and Run a small business	Total Duration
SPECIFIC COMPETENCES	NUMBER	NUMBER	Level of complexity	Duration					2	12	3	6	4	11	7		10	
	Duration								30	80	50	30	50	50	70		30	500
1	Describe the occupation and the training process	2	20						○	○	○	○		○	○		○	
8	Construct non upholstered furniture	4	120	▲	▲	▲	▲	▲	●	●	●	○	●	●	●		○	
6	Operate wood working machines		110						●	●	○	●	●	●	●			
13	Integrate the workplace	5	300	▲	▲	▲	▲	▲	●	●	●	●	●	●	●		○	
	Total Duration		490														990	

FLOWCHART

The flowchart of sequencing of learning is a schematic representation of the order of acquisition of the competences. 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.



CM101 OCCUPATION AND LEARNING PROCESS		
Competence : Describe the occupation and the learning process		
RTQF LEVEL: ALL	CREDITS: 3	LEARNING HOURS : 30
SECTOR: All	SUB-SECTOR: All	
ISSUE DATE: January 2012	REVIEW DATE:	

PURPOSE STATEMENT

This module is covered first in all qualifications. It allows the learner to get to know the other participants to the training programme and to understand himself/herself as part of a team. Also, the trainee will develop a comprehensive and clear vision of the occupation and the training programme. The module will allow the participant to avoid mistakes of career guidance and confirm or deny his/her choice from the start.

The training and learning methods are presented to the learner. This approach encourages greater motivation and, subsequently, a better integration of various learning.

LEARNING ASSUMED TO BE IN PLACE

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning unit	Performance criteria
By the end of the module, the learner will be able to :	
1. Understand oneself as part of a team and respect the rules of the workshop	1.1 Know each other. 1.2 Be part of a team and behave accordingly. 1.3 Rules and requirements are agreed upon and known.
2. Learn about the occupation and the training process	2.1 The occupation and the industry sector are understood. 2.2 The training required is known. 2.3 The training organisation is known.
5. Reflect upon the teaching and learning methods	3.1 The active and participatory learning methods are applied. 3.2 The assessment method is understood.

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.

Learning unit 1: Understand oneself as part of a team and respect the rules of the workshop

Learning hours: 6

Learning outcomes	Contents	Learning activities	Resources
1.1 Introduce oneself and get to know one another	• Introductions • Expectations about the training	○ Introduction ○ Game ○ Presentation of trainees' expectations	
1.2 Work as a team	• Working as a team • Building trust	○ Games ○ Group discussions	
1.3 Setting rules and responsibilities	• Rules of the classroom • Group responsibilities	○ Brainstorming ○ Discussions	

Learning unit 2: Learn about the occupation and the training process

Learning hours: 22

Learning outcomes	Contents	Learning activities	Resources
2.1 Describe the occupation and the industry sector	• Characteristics of the occupation • Place of the occupation in the industry sector • Working conditions	○ Group discussion ○ Personal research ○ Visit of a business in the neighbourhood	- Pictures of people in working situation - Documents describing the occupation - Documents describing the industry sector
2.2 Obtain an understanding of the goals of the training programme	• Content of the training programme (modules) • Importance of the initial and continuous training	○ Presentation by the teacher ○ Research	- Overview of the training programme - Testimonies of people performing the occupation
2.3 Have a common understanding of the training	• Presentation of the timetable • Presentation of the classrooms	○ Visits of the premises of the school.	- School year calendar - Timetable

organisation	and workshops		
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Learning unit 3: Reflect upon the teaching and learning methods

Learning hours: 2

Learning outcomes	Contents	Learning activities	Resources
3.1 Understand the teaching and learning methods	Overview of the active and participatory teaching and learning methods	- Experience sharing. - Presentation by the trainer	
3.2 Understand the assessment methodology	Assessment methodology and its purpose	Explanation by the trainer	

Assessment Guidelines

To pass this module, the student has to complete:

1. Self-assessment form
2. Tree drawing
3. List of 5 goals
4. Skills and qualities assessment
5. Steps to reach goals
6. Learning goals and steps
7. Business visit's form

Elements 1 to 6 are available in the Work Readiness Training Programme – Participant's Manual

Suggestion for the business visit's form:

1. What interested you during the visit?
2. What surprised you?

3. What did you like?
4. What are your expectations?
5. What is your opinion on:
 - The working conditions
 - The training duration
 - The economic opportunities motivation

Reference books :

1. Work Readiness Training Programme – Trainer’s Manual, Akazi Kanoze – Youth Livelihoods Project.
2. Work Readiness Training Programme – Participant’s Manual, Akazi Kanoze – Youth Livelihoods Project.

CM302 HEALTH, SAFETY, SECURITY AND ENVIRONMENT AT THE WORKPLACE		
Competence : Maintain health and safety, and sustain environment at the workplace		
RTQF LEVEL: 1	CREDITS: 1	LEARNING HOURS : 30
SECTOR: All	SUB-SECTOR: All	
ISSUE DATE: February 2014	REVIEW DATE:	

PURPOSE STATEMENT

This module describes the skills, knowledge and attitudes required to respect and apply personal and workplace hygiene. It also covers the personal protective attitudes required in the sector.

Moreover, the module describes the skills, knowledge and attitudes required to follow safety and security procedures, identify hazards, assess the associated safety risks and take measures to eliminate or control and minimise the risk.

Finally, the learner learns how to participate in environmentally sustainable work practices.

LEARNING ASSUMED TO BE IN PLACE

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning unit	Performance criteria
By the end of the module, the learner will be able to :	
1. Maintain personal health and hygiene	1.1 Hygiene of the entire body and dressing code according to the standards are respected. 1.2 Clean materials and clothes are used and hygienic practices are respected to ensure that no cross-contamination of other items occurs. 1.3 The proper work clothing or Personal Protective Equipment is worn to perform work.
2. Prevent HIV/AIDS and sexual violence	2.1 Reproductive health is understood. 2.2 Transmission, prevention and treatment of HIV/AIDS and other STI's are understood. 2.3 Sexual violence is understood and can be avoided.
3. Address unsafe situations on the job	3.1 Appropriate methods are used to identify actual or foreseeable hazards that have the potential to harm the health, safety and security of workers or anyone else in the workplace.

	3.2 The work area is free from hazards. 3.3 Control measures are implemented according to individual level of responsibility or appropriate personnel is referred to for permission or further action.
4. Respond appropriately to emergencies at work	4.1 Emergency and potential emergency situations are recognised promptly and required actions are determined or taken within the scope of individual responsibility. 4.2 Appropriately response to emergencies is provided. 4.3 Assistance from colleagues or other authorities is sought promptly and when appropriate.
5. Sustain environment	5.1 National and enterprise environmental regulations are understood. 5.2 Procedures to ensure compliance are followed. 5.3 Identify and report workplace environmental hazards to appropriate personnel.

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.

Learning Unit 1: Maintain personal hygiene

Learning hours :10

Learning Outcome	Content	Learning Activities	Resources
1.1 Maintain good health	• Importance of maintaining good health • How to maintain good health: - Balance diet - Enough sleep - Periodical medical checkup - Sports	○ Brainstorming ○ Group discussion	- Flipcharts - Markers - Flipcharts stand - Training room
1.2 Maintain hygiene	• Importance of Body Cleanliness • Body Cleaning Products and equipment • Body cleanliness practices	○ Brainstorming ○ Documentary research and group discussion ○ Individual practice	- Water - Soaps - hand wash Basin - Hand towels - Equipped wash room
1.3 Wear work clothing or Personal Protective Equipment	• Composition of work clothing or Personal Protective Equipment • Proper Maintenance of work clothing	○ Individual practice	- work clothing or Personal Protective Equipment

Learning unit 2: Prevent HIV/AIDS and sexual violence.

Learning hours: 5

Learning outcomes	Contents	Learning activities	Resources
2.1 Understand reproductive health	• Puberty and body change • Female reproduction • Male reproduction • Consequences of early pregnancy	○ Small group discussions ○ Pair discussion	
2.2 Be sensitized to HIV /AIDS	• Definition • Transmission • Prevention (ABC) • Treatment • Other STI's • Stigma and VCT	○ HIV game ○ Questions and answers ○ True or false ○ Group work ○ Demonstration (condom use) ○ Role play (condom negotiation)	- Scenarios for HIV game - True and false statements
2.3 Be sensitized to sexual violence	• Definition of sexual violence • Definition of rape • Consequences of sexual violence	○ Story telling ○ Group discussion ○ Large group discussion	

Learning unit 3: Address unsafe situations on the job.

Learning hours: 5

Learning outcomes	Contents	Learning activities	Resources
3.1 Identify the primary hazards found in workplaces	• Types of hazards in the workplace (safety, chemical, biological, other health hazards)	○ Brainstorming ○ Group work ○ Discussion	Pictures
3.2 Understand why the situation or substance is hazardous	• Hazardous situations • Dangerous substances		

3.3 Identify the best ways to address specific problem situations	Control methods (remove hazard, work policies and procedures, protective equipment)	- Brainstorming - Discussion	Stories and pictures
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Learning unit 4: Respond appropriately to emergencies at work.

Learning hours: 5

Learning outcomes	Contents	Learning activities	Resources
4.1 Identify emergencies	- Definition of emergency - Types of emergencies in a workplace	- Presentation by the trainer - Experience sharing	
4.2 Handle emergencies	Possible responses to emergencies in the workplace	- Disaster Blaster Game - Role play	- Disaster Blaster Game board, paper, marker, dice, game cards
4.3 Manage safety equipment	- Safety equipment identification - Fire extinguisher - Fire Horse - Fire Blanket - First aid kit - Fire triangle - Water fire extinguisher - Safety equipment usage	- Brainstorming on safety equipment - Demonstration on safety equipment usage - Organize safety drills - Compile activities reports	- Fire extinguisher - Fire Horse - Fire Blanket - First aid kit - Fire triangle - Water fire extinguisher

Learning unit 5: Sustain environment

Learning hours: 5

Learning outcomes	Contents	Learning activities	Resources
5.1 Understand the importance of environment sustainability	• Natural process that takes place in the environment • Awareness of the interdependence of all species • Attitude towards enjoying the benefits of nature without encroaching upon the rights of others.	○ Brainstorming ○ Group work ○ Role play	- Reference books - Role play scenario
5.2 Identify environmental regulations in Rwanda	• Law determining the modalities of protection, conservation and promotion of Environment in Rwanda. • Law relating to the prohibition of manufacturing, importation, use and sale of polythene bags in Rwanda	○ Group work ○ Plenary discussion	- Environmental regulations
5.3 Identify types of waste	• Non-hazardous waste • Hazardous waste	○ Group work ○ Research ○ Visit of an enterprise	- Reference books - Pictures - Videos
5.4 Follow procedures to sustain environment	• Waste reduction • Reuse of waste • waste recycling • reporting hazards to appropriate person	○ Brainstorming ○ Group discussion ○ role play	- sustain environment manual and procedures

Assessment Guidelines

To pass this module, the student has to complete:

1. The following elements of the portfolio:

1. Self-assessment
2. Writing Space: Putting Safety Tips into Practice
3. Session 2 Writing Space: Dealing with Emergencies
4. Show What You Know Observation Form (filled out by trainer for each team)
5. Habits for Good Health

Those documents are found in the Module 5, Safety and Health at work, of the **Work Readiness Training Programme – Participant’s Manual, Akazi Kanoze – Youth Livelihoods Project**

1. **An integration-situation related to his/her future occupation or trade, with a score equal or superior to the passing mark defined (recommended passing mark for this module: 70% or 15/20)**

SUGGESTIONS OF SITUATIONS:

ICT

1. A director of an Enterprise of computer lab would like to protect lab users and is coming to you with pictures of his computer lab, which show various safety and health related problems. Identify the relevant problems that are portrayed by the shown pictures.
2. Write a 1 page set of general instructions related to health (at least 10 instructions), safety (at least 3) and security (at least 2) in a computer lab.

Resources:

- Drawing, pictures or video of a computer lab showing at least 4 safety and health related problems.
- Paper
- Pen

Criteria	Indicators
Identification of the safety hazards from the picture (≥3)	Problem 1 identified Problem 2 identified Problem 3 identified Problem 4 identified, etc.
Health precautions (≥3)	Example of health related instructions (other possible answers should be considered by the examiner) ➤ Don't smoke in the lab ➤ Maintain cleanliness in the room ➤ Provide comfortable furniture for the users: height of the chair should be adjustable so the user can sit with eye level on top of the screen ➤ Users should take regular breaks ➤ Maintain a conducive environment (temperature between 18 and 24 degrees Celsius, with humidity between 40 per cent and 60 per cent, oxygen, light, calm) in the room ➤ Protect users from eye damage (don't stare directly at the beam of a projector)
Safety precautions (≥7)	Example of safety related instructions (other possible answers should be considered by the examiner) ➤ Keep emergency exit clear. ➤ Keep carbon dioxide fire extinguishers near any ICT equipment. ➤ Maintain adequate ventilation as fluids used for cleaning and in some reprographic processes are flammable ➤ Eat and drink carefully, be aware of accidental damage caused by spilt liquid ➤ Cover and secure power cables ➤ Replace damaged plugs ➤ Check regularly plugs, leads and other electrical equipment. ➤ Avoid cluttered cables ➤ Avoid water flooding ➤ Protect the equipment from dust

	➤ Insure the equipment ➤ Use mouse pads ➤ Protect computers by UPS
Security precaution (≥1)	Example of security related instructions (other possible answers should be considered by the examiner) ➤ Use of antivirus ➤ Protection of sensitive contents

Construction

TUBEHONEZA Construction Company has contracted to build a 14m x 15m home house in Gasabo district within five months. The study showed that the house will be near the road and 50 workers, female and male, will be involved. Workers will take lunch on construction site.

As one of employees, on 1 page maximum, you are asked to advise the site manager as well as your colleagues on health, safety and security practices so that the work can be accomplished as agreed. You have 40 minutes maximum. For each piece of advice, give precise examples.

RESOURCES

- Papers
- Pen

Criteria	Indicators	Scoring
Security precautions	Establish and communicate rules on the workplace	=5/5
	Provide protective equipment	
	Store equipment, tools and material	

	Fence the site	
	Use protective equipment	
Safety precautions	Identify hazards	≥2/2
	Address unsafe situations	
Health precautions	Provide clean water	≥4/6
	Have good diet	
	Use clean water	
	Provide waste disposal	
	Use toilet	
	Sensitize to HIV/AIDS prevention	
Precision	Relevant examples of security precautions	=3/3
	Relevant examples of safety precautions	
	Relevant examples of health precautions	

Reference books :

1. Work Readiness Training Programme – Trainer’s Manual, AkaziKanoze – Youth Livelihoods Project.
2. Work Readiness Training Programme – Participant’s Manual, AkaziKanoze – Youth Livelihoods Project.
3. HARE : Prevention of HIV and AIDS in Rwanda through education, Irish Aid and VSO.

CCM103 WORKPLACE COMMUNICATION SKILLS		
Competence : Communicate effectively at workplace		
RTQF LEVEL: 1	CREDITS: 3	LEARNING HOURS : 30
SECTOR: Construction	SUB-SECTOR: welding	
ISSUE DATE:	REVIEW DATE:	

PURPOSE STATEMENT

This module describes the skills and knowledge required to communicate and get along well with others, in a variety of settings and for a range of purposes. The module will allow the participant to speak and listen actively and appropriately, one-on-one and in groups, to cooperate and work effectively within a group, to lead a team, to provide good customer service and write simple reports.

LEARNING ASSUMED TO BE IN PLACE

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Elements of competence: By the end of the module, the trainee will be able to :	Performance criteria
1. Listen and speak effectively	1.1 Strategies for effective listening are applied. 1.2 Instructions are adequately interpreted and followed. 1.3 Clear and accurate information and instructions are provided to colleagues.
2. Cooperate and work as a team member	2.1 Team objectives are reached through effective cooperation. 2.2 Diversity of team members is respected. 2.3 Lead a team efficiently 2.4 Demonstrate problem solving and decision making skills
3. Apply customer care	3.1 Importance and principles of good customer service are understood. 3.2 Quality service is provided. 3.3 Clear verbal information is provided to customers face to face or on the telephone. 3.4 Conflicts with customers are handled politely and adequately.

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.

Learning hours: 6

Learning unit 1: Listen and speak effectively

Learning outcomes	Contents	Learning activities	Resources
1.1 Apply effective listen skills & strategies	• Effective listening skills & strategies • Assess one's listening skills • Model good listening skills	○ Role play ○ Observing role play ○ Feedback from observers ○ discussion	- Role play scenarios - List of effective listening skills & strategies - Effective Listening Observation Form
1.2 Give and receive instructions	• Importance of giving clear, concise instructions • Formulation of instructions • Strategies to ask questions for clarification	○ individual work ○ group discussion	
1.3 Identify non-verbal communication signs and the impact on people's perceptions	• Importance of non-verbal communication • Impacts of non-verbal communication on how we give information and how we listen.	○ pair work ○ large group discussion	
1.4 Demonstrate effective speaking skills	• Effective speaking skills and strategies	○ small group work ○ practice presentations ○ large group discussion	- List of Effective Speaking Skills & Strategies - Speaking Scenarios for group work - Effective Speaking Observation Form

Learning unit 2: Cooperate and work as a team member

Learning hours: 8

Learning outcomes	Contents	Learning activities	Resources
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2.1 Identify the different personalities	• Different personalities and approaches that individuals bring to a group	○ Self-assessment ○ large group activity (inner/outer circles) ○ Discussion	- Working in Groups Self-Assessment - Cooperating with Others Roles - Elements of an Effective & Cooperative Team Member
2.2 Handle different personalities in a group	• Strategies on how to handle different personalities in a group		
2.3 Cooperate with others to reach the same objective	• Characteristics of an effective and cooperative team member	○ Large group activity ○ Large group discussion ○ Individual reflection/journal writing ○ Pair work	
2.4 Lead a team efficiently	• Qualities of an effective leader • Different leadership styles • Appropriate leadership style in a given context • Strategies to lead a team efficiently	○ large group discussion ○ small group work ○ role plays ○ small group activity	- Role play scenarios
2.5 Demonstrate problem solving and decision making skills	• challenges and dynamics amongst people during the problem solving process • steps of problem solving to work and community related problems • Communication as a tool for problem solving	○ Large group activity ○ pair sharing ○ small group work ○ large group discussion ○ Task leadership competition	- Scenarios for problem solving activity

Learning unit 3: Apply customer care

Learning hours: 10

Learning outcomes	Contents	Learning activities	Resources
3.1 Understand the importance of good customer care	• Definition of customer service • Levels of customer service • Customer care principles • Importance of customer care	○ Experience sharing ○ Brainstorming Presentation by trainer	
3.2 Provide exceptional quality service	• Basic customer needs • Service to meet basic customer needs • Definition of customer's perception • Meeting and exceeding expectations • Getting feedback on the provided service	○ individual reflection ○ large group discussion ○ role play	
3.3 Communicate effectively with customers by telephone and face to face	• Telephone tips • Recording a telephone message	○ large group discussion ○ skit ○ pair role plays	- Role Play scenarios for Communicating with Customers
3.4 Handle conflict with difficult customers	• Definition of conflict, conflict resolution/management • Steps of conflict management with difficult customers	○ individual reflection ○ Brainstorming ○ large group discussion ○ role play	

Assessment Guidelines

To pass this module, the student has to:

Complete the portfolio, which includes:

Self-assessment form
Effective Listening Observation Form
Effective Speaking Observation Form

Session 1 Writing Space: listening and speaking strengths, weaknesses, ways to improve
Working in Groups Self-Assessment

Session 2 Writing Space: ways to improve cooperating and working in a group
DEMONSTRATE COMMUNICATION SKILLS IN A SITUATION related to his/her future occupation or trade, AND OBTAIN a score equal or superior to the passing mark defined (recommended passing mark for this module: 70% or 15/20)

SUGGESTED SITUATION (HOSPITALITY)

You are a chef de cuisine at Beausejour hotel, and you received an order of spaghetti a la Napolitaine for 4 people from customers who are in a hurry. You oversee three people: the person in charge of the mise en place, the cook and the dish washer.

As the chef, you give instructions to your team to prepare the food and supervise the work. The order should be ready within 30min.

Criteria	Indicators
Relevance	Time is respected

	The required covers are communicated The required order is communicated (type of meals/order are specified)
Quality of process	The information is received and well understood by the candidate Responsibilities are assigned The clarifications are given according to staff' learning style (reading, speaking, listening, doing) The follow up is well done (e.g. identification of the problem, activity tracking) The problem is solved
Quality of information	The information is given precisely The information is short and clear The technical terms are used accordingly The information is given directly The information is given timely/immediately

CM104-COMPUTER APPLICATIONS		
Competence : Use basic computer applications		
RTQF LEVEL: 3	CREDITS: 3	LEARNING HOURS : 30
SECTOR: All		SUB-SECTOR: All
ISSUE DATE: February 2013		REVIEW DATE:

PURPOSE STATEMENT

This module describes the skills and knowledge required to operate a computer, to use word processing applications in the production of workplace documents, to create and use spreadsheets and charts through the use of spreadsheet software and to send, receive and manage electronic mail (email), as well as to collaborate online using chat rooms and instant messaging.

LEARNING ASSUMED TO BE IN PLACE

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning units By the end of the module, the trainee will be able to :	Performance criteria
1. Apply computer fundamentals	1.1. Adequate identification of Various connectors and ports 1.2. Proper use of different I/O devices 1.3. Proper use of Desktop's elements 1.4. Proper scanning of Viruses in the computer and Different Storages Devices
2. Use a current word processing package	2.1. Adequate text formatting 2.2. Proper table creation and editing 2.3. Proper text editing 2.4. Proper printing 2.5. Correct saving 2.6. Proper insertion of header, footer and footnotes
3. Use current spreadsheet package	3.1. Adequate use of basic excel tasks 3.2. Proper management of sheets in excel workbook 3.3. Adequate Formatting of cells and their contents 3.4. Correct use of functions and performance of mathematical operations 3.5. Proper Excel worksheet Printing

4. Use Internet/Intranet (Outlook)	4.1. Correct Definition and explanation a website 4.2. Adequate Interaction through instant messaging (Chatting) 4.3. Adequate use of search Engines (example Google) 4.4. Adequate Browsing of internet using the hyperlinks 4.5. Correct downloading and uploading of files using internet
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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.

Learning Unit 1: Apply computer fundamentals			Learning Hours: 10
Learning outcomes	Contents	Learning activities	Resources
1.1. Apply Computer basics	• Computer Definition • Types of computers ✓ Laptops ✓ Desktops ✓ Palm tops ✓ PDA (Personal Digital Assistance) • Computer Hardware Memory	○ Open a computer case and Observe different types of memory ○ Group Discussion on each type of memory	- Computer Lab - Computer Tool Kit - CD, DVDs, Diskettes - White Board - Markers

	• Definition • Role of Memory • Features ✓ Capacity ✓ Speed ✓ Non Volatility • Types of Memory ✓ ROM (Read only memory) ✓ RAM (Random access memory) ✓ External/Internal memories (Hard disk, diskette, CD, Flash disk, etc.)		
1.2. Identify Various connectors and ports	• Connectors and ports ✓ Definition • I/O (Input and Output) Ports and connectors ✓ Serial ports ✓ Parallel ports ✓ USB ✓ Keyboard, Mouse connectors ✓ VGA Connectors	○ Observe different connectors as well as input and output ports ○ Exercises on ports identifications	- Computer Lab - Computer Tool Kit - CD, DVDs, Diskettes - Different types of Cables, Different types Connectors - White Board - Markers
1.3. Use different I/O devices	• Peripherals ✓ Definition ✓ Categories I/O devices ✓ Input devices (mouse, Keyboard, scanner, CD/DVD-ROM and diskettes drivers, etc) ✓ Output devices (Monitor, Diskette,	○ Practical exercises on connecting the mouse, keyboard. Monitor to the CPU (Central processing unit)	- Computer Lab - Computer Tool Kit - CD, DVDs, Diskettes - Printer - Scanner - White Board

	CD/DVD-ROM Writer, Printer, etc) ✓ Types of keyboards ➤ AZERTY ➤ QWERTY		
1.4. Use Desktop's elements	• Windows and its components: ✓ Desktop ✓ Task bar ✓ Start menu ✓ Minimize, Maximize, Close buttons ✓ My Computer	○ Brainstorming on Desktop's elements ○ -Use the desktop, the tasks bar and the start menu	- Computer Lab - Projector
1.5. Scan Viruses in the computer and Different Storages Devices (Flash disk, External Hard disk)	• Antivirus definition • Importance of antivirus • Functionality • Different Types of antivirus ✓ Norton ✓ Kaspersky ✓ Symantec • Storages to be scanned ✓ Flash disk ✓ External hard disk ✓ Memory card ✓ Computer hard disk	○ Brainstorming the use of antivirus ○ Practical exercises on Scanning viruses ○ Compile activities reports	- Computer Lab - Flash disks - External Hard disk - CDs, DVDs - Antivirus - White Board - Markers

Learning Unit 2: Use a word processing package

Learning Hours: 5

Learning outcomes	Contents	Learning activities	Resources
1.1. Format a text	• Style,Font,Size,Colour • Paragraph • Column • Tabulation • Paragraph spacing • Inserting symbols:Special characters,bullet and numbering • Borders and shading,header and footer.	○ Reproduce document already formatted ○ Various exercises to familiarize with formatting a text.	- Computer Lab With Current Word processing Package installed in each computer - Projector - White Board - Markers
1.2. Create and edit a table	• Inserting a table • Inserting a column • Inserting a row • Deleting table • Deleting row • Deleting column • Merging cells • Splitting cells • Drawing a table • Table auto format • Formula	○ Practical exercises on creating, editing and handling a table	- Computer Lab With Current Word processing Package installed in each computer - Projector - White Board

1.3. Edit document (Text)	• Search/Find-Replace • Deleting a range of text • The undo command • Spelling and grammar • Synonyms	○ Brainstorming Editing text ○ Perform practical exercises on the various tips (options) ○ compile activities reports	- Computer Lab With Current Word processing Package installed in each computer - Projector - White Board - Markers
1.4. Print document	• Page setup • Print preview • Print dialog box • Selecting printer name • Printer options • Printing one or more copies • Printing in black/white or color • Print page ranges	○ Exercises on printing one or more copies of a colored document, in black and white ○ printing in landscape, portrait	- Computer Lab With Current Word processing Package installed in each computer - Printer - Projector
1.5. Save documents	• File management ✓ Creation of files ✓ Creation of Folders ✓ File Naming ✓ File Formats	○ Practical Exercises on creation of files, folders and file Saving ○ Compile activities reports	- Computer Lab With Current Word processing Package installed in each computer - Projector
1.6. Insert Header, Footer and footnotes	• Footnotes • Header and Footer ✓ Automatic page numbering ✓ Total number of pages ✓ Automatic date ✓ Automatic authors name	○ Exercises on footnotes ○ Create a document containing several pages ○ With elements such as the page number, date automation. ○ practical exercises.	- Computer Lab With Current Word processing Package installed in each computer - Projector

Learning Unit 3: Use spreadsheet package			Learning Hours: 9
Learning outcomes	Contents	Learning activities	Resources
3.1. Use Some basic excel tasks	• Basic excel tasks ✓ Open ✓ Close ✓ New document ✓ Undo ✓ Save, save as.... ✓ Sheet ✓ Selecting a cell ✓ Validating a cell ✓ Deleting cell contents ✓ Modifying cell contents ✓ Selecting group of cells ✓ Increase and reduce the cell size ✓ Delete row and column ✓ Duplicate cell	○ Practical exercises on the use of basic excel tasks ○ Compile activities reports	- Computer Lab With Current spreadsheet package installed in each computer - Projector
3.2. Manage Sheets in excel workbook	• Selecting a sheet • Renaming a sheet • Insert new sheets • Moving a sheet in a workbook • Deleting a sheet	○ Practical exercises ○ On Managing sheets in excel workbook	- Computer Lab With Current spreadsheet package installed in each computer - Projector
3.3. Format cells and their contents	• Formatting text and cells ✓ Choosing font, size, colour ✓ Adjusting Row height	○ Practical exercises in groups and individual homework on formatting cells	- Computer Lab With Current spreadsheet package installed in each

	✓ Alignment of cell ✓ Number format ✓ Inserting rows ✓ Merging cells ✓ Creating borders ✓ Patterns	○ Compile activities reports	- computer - Projector
3.4. Use some functions and perform mathematical operations	• Numbers and Mathematical calculations ✓ Addition ✓ Multiplication ✓ Division ✓ Subtraction ✓ AutoSum ✓ Function ➤ Average ➤ Minimum ➤ Maximum	○ Practical exercises in groups and individual homework on formatting cells ○ Compile activities reports	- Computer Lab With Current spreadsheet package installed in each computer - Projector
3.5. Print an excel worksheet	• Page setup • Print preview • Print dialogue box • Print options • Print one or more copies • Print in black/white or color • Print page ranges • Printing a selection	○ Print one or more copies of a worksheet ○ Print colour or white and black worksheet ○ practical exercises (individual and in group) ○ print horizontally/vertically	- Computer Lab With Current spreadsheet package installed in each computer - Projector - Printer

Learning Unit 4: Use Internet/Intranet (Outlook)			Learning Hours: 6
Learning outcomes	Contents	Learning activities	Resources
4.1. Define and explain a website	• Introduction ✓ World wide web ✓ Web page ✓ Web site	○ Visit web sites and browse different pages. ○ Group discussion based on observation	- Internet Connection - Computer Lab - projector
4.2. Interact through instant messaging (Chatting)	• Definition • Steps to create a chat account • Chatting options ✓ Instant messaging with or no web cam ✓ Calling ✓ Sending files	○ Group Discussion on Interacting through instant messaging ○ Exercises on chatting in groups ○ Compile activities reports	- Internet Connection - Computer Lab - projector
4.3. Use search Engines (example Google)	• Search engines ✓ Definition ✓ Role ✓ Some Types of search engine ➤ www.google.com ➤ www.yahoo.com	○ Perform practical exercises on the use of search engines	- Internet Connection - Computer Lab - projector
4.4. Browse the internet using the hyperlinks	• Web Browser ✓ Browser buttons ✓ Address bar ✓ Status bar ✓ Scroll bar	○ Open a web using the address bar ○ Browse different web pages ○ practical exercises On Browsing	- Internet Connection - Computer Lab - projector

	✓ Home page ✓ Front/Back arrows ✓ Refresh button ✓ Start page	internet using hyperlink	
4.5. Download and Upload files using internet	• Downloading • File attachment	○ Practical exercises on downloading and uploading files using internet	- Internet Connection - Computer Lab - projector

Assessment Guidelines

Competence: Use basic computer applications

Formative assessment

Elements of competence	Assessment indicator	Checklist	Score		Observation
			Yes	No	
1.Apply computer fundamentals	Various connectors and ports are identified	Power ports and connectors			
		Serial ports and connectors			
		Parallel ports and connectors			
		Audiovisual ports and connectors			
		VGA ports and connectors			
		USB ports and connectors			

	Different I/O devices are used	Mouse			
		Keyboard			
		Scanner			
		CD/DVD-ROM drivers			
		Monitor			
		CD/DVD-ROM writer			
		Printer			
	Desktop's elements are used	My Computer			
		Start menu			
		Task bar			
		Desktop			
		Minimize button			
		Maximize button			
		Close button			
	Viruses in the computer and other storage media are scanned	Hard Disc			
		Flash Disc/ External Hard Disc			
2.Use current word	Text formatting is done	New document creation			

processing package		Open document			
		Close document			
		Style			
		Font			
		Size			
		Colour			
		Paragraph			
		Column			
		Tabulation			
		Paragraph spacing			
		Inserting Special characters			
		Inserting bullets			
		Numbering			
		Borders and shading			
		Header and footer			
	Table creation and editing are done	Inserting a table			
		Inserting a column			

		Inserting a row			
		Deleting table			
		Deleting row			
		Deleting column			
		Merging cells			
		Splitting cells			
		Drawing a table			
		Table auto format			
		Formula usage			
	Text editing is done	Search/Find-Replace application			
		Deleting a range of text			
		The undo and redo commands application			
		Spelling and grammar application			
	Printing is done	Page setup usage			
		Print preview			
		Print dialog box			
		Selecting printer name			

		Printer options			
		Printing one or more copies			
		Printing in black/white or color			
		Print page ranges			
		Printing a selection			
	Saving is done	Creation of files			
		Creation of Folders			
		File Naming			
		File Formats			
	Insertion of header, footer and footnotes is done	Footnotes			
		Header and Footer			
		Automatic page numbering			
		Total number of pages			
		Automatic date			
		Automatic authors name			
3.Use current spreadsheet package	Basic excel tasks are used	Sheet			
		Selecting a cell			

		Validating a cell			
		Deleting cell contents			
		Modifying cell contents			
		Selecting group of cells			
		Increase and reduce the cell size			
		Delete row and column			
		Duplicate cell			
	Sheets management in excel workbook is done	Selecting a sheet			
		Renaming a sheet			
		Insert new sheets			
		Moving a sheet in a workbook			
		Deleting a sheet			
	Formatting of cells and their contents is done	Adjusting Cow height			
		Alignment of cell			
		Number format			
		Inserting rows			
		Merging cells			

		Creating borders			
		Patterns usage			
	Mathematical operations are performed	Addition			
		Multiplication			
		Division			
		Subtraction			
		AutoSum			
		Average			
		Minimum			
		Maximum			
4.Use Internet	Website is defined and explained	World wide web			
		Web page			
		Web site			
	Interaction through instant messaging (Chatting) is done	Steps to create a chat account			
		Instant messaging with or no web cam			
		Calling			
		Sending files			

	Search Engines (example Google) are used	Role			
		www.google.com usage			
		www.yahoo.com usage			
	Browsing internet using hyperlinks is done	Browser buttons			
		Address bar			
		Status bar			
		Scroll bar			
		Home page			
		Front/Back arrows			
		Refresh button			
		Start page			
	Downloading and uploading files using internet are done	Downloading			

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3. Shelly, G., & Vermaat, M. (2008). *Discovering Computers 2009: Introductory*. Cengage Learning.

CM105 ORAL BASIC ENGLISH		
Competence: Communicate orally in basic English		
RTQF LEVEL: 1	CREDITS: 3	LEARNING HOURS : 30
SECTOR: All		SUB-SECTOR: All
ISSUE DATE: March 2014		REVIEW DATE:

PURPOSE STATEMENT

This module describes the skills and knowledge required to understand and use English language for very simple, commonly used expressions of a basic nature workplaces. It applies to individuals working in any industry context and at many different levels of responsibility. It covers activities such as welcoming and fare welling guests/clients, providing information related to his/her routine workplace activities.

LEARNING ASSUMED TO BE IN PLACE

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit

Learning units By the end of the module, the trainee will be able to :	Performance criteria
1. Initiate English communication	1.1. Proper use of correct, very simple, and commonly-used courtesy English expressions with customers or colleagues including greeting and welcoming, fare welling, apologizing and thanking. 1.2. Correct self-introduction with colleagues in order to know each other 1.3. Proper making of inquiries in order to get relevant information
2. Maintain the flow of communication in English	2.1. Effective use of basic vocabularies in English language to enhance communication 2.2. Appropriate use of English connectors words in order to phrase simple sentences
3. Communicate in English to support workplace activities.	3.1. Correct use of vocabularies related to the time 3.2. Correct use of words related to the numbers 3.3. Appropriate use of English conventions to support communication.

Learning unit 1: Initiate English communication			Learning Hours : 5
Learning outcomes	Contents	Learning activities	Resources
1.1. Use correct, very simple and commonly-used courtesy English expressions	- English Alphabet - Greetings and goodbyes: - Formal - Informal - Greetings and goodbyes at different times of the day - Self-Introductions - Welcoming techniques - Polite expressions and asking for help - Phrases and expressions of apology, thanks and help - Asking and answering Questions - Using 'wh' question words - Using auxiliary verbs	- Dialogues - Role Play - Demonstrations - Group work	- Videos - Recordings - Reference Books
1.2. Introduce yourself			
1.3. Make inquiries			

Learning unit 2: Maintain the flow of communication in English			Learning Hours : 15
Learning outcomes	Contents	Learning activities	Resources
2.1. Use basic vocabularies in English language	- Basic English key words - Regular and irregular verbs - Articles	- Dialogues - Demonstrations - Group work	- Videos - Conversations recordings - Reference Books

	- Nouns - Pronouns - Adjectives - Titles	- o Story telling - o Practical exercises by filling the missing key words in sentences	
2.1. Phrase simple sentences	• Parts of a sentence - Subject - Verb - Object • Sentence types - Affirmative sentence - Interrogative sentence - Exclamatory sentence • English connectors - Coordinating conjunctions - Subordinating conjunctions - Correlative conjunctions	- o Dialogues - o Role Play - o Group work	- Recordings - Reference Books

Learning unit 3: Communicate in English to support workplace activities			Learning Hours : 10
Learning outcomes	Contents	Learning activities	Resources
3.1. Use vocabularies related to numbers	• Vocabulary and phrases related to the use of money • Ordinal numbers • Cardinal numbers • Vocabulary related to the use of dates • Vocabulary related to times of the day	- o Speaking and listening exercises - o Reciting - o Story telling	- Worksheets - Videos/Recordings - Reference Books
3.2. Use English conventions to support communication	• Common body language and gestures • Expressing sincerity and sympathy through appropriate body language and gestures	o Demonstrations	- Videos

Assessment Guidelines

Competence: Communicate orally in Basic English

Formative assessment

Elements of competence	Assessment indicator	Checklist	Score		Observation
			Yes	No	
1.Initiate English communication	The simple and commonly-used courtesy English expressions are used	Excuse me			
		Forgive me			
		Good morning			
		Good afternoon			
		Good evening			
		Hello			
		How are you?			
		I am fine, thank you			
		I am sorry			
		I am grateful			
		No			
		Please			
		Thank you			
		You're welcome			
		Yes			
	Self-introduction with colleagues is done	Offer a handshake			
		Repeat the name of the person you meet			
		Say your full name			

		Give a one-sentence description of what you do			
		Offer a thankful			
	Inquiries are made	Offer an excuse			
		Ask for a talk			
		Say your full name			
		Give a one-sentence description of what you do			
		Ask for information			
		Offer a thankful			
2.Maintain the flow of communication in English	Basic vocabularies are used	Regular verbs			
		Irregular verbs			
		Articles			
		Nouns			
		Pronouns			
		Adjectives			
	Simple different types of sentences are phrased	Subject			
		Verb			
		Object			

		Affirmative sentence			
		Interrogative sentence			
		Exclamatory sentence			
		Negative sentence			
		Coordinating conjunctions			
		Subordinating conjunctions			
3.Communicate in English to support workplace activities	The vocabularies related to the numbers are used	Ordinal numbers			
		Cardinal numbers			
	The words related to the time are used	Vocabulary related to the use of dates			
		Vocabulary related to times of the day			
	English conventions to support communication are used	Common body languages			
		Common gestures			
		Signs of expressing sincerity			
		Signs of expressing sympathy			

REFERENCES

Helen Barker, **Cutting Edge Pre-intermediate** New Editions **Teacher's Book Pre-intermediate Teacher's Resource Book**, Feb 1, 2007, 184 pages

CM106 RUNNING MICROBUSINESS		
Competence : Run Microbusiness		
RTQF LEVEL:1	CREDITS: 4	LEARNING HOURS : 40
SECTOR: All		SUB-SECTOR: All
ISSUE DATE:		REVIEW DATE:

PURPOSE STATEMENT

This module describes the skills and knowledge required to prepare a business plan for a small business and operate a small business. At the end of this module, the participants understand the principles and tools behind personal and family money-management. They are able to understand the importance of saving and reducing expenses. They are able to organize and manage personal and a small business finances. They can create a small business budget and think strategically about their finances at their level. They can evaluate their options for selecting best source of funds and are familiar with ways to establish and maintain credit. They are aware of the risks associated with credit. The participants, through simulation of income-generating activities after which they will get familiar with the basic cycles of business. They can plan for income-generating activity expenses and loan repayments. They can keep basic business

financial records. They are able to evaluate the risks and opportunities of using credit in income generating contexts. They are able to distinguish between money to be used for investment into their income-generating activities, for their family expenses, and for savings.

LEARNING TO BE ASSUMED IN PLACE

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning unit By the end of the module, the trainee will be able to :	Performance criteria
1. Develop entrepreneurial mindset	1.1 Proper identification of livelihood activities and business in the community 1.2 Proper description of characteristics of an entrepreneur and their role in the society 1.3 Adequate identification and examination of risks related to a certain business as per its nature and size and responding to them accordingly. 1.4 Accurate identification of a business idea and selection of a good- profitable- ones among many.
2 Manage finance	1.1 Proper identification of personal and business financial needs in different life situations. 1.2 Proper mobilization of the required amount of money for different needs.

	1.3 Effective management of business money as per procedures in a way to avoid waste of money. 1.4 Appropriate saving of money in a recognized financial institution. 1.5 Effective management of business debts. 1.6 Adequate execution of basic record-keeping as per standards. 1.7 Effective development of a financial plan over a defined period of time.
3 Manage a small business	3.1 Proper description of basic business cycle in terms of buying, adding value and selling for profit. 3.2 Correct identification of credit risks and unexpected costs and dealt with accordingly. 3.3 Adequate development of record-keeping sheet as per standards and on time.
4 Develop a business plan for a micro business	4.1 Realistic formulation of objectives of the small business, and are clearly stated and measurable. 4.2 Appropriate filling out of the business plan template as per standards. 4.3 The simulated small business has brought benefits.

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.

Learning unit 1: Develop entrepreneurial mindset

Learning hours: 5

Learning outcomes	Contents	Learning activities	Resources
1. Identify income generating activities	• Categorization of income generation activities • Characteristics of livelihood business activities in the community	○ Small group discussion ○ brainstorming ○ large group discussion ○ Presentation	- Flipchart - Pen - Notebooks - Projector
2. Describe an entrepreneur	• Characteristics of an entrepreneur (mindset) • Role of entrepreneur in community	○ small group discussion ○ brainstorming ○ large group discussion ○ presentation ○ case studies ○ Site visit ○ guest speakers	- Flipchart - Pen - Notebooks - Projector - Videos
3. Examine business risks	• Types of business risks and their impact on business • Strategies to overcome business risks	○ exercise ○ role-play ○ large group discussion ○ case studies ○ guest speakers ○ Practical exercises on evaluation of business risks	- Role play scenarios - Videos -
4. Select a business idea	• Characteristics of a promising business idea	○ Brainstorming ○ large group discussion ○ Practical exercises on selection of a business idea ○ Visit a nearby business settings	- Flipchart - Pen - Notebooks - Projector

Learning unit 2: Manage finance

Learning hours: 10

Learning outcomes	Contents	Learning activities	Resources
1. Examine business financial needs	• Identification of money needs in daily life ✓ Personal needs ✓ Business needs • Identification of how the things they need money for change as their life situations change	○ small group discussion ○ brainstorming ○ large group discussion ○ Presentation	- Flipchart - Pen - Notebooks - Projector
2. Raise fund (money)	• Planning of getting money • Sources of funds for a business ✓ Borrowing (financial institution of friends/family) ✓ Saving ✓ Working to earn money)	○ small group discussion ○ brainstorming ○ prioritizing ○ role-play ○ large group discussion ○ presentation ○ Case studies	- Role play scenarios - Flipchart - Pen - Notebooks - Projector
3. Manage money effectively	• Good ways to manage money • Ways of wasting money • Ways to cut costs through ✓ Reducing ✓ Recycling ✓ Repairing ✓ Reusing	○ exercise ○ role-play ○ large group discussion ○ Case studies	- Role play scenarios
4. Save money	• Definition of the concept of saving • Recognize that not only rich	○ Brainstorming ○ large group discussion ○ role-play ○ individual goal setting	- Flipchart - Pen - Notebooks

	people can save • Reasons for saving (unexpected events and specific needs) • Savings goals • Saving possibilities and institutions	○ guest speakers	Projector
5. Manage debts	• Definition of the concept of debt • Risks of getting into debt • Strategies to avoid debt • Strategies to get out of debt	○ large group discussion ○ group work ○ prioritizing ○ case studies	- Role play scenarios

Learning unit 3: Perform record keeping and budgeting

Learning hours:5

Learning outcomes	Contents	Learning activities	Resources
1. Keep basic personal financial records	• Income • Expenses • Balance calculations	○ group work ○ case study	
2. Perform basic budgeting	• Definition of budget • Definition of the concept of budgeting • Principle of budgeting	○ group work ○ case study ○ Practical individual budgeting respecting principles	
3. Develop a financial strategic plan	• structure of a financial plan • the importance of a financial plan	○ Brainstorming ○ large group discussion ○ demonstration on developing a financial plan ○ Practical individual work on	- Financial fitness plan - Template of a financial plan - Flipchart - Pen

		developing a financial plan ○ Case studies	- Notebooks - Projector
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Learning unit 4: Manage a small business

Learning hours: 5

Learning outcomes	Contents	Learning activities	Resources
1. Describe the business cycle	• Basic cycle of business: buying, adding value, selling for profit • Allocation of income between the business, personal expenses and savings • Importance of maintaining positive cash flow	○ Simulation game ○ large group discussion	- Entrepreneurs' profiles - Entrepreneur's Cycle Chart
2. Plan for unexpected costs	• Possible unexpected expenses or financial events • Strategies of planning and dealing with, unexpected financial events	○ simulation game ○ large group discussion ○ Case studies	- Life cards for simulation game
3. Identify the risks of credits	• Risks and potential benefits of selling to customers on credit • Financial risks involved with extending credit to friends and family members	○ simulation game ○ large group discussion	- Life cards for simulation game
4. Fill in a record-	• Value of keeping records • Sections of a record-keeping	○ simulation game, ○ large group discussion	- Record-keeping template

keeping sheet	sheet	○ Demonstration on filling up a record keeping sheet ○ Practical individual work on filling up a record keeping sheet	
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Learning unit 5: Prepare a business plan for a micro business

Learning Hours: 15

Learning outcomes	Contents	Learning activities	Resources
1. Describe the value of a business plan	• Value of a business plan • Flexibility of a business plan • Importance of realistic goals • Sections of a business plan	○ simulation game ○ large group discussion ○ Demonstration on preparing a business plan ○ Practical individual work on preparing a business plan	- Entrepreneur's Cycle Chart - Record-keeping template - Business plan template
2. Identify the profit to achieve			
3. Prepare a business plan			
4. Operate a business according to the plan			

Assessment Guidelines

Competence: Run Microbusiness

Formative assessment

Elements of competence	Assessment indicator	Checklist	Score		Observation
			Yes	No	
1. Develop entrepreneurial mindset	Proper identification of livelihood activities and business in the community	Non-farm' natural resource based livelihood activities			
		Farm-based livelihood activities			
		Processing of products from 1&2 above			
	Proper description of characteristics of an entrepreneur and their role in the society	<i>Opportunity seeking</i>			
		<i>Negotiation capacity</i>			
		<i>Initiative taking</i>			
		<i>Commitment to see things through</i>			
		<i>Personal locus of control (autonomy)</i>			
		<i>Intuitive decision making with limited information</i>			
		Networking capacity			
		Strategic thinking			

		Negotiation capacity			
		Selling/persuasive capacity			
		Achievement orientation			
		Having to do everything under pressure (financial and time)			
		<i>Coping with loneliness</i>			
		Building know how and trust relationships			
		Learning by doing, copying, making things up, problem			
		Achievement orientation			
		Incremental risk taking			
		Living with uncertainty and complexity			
		Having to do everything under pressure (financial and time)			
		Coping with loneliness			
		Learning by doing, copying, making things up, problem solving			

		Managing			
		Interdependencies			
		Working long hours and unsocial hours			
		Belief that rewards come with your own effort			
		Belief that you can make things happen			
		Belief in individual and the community			
		Motivation to succeed			
		Ability to cope with doing something different to others			
		Motivation to make a difference			
		Ability to see problems as opportunities			
		Job creator			
		Social corporate			
		Creating market to local products and services			
		Human factors (talent management, strikes),			
	Adequate identification and examination of risks related to a certain business as per its nature				

	and size and responding to them accordingly.				
		Technological factors (emerging technologies),			
		Physical factors (failure of machines, fire or theft)			
		Operational factors (access to credit, cost cutting, advertisement			
		Economic factors (market risks, pricing pressure)			
		Natural factors (floods, earthquakes)			
		Political factors (compliance and regulations of government			
		Risk Acceptance strategy			
		Risk Avoidance strategy			
		Risk Limitation strategy			
		Risk Transference strategy			
	.Accurate identification of a business idea and selection of a good- profitable- ones among many.	Fulfills a customer need – a problem is solved			
		Innovative			
		Unique			
		Clear focus			

		Profitable in the long term			
1. Manage finance	Proper identification of personal and business financial needs in different life situations	Mortgage or rent			
		Vehicle expenses			
		Loans			
		Credit cards			
		Clothing			
		Memberships			
		Personal care			
		Entertainment, recreation and hobby expenses			
		Taxes			
		Membership fees and subscriptions			
		Investment			
		Food and groceries			
		Property taxes			
		Insurance costs			

		Savings and investment contributions			
		Home maintenance costs			
		Heating and air conditioning expenses			
		Utilities, such as electricity			
		Water, sewer, trash pick up			
		Medical expenses, such as medical bills, prescriptions			
		Child care and child support expenses			
		Rent and lease payments.			
		Loan repayments			
		Maintenance and repair of premises, equipment, and vehicles			
		Operating stock/ suppliers bills			
		Office supplies and stationary			
		Advertising and promotion			
		Delivery and shipping			

		Personal drawings and employee wages			
		Insurance premiums			
		Taxes			
		Membership fees and subscriptions			
		Investment			
	Proper mobilization of the required amount of money for different needs.	Borrowing from friends and family			
		t			
		Lease			
		Warrants			
		<i>Banks loan</i>			
		<i>Government Programs</i>			
		Bonds			
	. Effective management of business money as per procedures in a way to avoid waste of money.	Assessing and budgeting for your current financial situation			
		Developing a financial plan			
		Managing			

		Recognizing signs of financial trouble			
		Handling financial emergencies			
		Dealing with unmanageable			
	Appropriate saving of money in a recognized financial institution.	Assessing and budgeting for your current financial situation			
		Developing a financial plan			
		Managing			
		Recognizing signs of financial trouble			
		Handling financial emergencies			
		Dealing with unmanageable debt			
	Effective management of business debts.	Cut unnecessary costs and free up cash			
		Revisit the budget			
		Prioritize debt payments			
		Speak with creditors			
		Consolidate your loans			
	Adequate execution of basic record-	Importance of figuring out how money flows through your business and why			

	keeping as per standards.				
		Need to keep good records			
		The main records you may need to keep			
		Keep basic paper records			
		Complete a cash payments book and a cash receipts book			
2. Manage a small business	Proper description of basic business cycle in terms of buying, adding value and selling for profit	Commodity prices			
		Freight rates			
	Correct identification of credit risks and unexpected costs and dealt with accordingly	Qualifications of loan review personnel.			
		Independence of loan review personnel			
		Frequency of reviews			
		Scope of reviews			
		Depth of reviews			
		Review of findings and follow-up			
		Work paper and report distribution			
	Adequate development of record-keeping sheet as per standards and on time.	Total exposure and segment exposures, including subordinated debt and equity			
		Noncompliance with covenants			

4. Develop a business plan for a micro business	Realistic formulation of objectives of the small business, and are clearly stated and measurable.	Performing assets			
		Impaired loans			
		Compliance with internal procedures			
		The aggregate level of exceptions to policy and underwriting standards			
	Appropriate filling out of the business plan template as per standards	Desired sales or profit levels			
		Rates of growth			
		Increased turnover			
		Value of the business or dividends paid to shareholders			
		Executive summary			
		General company description			
		Products and services			
		Marketing plan			
		Operational plan			
		Management and			
		Personal financial			

		Statement			
		Startup expenses and capitalization			
		Financial plan			
		Appendices			
		Refining the plan			
		Operational plan			
		Management and organization			
		Personal financial statement			
		Startup expenses and capitalization			
		Financial plan			
		Appendices			
		Refining the plan			
	The simulated small business has brought benefits.	Planning activities and resources			
		Staffing			

		Organizing resources			
		Coordinating business activities			
		Controlling for achievements			

Reference books:

1. Work Readiness Training Programme – Trainer’s Manual, Akazi Kanoze – Youth Livelihoods Project.
2. Work Readiness Training Programme – Participant’s Manual, Akazi Kanoze – Youth Livelihoods Project.

CSTCA101 TIMBER TECHNOLOGY			
Competence : APPLY TIMBER TECHNOLOGY			
RTQF LEVEL: 1	CREDITS: 5		LEARNING HOURS : 50
SECTOR: Construction		SUB-SECTOR: Carpentry	

ISSUE DATE:	REVIEW DATE:
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PURPOSE STATMENT

This module provides the learners with skills, attitude and knowledge required to identify the process of producing timber. Besides, it provides learners with the techniques of timber conversion and preservation.

LEARNING ASSUMED TO BE IN PLACE

CM101 Describe the occupation and the training process

CM102 Maintain health safety, security and sustain environment in the workplace

CSTCA103 Carpentry Hand tools

CSTCA104 Woodworking machines

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit

Learning units By the end of the module, the trainee will be able to :	Performance criteria	
1. Identify types of trees	1.1.	Correct classification of trees
	1.2.	Correct characterization of trees
	1.3.	Correct identification of tree structure
2. Perform timber conversion	2.1.	Proper identification of methods of timber sawing Correct application of sawing methods
	2.2	Relevant timber cuts in accordance with marketable size

	2.3	
3. Preserve timber	3.1. 3.2. 3.3.	Proper identification of timber defects Proper application of methods of timber seasoning (artificial and natural seasoning) Proper application of timber preservation methods (non-pressure treatment, pressure treatment)

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

Learning Unit 1: Identify types of the tree

Learning hours: 20

Learning outcomes	Contents	Learning activities	Resources
1. Classify types of the tree	- Types of tree: ✓ Hard wood ✓ Soft wood - Classes of tree ✓ Exogenes group ✓ Endogenes group	○ Group discussion on types of timbers ○ Site visit ○ Observation of hardwood and softwood ○ Observation of exogenous group and endogenous group ○ Presentation on the classification of trees	- Reference books - Internet - Hard and soft wood samples - Video aids - Projector - Flipchart - Markers - Different sites

2. Describe characteristics of the tree	• Tree species • Characteristics of tree ✓ form, ✓ trunk, ✓ bark, ✓ branches, ✓ leaves, flowers, ✓ seeds	○ Brainstorming on tree species and tree characteristics ○ Group discussion on the characteristics of the tree ○ Site visit ○ Documentary research on tree species ○ Observation on tree characteristics ○ Presentation on the trees species	- Reference Books - Internet - Video aids - Hand-out - Samples of tree characteristics
3. Describe tree structure	• Tree structure: ✓ Pith ✓ Heart wood ✓ Sap wood ✓ Bark ✓ Annual rings ✓ Medullary rays	○ Group discussion on tree structure ○ Video display presentation on tree structure ○ Presentation on the tree structure	- Reference Books - Internet - Video aids - Hand-outs

Learning unit 2: Perform timber conversion

Learning hours:

Learning outcomes	Content	Learning activities	Resources
Identify sawing methods	• Timber sawing methods: ✓ Flat sawing/through ✓ Quarter sawing ✓ Square log sawing • Sawing tools	○ Group discussion on timber seasoning ○ Brainstorming on seasoning methods ○ Demonstration on sawing and seasoning methods	○ Internet ○ Reference books ○ Hand outs ○ Ripping saws ○ Timbers
Apply sawing methods			

Cut timber to usage size	Types of marketable timber sizes: ✓ Beam ✓ Columns ✓ Boards ✓ Scantlings ✓ Planks ✓ Baulk	○ Brainstorming on types of timber marketable size ○ Group discussion on types of timber marketable size ○ Presentation on types of timber marketable size ○ Demonstration on cutting different types of timber size ○ Practical exercises on cutting different types of timber size	- Timbers - Saws - Marketable size samples - Hand-outs - Video aids
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Learning Unit 2: Preserve timber

Learning hours: 30

Learning outcomes	Contents	Learning activities	Resources
1. Identify the defects in timber	• Timber defects: ✓ Natural Defect: ▪ Heart rot ▪ Spike rot ▪ Spiral grain ▪ Knot ▪ Resin pockets ▪ Shakes ▪ Radial ▪ Tangential ▪ Cross ✓ Artificial Defects: ▪ Cupping ▪ Bowing	○ Brainstorming or group discussion on the timber defects. ○ Observation on timber defects. ○ Video presentation on timber defects	- Reference books - Internet - Hand-out - Timbers - Defected timbers - Pictures of defects

	▪ Twisting/Warping ▪ End splitting ▪ Case hardening ▪ Honeycomb checks ✓ Fungal Attack : ▪ Wet rot (white rot) ▪ Dry rot (brown rot) ✓ Insect Attack : ▪ Furniture Beetle (woodworm) ▪ Deathwatch Beetle ▪ Powder Post Beetle		
2. Apply timber seasoning techniques	• Method of timber seasoning: ✓ Natural seasoning/ Air seasoning ✓ Artificial seasoning/ Kiln Seasoning: ▪ Compartment Kiln ▪ Progressive Kiln	○ Group discussion on timber seasoning ○ Brainstorming on seasoning methods ○ Demonstration on sawing and seasoning methods ○ Practical exercises on natural seasoning ○ Practical exercises on timber sawing ○ Site visit ○ Documentary research on seasoning techniques	- Internet - Reference books - Hand outs - Ripping saws - Timbers
3. Preserve timber	• Preservative materials ✓ Organic-solvent type ✓ Water-born type ✓ Tar-oil type • Preservation methods ✓ Pressure method ✓ Non pressure method	○ Group discussion on preparation of preservative materials ○ Brainstorming on which type of preservative are used ○ Demonstration on preparing some preservation materials ○ Practical exercises of mixing the preservative materials ○ observation of different	- Reference books - Internet - Video aids - Preservative materials - Timbers - Lubricate oil - Brush

		application of preservative materials ○ Practical exercises on application of preservative materials ○ Site visit	
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Assessment Guidelines

Competence: Apply timber technology

Portfolio for formative assessment

Tools & accessories	Materials	Equipment
• Axe falling • Bush knife • Jack saw • Hand saw • Marking gauge • Tape measure • Try Square • Pencil • Brush • Buckets • jerricans	▪ African mahogany ▪ Lubricant oil ▪ Eucalyptus timber ▪ Markhamia platycalyx timber(Umusave) ▪ Cypress log ▪ Eucalyptus log ▪ Cedar log ▪ Cypress timber ▪ Cedar timber ▪ Pine timber, ▪ cedar log ▪ Tar oil creosote ▪ Water soluble ▪ Organic solvent	▪ Gloves ▪ Goggles ▪ Dust mask ▪ Overall ▪ Earplugs ▪ Safety shoes(boats) ▪ Ear protector ▪ Helmet ▪ Portable electric chain saw machine ▪ Sawing machine ▪ Kiln

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Element of competence	Performance criteria	Checklist	Score		Observation
			Yes/ no		
1.Identify types of trees	1.Corect classification of trees	Exogenous group(hardwood, softwood)			Proposed evidence: Written evidence
		Endogenous group(trees with fibers, trees with fibers and hollow)			Proposed activity: Knowledge test(with clear examples give different types of trees)
	2.Correct characterization of trees	form			Proposed evidence: Written evidence
		trunk			Proposed activity: Matching: link the lines with the correct names of the given parts of a tree
		bark			
		branches			
		leaves			
		flowers			
		seeds			
	3.Correct identification of	Pith			Proposed evidence: Written evidence
Heart wood				Proposed activity:	

	tree structure	Sap wood			Matching: link the lines with the correct names of the given inner log structure
		Cambium			
		Bark			
2.Perform timber conversion	1.Proper identification of methods of timber sawing	Flat/through sawing			Proposed evidence: Written evidence Proposed activity: Matching: Match the name of sawing methods from the given sketches
		Square log sawing			
		Quarter sawing(A and B)			
	2. Correct application of sawing methods	Tangential section			Proposed evidence: Performance evidence Proposed activity: Using tangential section obtain the timbers from the provided log
		Radial section			
	3. Relevant timber cuts in accordance with marketable size	lumber(1×6 inches, 1×8 in, 1×10 in, 1×12 in, 1×14 in)			Proposed evidence: Performance evidence Proposed activity: Using any sawing method get the following planks: 2×2 in, 2×3 in, 2×4 in, 2×6 from the provided log
		plank(2×2 in, 2×3 inches, 2×4 in, 2×6 in, 2×8 in, 2×10 in, 2×12 in, 2×14 in)			

		in)			
3.Preserve timber	1.Proper identification of Timber defects	Natural defects(knots, tension wood, variation in log forms, excessive taper, shake and splits)			Proposed evidence: written evidence Proposed activity: Matching : Link object of the picture with appropriate defects
		Artificial defects(bending, bowing, warping, splitting, twisting)			Proposed evidence: Written evidence Proposed activity: Matching : Link object of the picture with appropriate defects
		Insect attack(death sap, wood wasp, weevil, furniture, house long horn and pin borers beetles and fungus)			Proposed evidence: Written evidence Proposed activity: Matching : Link object of the picture with appropriate insect

	2.Proper application of methods of timber seasoning	Natural or air seasoning			Proposed evidence: Performance evidence Proposed activity: By using air seasoning method, pile the given timber in the store
		Artificial or Kiln seasoning			
		Non pressure methods			

CSTCA102 BASIC DRAWING		
Competence : PERFORM BASIC DRAWING		
RTQF LEVEL: 1	CREDITS: 5	LEARNING HOURS : 50
SECTOR: Construction		SUB-SECTOR: Carpentry

ISSUE DATE:

REVIEW DATE:

PURPOSE STATEMENT

This is a core module in carpentry which describes the skills, attitude and knowledge required to perform basic drawings of different objects, apply carpentry mathematics and calculate cost of products.

LEARNING ASSUMED TO BE IN PLACE:

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning units By the end of the module, the trainee will be able to :	Performance criteria	
1. Perform free hand sketching	1.1.	Proper identification and application of the four fundamental operations
	1.2.	Proper use of metric system units
	1.3.	Proper calculation of areas, perimeters, circumferences, volumes of geometrical figures
		Proper identification of drawing instruments and their use Appropriate construction of geometric forms
2. Apply basic drawing techniques	2.1.	Proper identification of drawing techniques
	2.2.	Effective application of drawing lines as per standards
	2.3	Correct application of drawing lettering

	2.4	Proper application of the drawing dimensions
	2.5	Appropriate application of orthographic and oblique drawing techniques
3. Interpret technical drawing	3.1.	Proper differentiation of drawing symbols
	3.2.	Proper interpretation of the scale
	3.3.	Appropriate lettering

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.

Learning Unit 1: Perform free hand sketching

Learning Hours: 20

Learning Outcomes	Contents	Learning Activities	Resources
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1. Apply free hand sketching techniques	• Importance of sketches • Free hand sketching techniques ✓ Draw different geometrical forms: ▪ Square ▪ Rectangle ▪ Circle ▪ Triangle ▪ Polygons ▪ Cubes	○ Group discussion on free hand sketching ○ Documentary research ○ Practical exercise on drawing basic geometrical forms ○ Practical exercise on drawing tables, beds, cabinets, wardrobes, chairs, desks, benches, cupboards, bookshelves, racks, sideboards, stools, mirror frames and planters	- Internet - Ruler - Pencil - Try square - Protractor - Eraser - Combination square - Geometric form samples - Drawing board - Reference books - Furniture
2. Identify drawing instruments	• Types of drawing materials and their use: ✓ Ruler ✓ Pencil ✓ Try square ✓ Protractor ✓ Eraser ✓ Combination square ✓ Drawing board	○ Group discussion on drawing materials ○ Display of drawing materials ○ Documentary research on drawing materials ○ Presentation on drawing materials	- Reference books - Internet - Ruler - Pencil - Try square - Protractor - Eraser - Combination square - Drawing board

Learning Unit 2: Apply technical drawing skills

learning Hours: 60

Learning Outcomes	Contents	Learning Activities	Resources
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3. Identify drawing techniques	• Drawing techniques ✓ Orthographic ✓ Oblique ✓ Perspective ✓ Isometric	○ Group discussion on drawing techniques ○ Presentation on drawing techniques ○ Display of drawings	- Reference books - Video aids - Drawing samples of different techniques
4. Apply drawing lines	• Basic drawing lines ✓ Construction line ✓ Section line ✓ Break line ✓ Central line ✓ Dimension line ✓ Hidden line	○ Brainstorming on drawing lines ○ Presentation on drawing lines ○ Group discussion on drawing lines ○ Demonstration on drawing lines ○ Practical exercises on drawing lines	- Reference books - Sample of drawings - Pencil - Ruler - Square - Video aids - Drawing sheet
5. Apply drawing lettering	Types of lettering ✓ Lowercase ✓ Uppercase Lettering principles	○ Presentation on lettering and principles ○ Group discussion on lettering principles ○ Demonstration on application of lettering principles lines ○ Practical exercises on application of lettering principles lines	- Reference books - Video aids - Drawing samples of different lettering - Pencil - Ruler - Square - Drawing sheet
6. Apply dimensions	• Dimensioning ✓ Purpose ✓ Types ✓ Fundamental rules	○ Brainstorming on the purpose of dimensioning ○ Presentation on dimensioning ○ Group discussion on dimensioning rules ○ Demonstration on	- Reference books - Sample of drawings - Pencil - Ruler - Square - Video aids

		dimensioning ○ Practical exercises on dimensioning	
7. Apply orthographic drawing techniques	Orthographic drawings ✓ Views ✓ Dimensioning ✓	○	-

Learning Unit 3: Interpret technical drawing

Learning Hours:20

Learning Outcomes	Contents	Learning Activities	Resources
3.1 Identify drawing symbols	• Drawing symbols	○ Practical demonstration on different types of lines	- Pencil (HP,2H), eraser, erasing shield, graduated ruler, divider, set squares, compass, T-square, French curves, clinograph (adjustable set square), tracing paper, drawing ink. - Drawing room, drawing table. - Standard sheets A4, A3, A2, A1, A0. - Corresponding sheet

			dimensions 297x219, 297x420, 594 x 420, 594 x 841, 1189x841. ❖ Books • Handout notes
3.2 Perform drawing scale	• Interpretation of drawing • Type of scale ✓ Full scale, ✓ Reducing scale and ✓ Enlarging scales	○ Physical demonstration of scale drawing ○ Hands on Practices	- Pencil (HP, 2H), eraser, erasing shield, graduated ruler, divider, set squares, compass, T-square, French curves, clinograph (adjustable set square), tracing paper, drawing ink. - Drawing room, drawing table. - Standard sheets A4, A3, A2, A1, A0. - Corresponding sheet dimensions 297x219, 297x420, 594 x 420, 594 x 841, 1189x841. - Books - Handout notes
3.3 Perform lettering	• Lettering ✓ Gothic lettering ✓ Roman lettering	○ Physical demonstration of scale drawing ○ Hands on Practices	- Pencil (HP, 2H), eraser, erasing shield, graduated ruler, divider, set squares,

	✓ Italic ✓ Text lettering types		compass, T-square, French curves, clinograph (adjustable set square), tracing paper, drawing ink. - Drawing room, drawing table. - Standard sheets A4, A3, A2, A1, A0. - Corresponding sheet dimensions 297x219, 297x420, 594 x 420, 594 x 841, 1189x841. - Books - Handout notes - Drawing room, drawing table
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Assessment Guidelines

MODULE: BASIC TECHNICAL DRAWING.

Competence: Perform basic technical drawing

Resources

Tools	Materials	Equipment
✓ Pencil (HP, 2H) ✓ Graduated ruler ✓ Sharpener ✓ Rubber ✓ Eraser, ✓ Erasing shield, ✓ Divider, ✓ Set squares, ✓ Compass, ✓ T-square, ✓ Adjustable set square	✓ Papers ✓ Drawing ink.	✓ Drawing board ✓ Drawing table

Element of competence	Assessment indicators	Checklist	Score		Observation
			YES	NO	
1.Perform free hand sketching	Proper identification and application of the four fundamental operations	Addition			Proposed activity:
		Multiplication			
		Division			
		Subtraction			
	Proper use of metric system units	Meter			Proposed evidence: written Evidence
		kilogram			
		Litre			
		Second			
	Proper calculation of areas,	Square			Proposed

	perimeters, circumferences, volumes of geometrical figures	Rectangle			evidence: written Evidence Proposed activity: Multiple choice Give the list of metric system units and list of geometric figures use in carpentry
		Triangle			
		Cube			
		polygon			
	Correct free hand sketching	Joints			Proposed evidence: written Evidence Performance evidence Proposed activity: Sketch a chair in 3Dimensions.
		Polygon			
		Objects			
2.Apply basic	Proper identification of	Orthographic			

drawing techniques	drawing techniques	Oblique			Proposed evidence: written Evidence Performance evidence Proposed activity: Give Techniques use in Basic Technical Drawing.
		Perspective			
		Isometric			
	Effective application of drawing lines as per standards	Construction line			Proposed evidence: written Evidence Performance evidence Proposed activity: Multiple choice Give types of lines used in Carpentry drawinws.
		Section line			
		Break line			
		Central line			
		Dimension line			
		Hidden line			

	Correct application of drawing lettering	Lowercase			Proposed evidence: written Evidence
		Uppercase			
		Radius			Proposed activity: Multiple choice
	Appropriate application of orthographic and oblique drawing techniques	Front view			Proposed evidence: written Evidence Proposed activity: Multiple choice
		Back view			
		Left view			
		Right view			
		Top view			
		Bottom view			
3. Interpret technical drawing	Proper differentiation of drawing symbols	Timber symbol			Proposed evidence: written Evidence Proposed
		Glass Symbol			
		Windows Symbol			
		Doors Symbol			

		Bricks Symbol			activity:
		Concrete Symbol			Multiple choice
	Proper interpretation of the scale	Full scale			Proposed evidence: written Evidence Proposed activity: Multiple choice
		Reducing scale and			
		Enlarging scales			
	Appropriate lettering	Gothic lettering			Proposed evidence: written Evidence Performance evidence Proposed activity: Multiple choice
		Roman lettering			
		Italic			

REFEREN CES

<http://www.en.technisches-zeichnen.net/technical-drawing/basics-01/technical-drawing-01.php>

SOKOINE
UNIVERSITY OF
AGRICULTURE,
DEPARTMENT OF
FOOD
SCIENCE
AND

TECHNOLOGY, basic engineering drawing and communication, lecture notes, Morogoro.

TSAUT103 COST ESTIMATION		
Competence : Estimate the cost		
RTQF LEVEL: 1	CREDITS: 5	LEARNING HOURS : 50
SECTOR: All	SUB-SECTOR: All	
ISSUE DATE: November 2013	REVIEW DATE:	

STIRLING, N. (1989): An Introduction to Technical Drawing – Metric Edition

Delmar Publishers. Albany, New York, pp. 370

BHANDARI, V.K., BUEHLMANN, E.T., KELLER, U., OEHNINGER, J. and TOMESSEN, L.B.M. (1983):

Drawing and Design: Data Book for Mechanical Engineering

SHIGLEY, J.E. (1977): Mechanical Eng

PURPOSE STATEMENT

This module describes the skills and knowledge required to prepare a small budget. They can keep basic business financial records.

LEARNING ASSUMED TO BE IN PLACE

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning units By the end of the module, the trainee will be able to :	Performance criteria
1. Examine work	1.1 Proper determination of the work extent 1.2 Proper scrutiny of complexity of the work 1.3 Proper identification of the location where the work will be performed 1.4 Accurate determination of the work duration
2. Determine required resources	2.1 Proper identification of materials needed 2.2 Proper determination of quantities in terms of size and shape 2.3 Proper identification of quality of materials needed 2.4 Proper determination of human resource required

3. Calculate the cost estimation	3.1 Proper survey on actual prices of materials and human resources 3.2 Accurate determination of unit and total prices of each item 3.3 Precise calculation of the labor cost considering taxes, transport, equipment, benefit and other charges 3.4 Neat filling in the bill of quantities of layout 3.5 Accurate preparation of invoice
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Learning unit 1: Examine work

Learning Hours : 10

Learning outcomes	Contents	Learning activities	Resources
1.1 Determine the work extent	- Determination of dimension: ✓ Length ✓ Width ✓ Thickness ✓ Accuracy ✓ Clearness ✓ Completeness	- Brainstorming on dimension determination - Group discussion on analysis of the work - Physical demonstration of work analysis	- Books - Handout - Measuring tools - Calculator - Note book - Writing device
1.2 Scrutinize the complexity of the work	- Analysis of complexity of the work: ✓ Shape ✓ Accessories	- Brainstorming on accurate work done - Group discussion on analysis of the work - Physical demonstration of work analysis	- Books - Handout - Measuring tools - Calculator - Note book - Writing device
1.3 Localize the working place	- Working location ✓ Indoor location ✓ Outdoor location	- Brainstorming on factors to locate the working place - Group discussion on factors to locate the working place	- Handout - Places - Note book - Writing device
1.4 Determine the work duration	- Steps of work duration determination ✓ Time of each task	- Brainstorming on time allocation of different tasks - Group discussion on time	- Scenarios - Calculator - Note book

	✓ Determination of concurrent tasks ✓ Total time	- allocation of different tasks ○ Practical exercises on time allocation of different tasks	- Writing device
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Learning unit 2: Determine required resources

Learning Hours : 10

Learning outcomes	Contents	Learning activities	Resources
2.1. Quantify materials	• Identification of materials ✓ Type of materials • Quantities of materials in terms of size and shape; ✓ Measurements ✓ Profiles	○ Brainstorming on materials quantities ○ Group discussion on bills of quantities	- Calculator - Note book - Writing device - Proforma invoice
2.2. Identify the quality of materials	• Quality of material needed: ✓ Specification of material ✓ Description of material	○ Brainstorming on condition of the quality of materials ○ Group discussion on condition of the quality of materials ○ Practices of identification of materials	- Books - Handout - Measuring tools - Calculator - Note book - Writing device
2.3. Determine human resources	• Factors for human resource determination: ✓ Variety of tasks ✓ Extent of work ✓ Duration of work	○ Brainstorming on factors to determine human resource required ○ Group discussion on factors to determine human resource required ○ Practical exercises	- Calculator - Handout - Places - Note book - Writing device

Learning unit 3 : Calculate the cost estimation

Learning Hours : 30

Learning outcomes	Contents	Learning activities	Resources
3.1. Actualize the prices	• Materials survey prices ✓ Window shopping ✓ Proforma invoice	○ Brainstorming on prices ○ Group discussion on factors to fix the cost.	- Books - Handout - Places

		○ Discussion on surveying the prices	- Note book - Writing device
3.2. Determine the units and total costs of materials	• Determination of units and total prices of each item: ✓ Cost per unit measures ✓ Total cost	○ Brainstorming in determining the units and total costs ○ Group discussion cost unit and total cost determination	- Calculator - Note book - Writing device - Pro forma invoice
3.3. Perform calculation of charges and benefits	• Calculation of charges and benefits: ✓ The Labor Cost ✓ Taxes, ✓ Transport, ✓ Equipment, ✓ Benefits ✓ Transportation of materials ✓ Other Charges • Calculation of grand total cost • Layout for bill of quantities	○ Brainstorming on calculating the charges benefits and grand total ○ Group discussion on bills of quantities ○ Practices on calculations of charges and grand total.	- Calculator - Note book - Writing device - Pro forma invoice
3.4. Fill in bill of Quantities			
3.5. Prepare invoice	• Types of invoice ✓ Performa ✓ Service • Invoice elements ✓ Invoice number ✓ Item description ✓ Service description ✓ Quantities ✓ Unit prices ✓ Total prices	○ Brainstorming on cost estimation ○ Demonstration of invoice preparation ○ Practical exercises on invoice preparation	- Books - Internet - Bills books - Invoice samples

Assessment Guidelines

Competence: Estimate the cost

Portfolio for formative assessment

Resources

Tools	Materials	Equipment
✓ Pens	✓ Papers	
✓ Rulers	✓ Pro forma invoice	
✓ Calculator	✓ Invoice	
✓ Pincels	✓ Receipts	
✓ Registrar book	✓ Cheque book	

Elements of competence	Assessment indicator	Checklist	Score		Observation
			Yes	No	
1. Examine work	Determination of the work extent is done	Complexity level of the component shape			
		Time for the work			
	Working place is identified	Indoor location			
		Outdoor location			
	Work duration is located	Time of each task			
		Determination of concurrent tasks			
2. Determine required resources	Materials are quantified	Type of materials			
		size and shape			
	Quality of materials are identified	Specification of material			
		Prices			

	Human resources are determined	Availability of labor			
		Availability of funds			
3. Calculate the cost estimation	The prices are actualised	Market prices			
		Proforma invoice			
	Bill of quantities are calculated	Labor Cost			
		Taxes			
		Transport			
		Equipment			
		Benefits			
		Miscellaneous Charges			
	Invoice is prepared	Invoice number			
		Item description			
		Service description			
		Quantities			
		Unit prices			
		Total prices			

Reference

TSAUT101 BASIC WORKPLACE CALCULATIONS		
Competence : Perform basic workplace calculations		
RTQF LEVEL: 1	CREDITS: 8	LEARNING HOURS : 80

1. Publishing, B. (2013). *Good Small Business Guide 2013, 7th Edition: How to start and grow your own business*. A&C Black.
2. Sweeting, J. (1997). *Project Cost Estimating: Principles and Practice*. IChemE.
3. Vijaya, K. R., Elanchezhian C. , Ramanath B., Kesavan, R., Elanchezhian, C., & Ramanath, B. V.
4. (2009). *Process Planning and Cost Estimation*. New Age International.

SECTOR: All	SUB-SECTOR: All
ISSUE DATE: November 2013	REVIEW DATE:

PURPOSE STATEMENT

This module describes the skills and knowledge required to prepare a small budget. They can keep basic business financial records.

LEARNING ASSUMED TO BE IN PLACE

Not applicable

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning units By the end of the module, the trainee will be able to :	Performance criteria
4. Apply basic arithmetic operations	4.1. Proper application of four fundamental operations

	4.2. Proper application of fractions and decimals 4.3. Proper determination of percentages and ratios
5. Apply metric system	5.1. Proper identification of measurements systems 5.2. Proper use of metric and non-metric measurements units 5.3. Correct conversion of units of measurements
6. Perform basic geometric forms	6.1. Proper drawing of regular and irregular geometrical forms 6.2. Adequate calculation of dimensions of regular geometrical forms 6.3. Adequate calculation of dimensions of irregular geometrical forms

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

Learning unit 1: Apply basic arithmetic operations

Learning Hours : 20

Learning outcomes	Contents	Learning activities	Resources
1.1. Apply fundamental operations	- Fundamental operations: ✓ Addition, ✓ Subtraction, ✓ Multiplication and ✓ Division	- Group discussion on 4 fundamentals operations - Practical exercises on adding, subtracting, multiplying, and dividing	- Reference books - Pens
1.2. Apply fractions and decimals	- Fractions and decimals ✓ Addition of fractions ✓ Subtraction of fractions	Brainstorming on fractions and decimals	- Reference books - Pens
1.3. Determine		Group discussion on fractions	

percentages and ratios	✓ Multiplication of fractions ✓ Division of fractions ✓ Addition of decimals ✓ Subtraction of decimals ✓ Multiplication of decimals ✓ Division of decimals • Conversion of decimals to fractions and vice-versa • Simplification of fractions • Expressing percentages and ratios	- and decimals ○ Practical exercises fractions and decimals, percentages and ratios	
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Learning unit 2: Apply metric system

Learning Hours : 30

Learning outcomes	Content	Learning activities	Resources
2.1. Use measurements systems	• Metric and non-metric measurements units ✓ Length ✓ Area ✓ Volume ✓ Mass ✓ Time • Application of metric and non-metric measurement units.	○ Brainstorming on Metric and non-metric measurement units ○ Group discussion on Metric and non-metric measurement unit ○ Practical exercises on Metric and non-metric measurement units	- Books - Handout - Calculator - Pens
2.2. Convert units of measurements	• Relationship between metric and non-metric measurement units	○ Brainstorming on Relationship between metric and non-metric measurement units ○ Group discussion on Relationship between metric and non-metric measurement units ○ Practical exercises on Relationship between metric and non-metric measurement	

		units	
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Learning unit 3 : Perform basic geometric forms

Learning Hours : 30

Learning outcomes	Contents	Learning activities	Resources
3.1. Draw regular and irregular geometrical forms	• Drawing instruments • Regular geometrical forms ✓ Square ✓ Rectangle ✓ Triangle ✓ Other polygons ✓ Circle ✓ Cone • Irregular geometrical forms ✓ Irregular polygons	○ Brainstorming on regular and irregular geometrical forms ○ Group discussion on regular and irregular geometrical forms ○ Practical exercises on drawing regular and irregular geometrical forms	- Books - Handout - Drawing set
3.2. Calculate dimensions of regular geometrical forms	• Basic formula for determining different dimensions of regular geometrical forms	○ Brainstorming in determining different dimensions of regular geometrical forms ○ Group discussion on determining different dimensions of regular geometrical forms ○ Practical exercises on determining different dimensions of regular geometrical forms	- Books - Handout - Drawing set - Calculator
3.3. Calculate dimensions of irregular geometrical forms	• Basic formula for determining different dimensions of irregular geometrical forms	○ Brainstorming in determining different dimensions of irregular geometrical forms ○ Group discussion on determining different dimensions of irregular	- Books - Handout - Drawing set - Calculator

		geometrical forms ○ Practical exercises on determining different dimensions of irregular geometrical forms	
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Assessment Guidelines

Competence: Perform basic workplace calculations

Portfolio for formative assessment

Resources

Tools	Materials	Equipment
✓ Pens ✓ Rulers ✓ Calculator ✓ Compass	✓ Papers	✓ Drawing set

Element of competence	Assessment indicator	Checklist	Score		Observation
			Yes	No	
1. Apply basic arithmetic operations	Four fundamental are applied	Addition			
		Subtraction			
		Multiplication			
		Division			
	Fractions and decimals are applied	Addition of fractions			126
		Subtraction of fractions			
		Multiplication of fractions			
		Division of fractions			
		Addition of decimals			
		Subtraction of decimals			
		Multiplication of decimals			
		Division of decimals			
		Simplification of fractions			
	Percentages and ratios are determined	Percentages			

		Ratios			
2. Apply metric system	Metric and non-metric measurements units are applied	Length			
		Area			
		Volume			
		Time			
		Mass			
		Application of metric and non-metric measurement units.			
	Conversion of units of measurements is done	metric measurement units			
		non-metric measurement units			
3. Perform basic geometric forms	Drawing of regular and irregular geometrical forms are performed	Drawing instruments			
		Square			
		Rectangle			
		Triangle			
		polygons			
		Circle			

		Cone			
		Irregular geometrical forms			
		Irregular polygons			
	Dimensions of irregular geometrical forms are calculated	Basic formula			
		Dimensions of regular geometrical forms			
	Dimensions of regular geometrical forms are determined	Dimensions of irregular geometrical forms			

References

1. Chancellor, W. E. (1901). *Children's Arithmetic by Grades: Fundamental operations. Second book, third year*. Globe School Book Company.
2. *Key Maths 7/1*. (2000). Nelson Thornes.
3. Punzalan, C. N., CO, K. H. P., & Close, J. F. (2011). *Fundamental Operations on Fractions*. Kendall Hunt Publishing Company.

CSTCA103 CARPENTRY HAND TOOLS		
Competence : USE CARPENTRY HAND TOOLS		
RTQF LEVEL: 1	CREDITS: 7	LEARNING HOURS : 70
SECTOR: Construction		SUB-SECTOR: Carpentry
ISSUE DATE:		REVIEW DATE:

PURPOSE STATEMENT

This is a core module which describes the skills, attitude and knowledge required to use safely and effectively carpentry hand tools, apply hand tools maintenance techniques and store hand tools following standards.

LEARNING ASSUMED TO BE IN PLACE:

CM101 Describe the occupation and the training process

CM102 Maintain health, safety, and Security, and Sustain Environment in the workplace

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning units By the end of the module, the trainee will be able to :	Performance criteria	
1. Describe hand tools	1.1.	Proper description of setting out tools and their use
	1.2.	Proper description of cutting and shaving tools and their use
	1.3.	Proper description of holding tools and their use
	1.4.	Proper description of fixing or impelling tools and their use
	1.5.	Proper description of boring tools and their use
2. Maintain hand tools	2.1.	Proper choice of cleaning products
	2.2.	Appropriate cleaning of hand tools
	2.3.	Proper lubricate of hand tools
	2.4.	Proper re-sharpen of hand tools
3. Store hand tools	3.1.	Proper identification of the place
	3.2.	Proper description of storing condition
	3.3.	Appropriate arrangement of tools

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.

Learning Unit 1: Describe hand tools

Learning Hours: 30

Learning Outcomes	Contents	Learning Activities	Resources
1. Describe holding tools	- Holding tools types: ✓ Carpenters work bench or ✓ Bench hook ✓ Sash clamps ✓ T-bar clamps ✓ G-clamps ✓ Hand screw clamps or L clamp ✓ Support devices or trestles ✓ Mitre boxes ✓ Kit bench box (or bench tools box)	○ Group discussion holding tools ○ Video presentation on holding tools ○ Documentary research on holding tools ○ Practical exercise of using holding tools	- Internet - Reference books - Visual aids - Carpenters work bench or carpenters work bench - Bench hook - Sash clamps - T-bar clamps - G-clamps - Hand screw clamps or L clamp - Support devices or trestles - Mitre boxes - Kit bench box (or bench tools box)
2. Describe setting out tools	Setting out tools types: ✓ Tape measure ✓ Folding rule ✓ Marking gauge ✓ Marking knife ✓ Pencil ✓ Spirit level ✓ Calipers ✓ Dividers ✓ Straight edges ✓ Plumb bob ✓ Parallel strips ✓ Try square ✓ Diagonal rods ✓ Mitre square	○ Group discussion setting out tools ○ Video presentation on setting out tools ○ Documentary research on setting out tools ○ Practical exercise on using setting out tools	- Tape measure - Folding rule - Marking gauge - Marking knife - Pencil - Spirit level - Calipers - Dividers - Straight edges - Plumb bob - Parallel strips - Try square - Diagonal rods - Mitre square - Building square

	✓ Building square ✓ Sliding bevel		- Sliding bevel - Internet - Reference books - Visual aids
3. Describe cutting and shaving tools	Cutting and shaving tools types: ✓ Slicing and smoothing tools: ▪ Planes, ▪ Chisels and ▪ Gauges ✓ Parting and shaving tools: ▪ Ripping saws ▪ Crosscut saws	○ Group discussion on cutting and shaving tools ○ Video presentation on cutting and shaving tools ○ Documentary research on cutting and shaving tools ○ Practical exercise on using cutting and shaving tools	- Internet - Reference books - Planes, - Chisels and - Gauges - Ripping saws - Crosscut saws
4. Describe fixing or impelling tools	Types of impelling tools: ✓ Wood or plastic mallet ✓ Claw hammer ✓ Warrington hammer ✓ Panel pin hammer ✓ Pincers ✓ Pliers ✓ Screw drivers (ordinary or flat screw driver) ✓ Star screw driver ✓ Spiro screw driver ✓ Nail punch ✓ Spanners ✓ Claw bars	○ Group discussion on fixing or impelling tools ○ Video presentation on fixing or impelling tools ○ Documentary research on fixing or impelling tools ○ Practical exercise on using fixing and impelling tools	- Reference books - Internet - Visual aids - Wood or plastic mallet - Claw hammer - Warrington hammer - Panel pin hammer - Pincers - Pliers - Screw drivers (ordinary or flat screw driver) - Star screw driver - Spiro screw driver - Nail punch - Spanners - Claw bars
5. Describe boring tools	Boring tools types: ✓ Single brace ✓ Ratchet brace ✓ Hand drill or Wheel drill ✓ Drill bits ✓ Twist bits ✓ Auger bits	○ Group discussion on boring tools ○ Video presentation on boring tools ○ Documentary research on boring tools ○ Practical exercise on using	- Internet - Reference books - Visual aids - Single brace - Ratchet brace - Hand drill or Wheel drill - Drill bits

	✓ Fastener bits ✓ Dowel bits ✓ Gimlet bits ✓ Turn screw bit to fit brace, hand drill ✓ Expansion bits ✓ Shell boring bits for mortises ✓ Counter sink bits ✓ Dowel sharpener bits	boring tools	- Twist bits - Auger bits - Fastener bits - Dowel bits - Gimlet bits - Turn screw bit to fit brace, hand drill - Expansion bits - Shell boring bits for mortises - Counter sink bits - Dowel sharpener bits
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Learning Unit 2: Maintain hand tools

Learning Hours: 20

Learning Outcomes	Contents	Learning Activities	Resources
1. Clean hand tools	• Cleaning importance • Cleaning techniques: ✓ Sanding ✓ Chipping ✓ Wire brushing ✓ Scrapping • Cleaning materials: ✓ Oil ✓ Solvent ✓ water	○ Group discussion on cleaning hand tools ○ Video presentation on hand tools cleaning ○ Documentary research on hand tools cleaning ○ Practical exercise on cleaning hand tools	- Internet - Reference books - Visual aids - Oil - Solvent - Water - Brush - Scrappers
2. Lubricate hand tools	Materials for lubrication: ✓ Oil ✓ Grease Lubrication methods: ✓ Manual ✓ machine	○ Practical exercise on lubricating hand tools ○ Group discussion on lubrication materials ○ Demonstration on lubricating hand tools	- Internet - Reference books - Oil - Grease - Brush - Lubricating machine
3. Re-sharpen hand tools	• Re-sharpening stones: ✓ Rough	○ Group discussion on hand tools re-sharpening	- Internet - Reference books

	✓ Fine • Re-sharpening angle • Saw setting and re-sharpening	○ Practical exercise on hand tools re-sharpening ○ Practical exercise on saw setting	- Re-sharpening stones - Saws - Plane cutters - Chisels
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Learning Unit 3: Store carpentry hand tools

Learning Hours: 20

Learning Outcomes	Contents	Learning Activities	Resources
1. Identify storing places	Storing places: ✓ Shelves ✓ Tool boxes	○ Group discussion on storing places ○ Site visit	- Internet - Reference books - Tool boxes - shelves
2. Describe the store room conditions	Storing conditions ✓ Weathering ✓ Volume of workshop	○ Group discussion on store room conditions ○ Documentary research ○ Site visit	- Internet - Reference books - Hand outs
3. Arrange tools to be stored	Arrangement of tools according to: ✓ Standard operational procedures ✓ Manufacturers' recommendation	○ Demonstration on tools arrangement ○ Practical exercise on tools arrangement ○ Group discussion on tools arrangement	- Internet - Reference books - Hand outs - Shelves - Tool boxes

Assessment Guidelines

COMPETENCE: Use carpentry hand tools

Portfolio for formative assessment

Resources

Tools	Materials	Equipment
Holding tools: ✓ Carpenters work bench ✓ Bench hook ✓ Sash clamps ✓ T-bar clamps ✓ G-clamps ✓ Hand screw clamps or L clamp ✓ Support devices or trestles ✓ Mitre boxes ✓ Kit bench box (or bench tools box) setting out tools: ✓ Tape measure ✓ Folding rule ✓ Marking gauge ✓ Marking knife	✓ Oil ✓ Solvent ✓ Water ✓ Air ✓ Wood ✓ Re-sharpen tools	✓ Shelves ✓ Tool boxes

✓ Pencil ✓ Spirit level ✓ Calipers ✓ Dividers ✓ Straight edges ✓ Plumb bob ✓ Parallel strips ✓ Try square ✓ Diagonal rods ✓ Mitre square ✓ Building square ✓ Sliding bevel Cutting and shaving tools: ✓ Slicing and smoothing tools: (Planes, chisels, Gauges) ✓ Parting and shaving tools: (Ripping saws, Crosscut saws) fixing or impelling tools: ✓ Wood or plastic mallet ✓ Claw		
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✓ hammer ✓ Warrington hammer ✓ Panel pin hammer ✓ Pincers ✓ Pliers ✓ Screw drivers (ordinary or flat screw driver) ✓ Star screw driver ✓ Spiro screw driver ✓ Nail punch ✓ Spanners ✓ Claw bars Boring tools: ✓ Single brace ✓ Ratchet brace ✓ Hand drill or Wheel drill ✓ Drill bits ✓ Twist bits ✓ Auger bits ✓ Fastener bits ✓ Dowel bits ✓ Gimlet bits ✓ Turn screw bit to fit brace, hand drill ✓ Expansion bits ✓ Shell boring bits for mortises ✓ Counter sink bits		
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✓ Dowel sharpener bits ✓		
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Elements of competence	Assessment indicator	Checklist	Score		Observation
			YES	NO	
1. Describe hand	Proper description of	Carpenters work bench			Proposed

tools	holding tools and their use	Bench hook			evidence: written Evidence Proposed activity: Multiple choice List holding tools used in Carpentry trade
		Sash clamps			
		T-bar clamps			
		G-clamps			
		Hand screw clamps or L clamp			
		Support devices or trestles			
		Mitre boxes			
		Kit bench box (or bench tools box			
	Proper description of setting out tools and their use	Tape measure			Proposed evidence: written Evidence Proposed activity: Multiple choice List setting tools used in
		Folding rule			
		Marking gauge			
		Marking knife			
		Pencil			
		Spirit level			

		Calipers			Carpentry trade
		Dividers			
		Straight edges			
		Plumb bob			
		Parallel strips			
		Try square			
		Diagonal rods			
		Mitre square			
		Building square			
		Sliding bevel			
	Proper description of cutting and shaving tools and their use	Slicing and smoothing tools: (Planes, chisels, Gauges)			Proposed evidence: written Evidence Proposed activity:
		Parting and shaving tools: (Ripping saws, Crosscut saws)			

					Multiple choice
					List cutting and shaving tools used in Carpentry trade
	Proper description of fixing or impelling tools and their use	Wood or plastic mallet			Proposed evidence: written Evidence
		Claw hammer			
		Warrington hammer			Proposed activity:
		Panel pin hammer			
		Pincers			Multiple choice
		Pliers			List fixing tools used in Carpentry trade
		Screw drivers (ordinary or flat screw driver)			
		Star screw driver			
		Spiro screw driver			
		Nail punch			

		Spanners			
		Claw bars			
	Proper description of boring tools and their use	Single brace			Proposed evidence: written Evidence Proposed activity: Multiple choice List Boring tools used in Carpentry trade
		Ratchet brace			
		Hand drill or Wheel drill			
		Drill bits			
		Twist bits			
		Auger bits			
		Fastener bits			
		Dowel bits			
		Gimlet bits			
		Turn screw bit to fit brace, hand drill			
		Expansion bits			
		Shell boring bits for mortises			

2. Maintain hand tools		Counter sink bits			
		Dowel sharpener bits			
	Proper Selection of cleaning products	Oil			Proposed evidence: written Evidence
		Solvent			
		Water			
		Air			Proposed activity: Give the list of cleaning product. Multiple choice
	Appropriate cleaning of hand tools	Sanding			Proposed evidence: written Evidence
		Chipping			
		Wire brushing			Proposed activity: Multiple
		Scrapping			

		Washing			choice List Boring tools used in Carpentry trade Multiple choice Give the types of cleaning product of hand tools use in Carpentry
	Proper lubricate of hand tools	Lubricated hand tools			Proposed evidence: written Evidence Performance evidence. Proposed activity: After Cleaning of Chisel you are requested to rubricate it.

	Proper re-sharpen of hand tools	Re-sharpened hand tools			Proposed evidence: Performance evidence Proposed activity: Before preparation of windows pieces re-shape the saw used.
3. Store hand tools	Proper identification of the place	Shelves			Proposed evidence: written Evidence Give 2 examples of two storing place of Hand tools
		Tool boxes	,		
	Proper description of	Weather			Proposed

	storing condition	Size of Storing room			activity: Multiple choice
	Appropriate arrangement of tools	Tools Arranged			Proposed evidence: Performance evidence written Evidence

CSTCA104 WOODWORKING MACHINES		
Competence : USE WOODWORKING MACHINES		
RTQF LEVEL: 1	CREDITS: 11	LEARNING HOURS : 110

SECTOR: Construction	SUB-SECTOR: Carpentry
ISSUE DATE:	REVIEW DATE:

PURPOSE STATEMENT

This module provides the learners with skills, attitude and knowledge required to operate wood working machines following safety procedures, maintain the machines according to standards and store woodworking machines in accordance with standard operational procedures and manufacturers' recommendations.

LEARNING ASSUMED TO BE IN PLACE

CM101 Describe the occupation and the training process

CM102 Maintain health, safety, and security, and Sustain Environment in the workplace

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
By the end of the module, the trainee will be able to :	
1. Prepare for work	1.1. Proper observation of workplace health and safety requirements, including ventilation requirements and personal protection needs throughout the work 1.2. Appropriate selection of machines and inspected for quality 1.3. Respect of safety requirements of machines before, during and after use, this

	includes emergency stops, gauges, guards and controls
2. Operate machines	1.1. Appropriate start-up of machine procedure in accordance with manufacturers' Instructions 1.2. Proper operation of the machine in accordance with its designed capacity and purpose, tooling requirements and to manufacturers' recommendations 1.3. Proper identification of any deficiency in the machine operation and reported to appropriate persons
3. Maintain equipment	3.1. Proper removal of waste and scrap following workplace procedures 3.2. Correct cleaning and inspection of equipment for serviceable condition in accordance with workplace procedures 3.3. Respect of storage conditions for equipment in terms of safely location and standard operational procedures and manufacturers' recommendations

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.

Learning Unit 1: Prepare for work

learning hours: 60

Learning outcomes	Contents	Learning activities	Resources
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	✓ Heavy duty machines ✓ Portable machines types: ✓ Portable circular saw machines ✓ Portable planer machines ✓ Portable drill machines ✓ Angle grinder machines ✓ Portable sanding machines ✓ Portable jig saw machines ✓ Portable blower machine ✓ Portable freezing machine Heavy duty machines: ✓ Angle grinder machine ✓ Sanding machine ✓ Blower machine ✓ Freezing machine ✓ Circular saw machine ✓ Surface planer machine ✓ Thickness planer machine ✓ Bench drill machine ✓ Band saw machine ✓ Cross cutting machine ✓ Reshaping machine ✓ Belt Sander machine ✓ Wood lathe machine	○ Group discussion on classification of woodworking machines and types of woodworking machines ○ Site visit of a nearby carpentry workshop ○ Presentation on classification and types of woodworking machines ○ Practical exercises on selection of different types of woodworking machines	- Reference books - Video aids - Internet - Portable circular saw machines - Portable planer machine - Portable drill machines - Angle grinder machine - Portable sanding machine - Portable jig saw machine - Portable blower machine - Portable freezing machine - Angle grinder machine - Sanding machine - Blower machine - Freezing machine - Circular saw machine - Surface planer machine - Thickness planer machine - Bench drill machine - Band saw machine - Cross cutting machine - Reshaping machine - Belt Sander machine - Wood lathe machine
3. Observe safety of equipment	• General safety for woodworking machines • Machinery protection devices ✓ Emergency stops ✓ Gauges ✓ Guards ✓ Controls • Safe procedures for the inspection purpose	○ Group discussion on safety of woodworking machines ○ Site visit of a nearby carpentry workshop ○ Presentation on safety procedures and conditions of woodworking machines ○ Practical exercises on using protection devices of woodworking machines	- Emergency stops - Gauges - Guards - Controls - Reference books - Internet - Video aids - Pictures

Learning Unit 2: Operate woodworking machine

Learning hours: 50

Learning outcomes	Contents	Learning activities	Resources
1. Start-up machine	- Start up and shut down procedures - Parts and methods of operation	- Group discussion on starting-up and operation of machines - Site visit of a nearby carpentry workshop	- Reference books - Internet - video aid
2. Operate machine	- Designed capacity and Purpose - Tooling requirements and methods of changing tooling - Manufacturers' recommendations - Potential hazards associated with setting up and operating woodworking machinery - Safety aids and guards ✓ Push stick ✓ Push block ✓ Supports ✓ Autofeed table	- Presentation on starting-up and operation of machines - Practical exercises on starting-up and operation of woodworking machines	- Push stick - Push block - Supports - Autofeed table - Portable circular saw machines - Portable planer machine - Portable drill machines - Angle grinder machine - Portable sanding machine - Portable jig saw machine - Portable blower machine - Portable freezing machine - Angle grinder machine - Sanding machine - Blower machine - Freezing machine - Circular saw machine - Surface planer machine - Thickness planer machine - Bench drill machine - Band saw machine - Cross cutting machine - Reshaping machine - Belt Sander machine - Wood lathe machine

3. Identify machine deficiency	• Common reported faults	○ Group discussion on machines deficiency ○ Site visit of a nearby carpentry workshop ○ Presentation on machines deficiency	- Reference books - Internet - Video aids - Workshop
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Learning unit 3: Maintain woodworking machines

Learning outcomes	Content	Learning activities	Resources
1. Clean woodworking machines and workplace	• Cleaning techniques of portable and heavy machines ✓ Brushing ✓ Oiling ✓ Air pressure method (compressor) • Cleaning materials • Removal of waste and scrap procedures	○ Group discussion on the cleaning techniques and materials of woodworking machines ○ Site visit ○ Practical exercises on cleaning woodworking machines ○ Brainstorming on the nature of waste	- Reference books - Internet - Trash bin - Spade - Hand broom - Wheelbarrow - Gloves - Video aids - Machines - Air pressure/ compressor - Brush - Lubricate oil - Woodworking machines
2. Maintain serviceable condition of machines	• Good practices maintenance procedures for woodworking machines ✓ Methods ✓ Tools	○ Brainstorming on good practices maintenance procedures ○ Group discussion on maintenance procedures ○ Site visit of a nearby carpentry workshop ○ Practical exercises on application of maintenance procedures of woodworking machines	- Reference books - Internet - Picture - Video aids - Jigs - Holders - Push-sticks

		○ Presentation on maintenance procedures of woodworking machines	
3. Store woodworking machine	• Storage conditions • Standards Operations Procedures	○ Brainstorming on storage conditions ○ Group discussion on storing woodworking machines ○ Site visit of a nearby carpentry workshop	- Reference books - Internet - Video aids - Hand-out - Workshop - Storage boxes - Shelves

Assessment Guidelines

Competence: USE WOODWORKING MACHINES

Portfolio for formative assessment

Resources:

Tools & accessories	Materials	Equipment
• Spanners • Gauge • Chisel • Tape measure • Square • Veneer calliper • Pencil • Guards • Controls • Push stick • Push block • Supports • Trash bin • Spade • Hand broom • Wheelbarrow • Shelves • Storage boxes	▪ Libuyu timbers ▪ Sand paper ▪ Lubricant oil ▪ Varnish ▪ Eucalyptus timber ▪ Markhamia platycalyx timbers (Umusave) ▪ Cypress timber ▪ Cedar timber ▪ Pine timber ▪ Stain ▪ Thinner	▪ Gloves ▪ Goggles ▪ Dust mask ▪ Overall ▪ Earplugs ▪ Safety shoes(boats) ▪ Ear protector ▪ Helmet ▪ Surface planer machine ▪ Thickness planer machine ▪ Circular saw machine ▪ Wood lathe turning machine ▪ Mortiser machine ▪ Angle grinder machine ▪ Sanding machine ▪ Blower machine ▪ Freezing machine ▪ Bench drill machine ▪ Band saw machine ▪ Cross cutting machine ▪ Reshaping machine ▪ Belt Sander machine ▪ Wood lathe machine ▪ Portable circular saw machines ▪ Portable planer machines ▪ Portable drill machines ▪ Angle grinder machines ▪ Portable sanding machines ▪ Portable jig saw machines ▪ Portable blower machine ▪ Portable freezing machine ▪ Spray gun machine ▪ Air compressor machine

Element of competence	Performance criteria	Checklist	Score		Observation
			YES	NO	
1. Prepare for work	Proper observation of workplace health and safety requirements, including ventilation requirements and personal protection needs throughout the work	Helmet			Proposed evidence: Performance Evidence Proposed activity: Put on the required P.P.E according to manufacturer's instructions
		Gloves			
		Goggles			
		Dust mask			
		Overall			
		Earplugs			
		Safety shoes(boats)			
		Ear protector			
	Appropriate selection of	Portable circular			Proposed evidence:

	machines and inspected for quality	saw machines			- Performance Evidence - Written evidence Proposed activities: - Make a list of all machines required and sort out those which are having problems - Select a machine and check if it is working properly according to its working principles
		Portable planer machine			
		Portable drill machines			
		Portable sanding machine			
		Portable jig saw machine			
		Portable blower machine			
		Portable freezing machine			
		Portable Angle grinder machine			
		Portable Sanding machine			
		Freezing machine			
		Circular saw machine			
		Surface planer machine			

		Thickness planer machine			
		Bench drill machine			
		Band saw machine			
		Cross cutting machine			
		Reshaping machine			
		Belt Sander machine			
		Wood lathe machine			
		Cleanness of the machine			
		Working condition of the machine			
	Respect of safety requirements of machines before, during and after use, this includes emergency stops, gauges, guards and controls	Emergency stops			Proposed evidence: Written evidence Proposed activity: Identify all safety requirements that are needed when using
		Gauges			
		Guards			
		Controls			

					machines
2. Operate machines	Appropriate start-up of machine procedure in accordance with manufacturers' Instructions	User manual is consulted			Proposed evidence: Performance Evidence
		Machine is running			Proposed activity: Put the machine on by using all switches
	Proper operation of the machine in accordance with its designed capacity and purpose, tooling requirements and to manufacturers' recommendations	Size of timber			Proposed evidence: Performance evidence
		Working time for the machine			Proposed activity: Feed the timber in the machine and set the cutting width
	Proper identification of any deficiency in the machine operation and reported to appropriate persons	Technical report			Proposed evidence: Written evidence
					Proposed activity: Make a report on the condition of all machines that are having the problem
3. Maintain equipment	Proper removal of waste and scrap following workplace	Trash bin			Proposed evidence:
		Spade			Performance Evidence

	procedures	Hand broom			Proposed activity: Remove all the wastes that are available in the workshop
		Wheelbarrow			
		Gloves			
		overall			
		Mouth mask			
		Goggles			
	Correct cleaning and inspection of equipment for serviceable condition in accordance with workplace procedures	Brush			Proposed evidence: Performance evidence Proposed activity: By using lubricant oil clean the machine correctly and make sure that all required parts are lubricated.
		Lubricated equipment			
		Equipment without dust			
		Gloves			
		overall			
		Mouth mask			
		Goggles			
	Respect of storage conditions for equipment in terms of safely location and standard operational procedures and manufacturers'	Shelves			Proposed evidence: Performance evidence Proposed activity: Put all the equipment in their
		Storage boxes			
		Weather condition of the			

	recommendations	storing room			respective stores
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Portfolio for Summative assessment

INTEGRATED SITUATION

The Managing Director of MANUMETAL S.A in NYARUGENGE District has received an order of making a modern bed of 2mx2m and its head is 1.5m high, and he requested you as a machine operator to prepare different pieces as follows:

- Legs on the head board are turned at 90cm from top and the remaining part is with rectangular section and the hall section of the leg is 150cmx 6cmx5cm
- Legs on the foot board are of rectangle shape at 90cm from top and the remaining part is with rectangular section and the hall section of the leg is 150cmx 6cmx5cm
- The head board is made up of 3 pieces of timbers; the back panel is made up of 2 timbers, and 2 side rails with one piece of timber. The size of the timber to be used 200cmx30cmx4cm.
- The joints to be used here are: tongue and groove, mortise and Tenon and edge to edge butt joints.

The work should be done in eight hours. The client wants the bed made in African mahogany known as Libuyu and the bed slats should be made from eucalyptus.

Resources:

Task	Tools	Materials	Equipment
1. Operate machines while producing legs	- Spanners - Gauge - Chisel - Tape measure - Square - Veneer calliper - Pencil	- Libuyu timbers - Sand paper - Lubricant oil	- Surface planer machine - Thickness planer machine - Circular saw machine - Wood lathe turning machine - Mortiser machine
2. Operate machines while producing head and foot boards and side rails	- Spanners - Chisel - Tape measure - Combined square - Pencil - Try square	- Libuyu timber - Sand paper	- Surface planer machine - Thickness planer machine - Circular saw machine - Band saw - Sanding machine
3. Operate machines while producing bed slats	- Tape measure - Try Square - Pencil	Eucalyptus timber	- Surface planer machine - Thickness planer - Circular saw - Sanding machine

ASSESSMENT CRITERIA AND INDICATORS

Assessment criteria	Assessment indicator	Checklist	Score		Observation
			YES	NO	
1 Safety	PPE is used properly	Overall			

		Gloves			
		Working boots			
		Goggles			
		Dust mask			
		Headset			
	Work place is clean	Hand brooms			
		Dust bins			
		Spades			
		Overall			
		Gloves			
		Working boots			
		Goggles			
		Dust mask			
		Headset			
	Equipment and tools are well prepared and arranged	Hand Tools			
		Circular saw machine			
		Surface planer machine			
		Thickness planer machine			

		Band saw machine			
		Cross cutting machine			
		Reshaping machine			
		Belt Sander machine			
		Wood lathe machine			
2. Quality of process	Portable and heavy machines to be used are well identified	Circular saw machine			
		Surface planer machine			
		Thickness planer machine			
		Band saw machine			
		Cross cutting machine			
		Reshaping machine			
		Belt Sander machine			
		Wood lathe machine			
	Appropriate maintenance of the equipment is done	Cleaning			
		Lubrication			
		Storage			

	The machines are well set according to the size	Adjustment			
		Setting thickness			
		Setting the squareness			
	The pieces are well prepared by the machine	Squareness			
		Sizes			
		Turned pieces			
3. Relevance	Dimensions are well respected	Width			
		Length			
		Thickness			
	Time is respected	Time required			
	The required design is well respected	Views shape			
. Maintenance	Machines are clean	Cleanness			
		Lubricants			
	Machine is running smoothly	Switching on and switching off the			

		machine			
		Accessories			
	Portable machines and accessories are stored properly	Shelves			
		Storage boxes			
		Weather condition of the storing room			

CSTCA106 NON-UPHOLSTERED FURNITURE		
Competence : CONSTRUCT NON-UPHOLSTERED FURNITURE		
RTQF LEVEL: 1	CREDITS: 12	LEARNING HOURS : 120
SECTOR: Construction		SUB-SECTOR: Carpentry
ISSUE DATE:		REVIEW DATE:

PURPOSE STATEMENT

This is a core module which describes the skills, knowledge and attitude required to construct different joints, apply assembling methods and finishing techniques of non-upholstered furniture while respecting the standards requirements of health, safety and environment.

LEARNING ASSUMED TO BE IN PLACE:

CM101 Occupation and the training process

CM102 Health, safety, and security, and Sustain Environment in the workplace

CSTCA101 Timber technology

CSTCA102 Basic drawing

CSTCA103 Carpentry hand tools

CSTCA104 Woodworking machines

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning units By the end of the module, the trainee will be able to :	Performance criteria	
1. Prepare tools, materials and equipment	1.1. 1.2. 1.3. 1.4.	Proper interpretation of the drawing Appropriate identification of categories and types of furniture Proper selection, setting and sharpening of tools and equipment to be used Relevant selection of materials in accordance with nature and types of the furniture to be constructed

		Precise marking, measurements and cutting of pieces
2. Assemble the non-upholstered furniture	2.1. 2.2. 2.3 2.4 2.5 2.6	Proper identification of joints classification according to the work to be performed Appropriate application of marking symbols as per standards Precise preparation by marking and cutting of joints in accordance with the types of joints required for the furniture Appropriate joining of the pieces according to joints types Proper assembly and fastening all components of the furniture by using appropriate fastening materials
3. Perform finishing	3.1. 3.2. 3.3 3.4	Proper application of sanding techniques on furniture Proper application of molding technique where applicable Correct application of filling technique of any defects on the furniture Correct application of polishing technique on furniture

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.

Learning Unit 1: Prepare tools, materials and equipment as per furniture

Learning Hours:60

Learning Outcomes	Contents	Learning Activitiess	Resources
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1. Interpret drawing	Elements to consider ✓ Design ✓ Materials ✓ Dimensions	○ Group discussion on the elements to consider while interpreting a drawing ○ Documentary research ○ Demonstration on interpretation of different drawings ○ Practical exercises on interpretation of different drawings	- Internet - Hand-outs - Reference books - Drawings
1. Identify non-upholstered furniture	• Categories of furniture ✓ Upholstered ✓ Non upholstered • Classification of furniture as per their use ✓ Seating ✓ Entertainment ✓ Sleeping/laying ✓ Surfaces ✓ Storage • Types of furniture ✓ Tables ✓ Beds ✓ Cabinets ✓ Wardrobes ✓ Chairs ✓ Desks ✓ Benches ✓ Cupboards ✓ Bookshelves ✓ Racks ✓ Sideboards ✓ Stools	○ Brainstorming on categories of furniture and classification ○ Group discussion on the types of furniture ○ Display of different furniture on pictures and videos ○ Documentary research ○ Field visit of a nearby carpentry workshop/showroom	- Reference books - Internet - Audio visual aids - Furniture - Pictures - Workshop/showroom

	✓ Mirror frames ✓ Planters		
2. Select tools and equipment	• Preparation techniques of hand tools and machines ✓ Setting ✓ Sharpening	○ Selection of hand tools and machines ○ Practical exercises on preparation of hand tools and machines	- Internet - Reference books - Ironmongery - Timber - Boards - Wooden glue - Holding tools - Setting out tools - Cutting and shaving tools - Fixing or impelling tools - Boring tools - Portable drill machine - Portable jig saw machine - Surface planer machine - Thickness planer machine - Circular saw machine - Mortiser machine - Wood lathe machine - Sanding machine - Router machine - Jig saw machine - Drilling machine
3. Prepare materials	• Selection of materials depending on type of furniture • Preparation techniques of timber: ✓ Marking ✓ Planing ✓ Ripping ✓ Cross-cutting • Preparation of adhesive materials: (dilution techniques) ✓ Varnish ✓ Wooden glue	○ Interpretation of sketches ○ Practical exercise on marking, planing, cross-cutting and ripping ○ Practical exercise on mixing adhesives ○ Presentation on materials preparation ○ Documentary research on materials preparation	- Sketches - Internet - Reference books - Ironmongery - Timber - Boards - Wooden glue - Holding tools - Setting out tools - Cutting and shaving tools - Fixing or impelling tools

			- Boring tools - Portable drill machine - Portable jig saw machine - Surface planer machine - Thickness planer machine - Circular saw machine - Mortiser machine - Wood lathe machine - Sanding machine - Router machine - Jig saw machine - Drilling machine
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Learning Unit 2: Assemble non-upholstered furniture

Learning Hours:40

Learning Outcomes	Contents	Learning Activities	Resources
1. Identify classes of joints	Classes of joints: ✓ Lengthening ✓ Widening ✓ Framing Types of joints	○ Group discussion on joints ○ Presentation on types of joints ○ Documentary research on classes and types of joints ○ Display of joints samples	- Reference books - Internet - Sample of joints - Video aids - Pictures
2. Perform marking	• Marking symbols	○ Group discussion on different marking symbols ○ Demonstration on marking ○ Practical exercises marking pieces	- Reference books - Internet - Drawings - Woodworking materials (wooden
3. Prepare joints	• Joints preparation techniques	○ Demonstration on constructing joints ○ Practical exercises on constructing joints	- materials, wooden glue, ironmongery varnish and thinner)
4. Apply adhesive materials	• Techniques of assembly ✓ Application of wooden glue ✓ Fixing with ironmongery	○ Demonstration on application of adhesive materials ○ Practical exercises on application of adhesive materials	- Holding devices - Fixing tools - Setting out tools - Cutting and shaving tools

5. Fix the frame			- Fixing or impelling tools - Boring tools - Portable drill machine - Portable jig saw machine - Nail gun machine - Stapler machine
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Learning Unit 3: Finish non-upholstered furniture

Learning Hours:20

Learning Outcomes	Contents	Learning Activities	Resources
1. Apply molds	• Furniture finishing principles • Different types of molds materials • Different types of molds that can be applied to furniture : ✓ Cavetto ✓ Ovalo ✓ Ogee	○ Group discussion on type of finishing principles ○ Video presentation on different types of molds ○ Demonstration on application of molds on furniture ○ Practical exercise on application of molds on furniture	- Reference books - Internet - Audio visual equipment - Furniture - Molding machines+ accessories - Molding tools - PPE
2. Perform sanding	○ Types of sanding: ✓ Manual ✓ Sanding machine ○ Different types of sanding materials ✓ Sand papers ○ Sanding techniques	○ Group discussion on sanding materials ○ Presentation on different types of sanding materials ○ Video presentation on different types of sanding materials ○ Practical exercise on sanding furniture	- Reference books - Internet - Sand papers - Sanding machine - PPE - Furniture - Audio visual equipment
3. Perform furniture polishing	○ Different types of Polishing materials ○ Types of Wood Finishes ✓ surface Coatings,	○ Group discussion on types of wood finishes ○ Presentation on different types	- Reference books - Internet - Varnish

Learning Outcomes	Contents	Learning Activities	Resources
	✓ Penetrating Finishes ✓ Opaque/pigmented Finishes ○ Techniques of polishing	- of wood finishes ○ Video presentation on different types of wood finishes and their applications ○ Practical exercise on applying different finishes on furniture	- Shellac - Lacquer - Resin - Linseed Oil - Danish Oil - Paint, - Enamel - Painting/varnishing brush - Spray machine

Assessment Guidelines:

Competence: CONSTRUCT NON-UPHOLSTERED FURNITURE

Portfolio for formative assessment

Resources

Tools and Accessories	Materials	Equipment
✓ Carpenters work bench ✓ Bench hook ✓ Sash clamps ✓ T-bar clamps ✓ G-clamps ✓ Hand screw clamps or L clamp ✓ Support devices or trestles ✓ Mitre boxes ✓ Kit bench box (or bench tools box) ✓ Tape measure	✓ Grevellia timber ✓ Eucalyptus timber ✓ Pine timber ✓ Libuyu timber ✓ Muvura timber ✓ Umusave timber ✓ Cypress timber ✓ Cedar timber ✓ Nails	✓ Portable circular saw machines ✓ Portable planer machine ✓ Portable drill machines ✓ Angle grinder machine ✓ Portable sanding machine ✓ Portable jig saw machine ✓ Portable blower machine ✓ Portable freezing machine ✓ Sanding machine ✓ Blower machine

✓ Folding rule ✓ Marking gauge ✓ Marking knife ✓ Pencil ✓ Spirit level ✓ Callipers ✓ Dividers ✓ Straight edges ✓ Plumb bob ✓ Parallel strips ✓ Try square ✓ Diagonal rods ✓ Mitre square ✓ Building square ✓ Sliding bevel ✓ Planes, ✓ Chisels and ✓ Gauges ✓ Ripping saws ✓ Crosscut saws ✓ Wood or plastic mallet ✓ Claw hammer ✓ Panel pin hammer ✓ Pincers ✓ Pliers ✓ Screw drivers (ordinary or flat screw driver) ✓ Star screw driver ✓ Spiro screw driver ✓ Nail punch ✓ Spanners ✓ Claw bars ✓ Single brace	✓ Screws ✓ Glue ✓ Varnish ✓ Locks ✓ Hinges ✓ Plywood ✓ MDF ✓ Glasses ✓ Bolts and nuts ✓ Barrel bolts ✓ Handles ✓ Sand paper ✓ Thinner ✓ Lubricants	✓ Freezing machine ✓ Circular saw machine ✓ Surface planer machine ✓ Thickness planer machine ✓ Bench drill machine ✓ Band saw machine ✓ Cross cutting machine ✓ Reshaping machine ✓ Belt Sander machine ✓ Wood lathe machine ✓ Spray gun ✓ PPE
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✓ Ratchet brace ✓ Hand drill or Wheel drill ✓ Drill bits ✓ Twist bits ✓ Auger bits ✓ Fastener bits ✓ Dowel bits ✓ Gimlet bits ✓ Turn screw bit to fit brace, hand drill ✓ Expansion bits ✓ Shell boring bits for mortises ✓ Counter sink bits		
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Element of competence	Performance criteria	Checklist	Score		Observation
			YES	NO	
1. Prepare tools, materials and equipment	Proper interpretation of the drawing	Drawing symbols			Proposed evidence: Written evidence Proposed activity: Interpret a given orthographic drawing of table.
		Drawing dimensions			
		Drawing scale			
		Title block of drawing			
		Different types of lines			
		Different size of lines			

		lettering			
	Appropriate identification of categories and types of furniture	materials			Proposed evidence: written evidence Proposed activity: Matching: link the furniture with the correct categories
		Design			
		Size			
		Use			
	Proper selection, setting and re-sharpening of tools and equipment to be used	Holding tools			Proposed evidence: Performance evidence Proposed activity: Select tools of make the dovetail joint of the drawer. Use correct methods re-sharpen the saw of ripping the planks.
		Setting out tools			
		Cutting and shaving tools			
		Fixing or impelling tools			
		Boring tools			
		Topped saw			
		Set saw			
		Re-sharpened saw			
		Portable machines			
		Heavy machines			

	Relevant selection of materials in accordance with nature and types of the furniture to be constructed	Grading of wood			Proposed evidence: written evidence Proposed activity: Matching: Match the name of materials with their nature and types
		Sand papers			
		Screws			
		Nails			
		Dilution of wooden glue			
		Dilution of varnish			
	Precise marking, measuring and cutting of pieces	Marking and measuring			Proposed evidence: Performance evidence Proposed activity: Measure mark and cut the pieces of make the frame of door.
		Planing			
		Jointing			
		Squareness			
		Ripping			
		Cross-cutting			
2. Assemble the non-upholstered furniture	Proper identification of joints classification according to the work to be performed	Cross- rap			Proposed evidence: written evidence Proposed activity: Matching
		Halved joint			
		Dovetail			
		Corner halving joint			
		Tee halving joint			

		Mitre			link the joint with the correct names of the given drawing
		Mortise and tenon			
		Scarf			
		Tongue and groove			
		Frame and panel			
		Housing joint (dado)			
		Dowel			
		Bridle joints			
	Appropriate application of marking symbols as per standards	left rails symbols(ε)			Proposed evidence: Performance evidence Proposed activity: Observation checklist; Put the marking symbols on the given window frame
		right rails symbols(3)			
		top rails symbols(Λ)			
		middle rails symbols(/ \)			
		bottom rails symbols()			

		middle rails symbols 			
	Precise preparation by marking and cutting of joints in accordance with the types of joints required for the furniture	Marked joint			Proposed evidence: Performance evidence Proposed activity: From the window frame sketch provided, prepare a stub mortise and tenon joint use on top left corner.
		Cross- rap			
		Halved joint			
		Dovetail			
		Corner halving joint			
		Tee halving joint			
		Mitre			
		Mortise and tenon			
		Scarf			
		Tongue and groove			
		Frame and panel			
		Housing joint (dado)			
		Dowel			
		Bridle joints			

	Appropriate joining of the pieces according to joints types	Cross- rap			Proposed evidence: Performance evidence Proposed activity: According to the sketch; make a window frame by using the corner halving joint.
		Halved joint			
		Dovetail			
		Corner halving joint			
		Tee halving joint			
		Mitre			
		Mortise and tenon			
		Scarf			
		Tongue and groove			
		Frame and panel			
		Housing joint (dado)			
		Dowel			
		Bridle joints			
	Proper assembly and fastening all components of the furniture by using appropriate fastening materials	Stability			Proposed evidence: Performance evidence Proposed activity: Fasten the chair frame with
		Tight			
		Squareness			
		Diagonal			

					wooden glue.
3. Perform finishing	Proper application of sanding techniques on furniture	Tip the machine lightly with just enough pressure to bend the disk			Proposed evidence: Performance evidence Proposed activity: By using correct sanding technique sand the wooden panel of cupboard
		Use a long			
		Sweeping motion			
		Back and forth			
		Advancing along the surface			
	Proper application of moulding technique where applicable	Cove			Proposed evidence: Performance evidence Written evidence Proposed activity: Matching: link the mould with the correct names From the table sketch provided, make the moulding on top panel
		Corner			
		Dovetail			
		v-grooving			
		Chamfer			
		Straight			
		Round end			
		Bending			
		Panel			
		beading			

	Correct application of filling technique of any defects on the furniture	Covered seams			Proposed evidence: Performance evidence Proposed activity: Try to fill all defect on you chair.
		Covered nail heads			
	Correct application of polishing technique on furniture	1 st coats			Proposed evidence: Performance evidence Proposed activity: After doing all finishing polish your desk.
		2 nd coats			
		3 rd coats			

Portfolio for Summative assessment

Integrated Situation:

- The district of KICUKIRO, has offer a job of making the wooden office equipment, as carpenter from MUTARA enterprise, you are requested to make one office table for that district which has the following dimensions 80 cm height, 150cm width and 100 cm depth. This table is made from cypress timber. The work must be properly cleaned and use properly the equipment and tools adequately.

The time allocated to this work is 8 hours.

Task: make the office table of 80cm height, 150cm width and 100cm depth.

Resources

Tools and Accessories	Materials	Equipment
✓ Carpenters work bench ✓ Bench hook ✓ Sash clamps ✓ T-bar clamps ✓ G-clamps ✓ Hand screw clamps or L clamp ✓ Support devices or trestles ✓ Mitre boxes ✓ Kit bench box (or bench tools box) ✓ Tape measure ✓ Folding rule ✓ Marking gauge ✓ Marking knife ✓ Pencil ✓ Spirit level ✓ Callipers ✓ Dividers	✓ cypress timber ✓ Screws ✓ Glue ✓ Varnish ✓ Locks ✓ Hinges ✓ Plywood ✓ Sand paper ✓ Thinner ✓ Lubricants	✓ Portable circular saw machines ✓ Portable planer machine ✓ Portable drill machines ✓ Angle grinder machine ✓ Portable sanding machine ✓ Portable jig saw machine ✓ Portable blower machine ✓ Angle grinder machine ✓ Sanding machine ✓ Blower machine ✓ Circular saw machine ✓ Surface planer machine ✓ Thickness planer machine ✓ Bench drill machine ✓ Band saw machine ✓ Cross cutting machine ✓ Reshaping machine

✓ Straight edges ✓ Try square ✓ Mitre square ✓ Sliding bevel ✓ Planes, ✓ Chisels and ✓ Gauges ✓ Ripping saws ✓ Crosscut saws ✓ Wood or plastic mallet ✓ Claw hammer ✓ Warrington hammer ✓ Panel pin hammer ✓ Pincers ✓ Pliers ✓ Screw drivers (ordinary or flat screw driver) ✓ Star screw driver ✓ Spiro screw driver ✓ Nail punch ✓ Spanners ✓ Claw bars ✓ Single brace ✓ Ratchet brace ✓ Hand drill or Wheel drill ✓ Drill bits ✓ Twist bits ✓ Auger bits ✓ Fastener bits ✓ Dowel bits ✓ Gimlet bits ✓ Turn screw bit to fit brace, hand drill ✓ Expansion bits		✓ Belt Sander machine ✓ Wood lathe machine ✓ PPE
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✓ Shell boring bits for mortises ✓ Counter sink bits ✓ Dowel sharpener bits		
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Assessment criteria	Assessment indicator	Checklist	Score		Observation
			YES	NO	
1. Safety	PPE is properly used	overall,			
		gloves,			
		working boots,			
		dust mask,			
		helmet			
	Workplace is free from any hazard	Ventilation			
		cleanness			
		lightness			
		Fire protection			
		Electrical protection			
		Roughness			

	Equipment and tools are safely used	Safety switch			
		Switching on			
		Switching off			
		Inspection of machine and tools			
2. Quality of process	Drawing interpretation is well done	Drawing symbols			
		Drawing dimensions			
		Drawing scale			
		Different types of lines			
	Tools and equipment are selected correctly	Holding tools			
		Setting out tools			
		Cutting and shaving tools			
		Fixing or impelling tools			
		Boring tools			
		Portable machines			
		Heavy duty machines			
	Materials are well prepared	Grading of wood			
		Sand papers			

		screws			
		nails			
		Dilution of wooden glue			
		Dilution of varnish			
		marking			
		Planing and jointing			
		squareness			
		Ripping			
		Widening			
		Framing			
	Assembling is done properly	stability			
		tightness			
		squareness			
		diagonal			
	Finishing is well done	Moulding			
		Sanding			
		Polishing			

3. Relevance	Dimensions are respected	Height			
		width			
		Depth			
	Design is respected	Shape			
		drawing			
	Time is respected	8 hours			
4. Quality of product	Alignment is respected	Squareness			
		Diagonal			
		Parallelism			
	Joints are respected	tight			
		No gaps			
		stable			

CSTCA107 INTERNSHIP		
Competence : Integrate the workplace		
RTQF LEVEL: 1	CREDITS: 30	LEARNING HOURS : 300
SECTOR: Construction		SUB-SECTOR: Carpentry
ISSUE DATE: January 2012		REVIEW DATE:

PURPOSE STATEMENT

This module describes the skills, knowledge and attitudes required to integrate the workplace for an internship or employment. At the end of this module, participants know how to apply for and present themselves for employment. They demonstrate good time management and show up for work on time. They demonstrate behavior and attitudes that are appropriate for the workplace and understand that workplaces have policies and procedures that need to be followed. They take initiative and responsibility for their own work and know how to work under and respect supervision. Participants are familiar with the rights and responsibilities of workers and employers and have explored ways to exercise rights in the workplace.

LEARNING ASSUMED TO BE IN PLACE

This module must be assessed after the following prerequisite modules :

CM101 Occupation and learning process
CM102 Safety, security and environment in the workplace
CM106 Health, Hygiene and personal grooming
CM104 Computer literacy
CM103 Communication in the workplace

CM105 Entrepreneurship
 LG101 Workplace English 1
 LG102 Workplace French 1
 LG103 Workplace Swahili 1
 CSTCA101 Timber technology
 CSTCA102 Hand tools
 CSTCA103 Woodworking machines
 CSTCA104 Basic drawing and carpentry mathematics
 CSTCA105 Non upholstered furniture
 TSAUT101 Basic workplace calculations
 TSAUT103 Cost estimation

LEARNING UNITS AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

Learning unit By the end of the module, the trainee will be able to :	Performance criteria
1. Apply for internship / employment	1.1 Appropriate resources in the community or nationwide are used to find employment information. 1.2 A basic CV that is accurate and neat is written. 1.3 Application letters that target specific jobs or types of jobs are written. 1.4 Effective interviewing skills are demonstrated.
2. Demonstrate appropriate workplace behaviour and attitudes	2.1 Appropriate workplace habits and attitudes are observed. 2.2 Strategies to manage time effectively are implemented. 2.3 Personal and work lives are managed efficiently.
3. Have a good understanding of worker's and employer's rights and responsibilities	3.1 Worker's and employer's obligations according to the Rwandan Labour code are understood.

	3.2	The worker's responsibilities are performed on the workplace.
	3.3	Exercise rights on the workplace.
4. Organise and evaluate one's internship	4.1	The internship agreement is concluded with the enterprise.
	4.2	The internship report contains all the required elements as well as one's own findings and experience.
	4.3	Active participation in the assessment of one's internship.
5. Develop one's competences on the workplace	5.1	The tasks assigned according the agreement with the enterprise are performed adequately.
	5.2	Positive response and active participation in meetings with the "maître de stage"
	5.3	Adequate work behaviour and attitudes are demonstrated

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.

Learning unit 1: Apply for internship / employment

Learning hours : 8

Learning outcomes	Contents	Learning activities	Resources
1.1 Identify and use resources to find a job	- Resources to find employment in the community and at national level - Identify contact persons	- small group work - panel discussion - large group discussion - speakers	job announcements and information: newspaper advertisements; information from recruitment agencies, youth organizations such as YES Rwanda and government agencies such as the RDB, WDA; sample advertisements posted on

			business walls or bulletin boards, internet websites, through cooperatives...
1.2 Write a Curriculum Vitae (CV) and an application letter	• Differences between a CV and an application letter • Types of application letters • Elements of a well written CV • Elements of an application letter	○ large group discussion ○ individual work ○ pair work	- sample CVs and application letters - format of an application letter
1.3 Take part in an interview	• Main parts of an interview • Interviewing tips : what to do before, during and after the interview • Typical questions asked during an interview Q	○ small group work ○ interview role plays ○ large group discussion	- Interview Observation Tool

Learning unit 2: Demonstrate appropriate workplace behaviour and attitudes

Learning hours: 5

Learning outcomes	Contents	Learning activities	Resources
2.1 Identify appropriate workplace behaviours and attitudes	• Appropriate workplace behaviours and attitudes (dress code, time management, respect, honesty, integrity, work as a team member) • Work habits (cooperation, initiative, courtesy, constructive criticism, supervision, accuracy, pace of work, time usage, adaptability, personal appearance, attendance, punctuality)	○ small group work ○ large group discussion ○ brainstorming	- Workplace behaviour scenarios - Work habits inventory

2.2 Manage time	• Importance of task planning and managing time • Strategies to better manage time	○ large group discussion ○ small group activity (tower building) ○ reflection ○ pair sharing	
2.3 Balance work and personal life	• Common situations that make it challenging to balance work & personal life • Tips to manage personal and work lives	○ large group discussion ○ individual work ○ self assessment ○ pair sharing	- Scenarios : “Did S/he Do the Right Thing?”

Learning unit 3: Have a good understanding of worker’s and employer’s rights and responsibilities Learning hours: 8

Learning outcomes	Contents	Learning activities	Resources
3.1 Be familiar with the universal human rights	• Definition of “right” and “human right” • Universal Declaration of Human Rights	○ small group work ○ large group discussion	Universal Declaration of Human Rights – plain language version
3.2 Explore one’s personal rights and responsibilities	• Definition of “responsibility” • Relationship between rights and responsibilities	○ individual work ○ pair share ○ large group brainstorming and discussion	
3.3 Identify one’s rights and responsibilities at work	• ‘rights’ (what you can expect your employer to provide) • ‘responsibilities’ (what your employer can expect that you will do)	○ large group discussion ○ small group work ○ skits	- Worksheet on Rights and Responsibilities at Work.
3.4 Become familiar with some of the provisions of the Rwandan Labour Law	• legal obligations of employers • legal obligations of workers	○ large group activity ○ discussion ○ small group work ○ observation	- Statements and Answers for Agree/Disagree Game on Rwandan Labour Law - Articles 47 and 48 of the Labour Code

3.5 React appropriately when the Labour Code is broken	• Possible solutions or responses in case the Labour Code is broken	○ small group work ○ scenario analysis ○ large group discussion	- Labour Code Scenarios - Labour Code Excerpts
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Learning unit 4: Organise and evaluate one's internship

Learning hours: 9

Learning outcomes	Contents	Learning activities	Resources
4.1 Conclude an internship agreement	• Definition of the concept "internship" • Objectives of the internship • Presentation of internship agreement	○ Brainstorming ○ Group discussion ○ Presentation by the trainer	- Sample internship agreement
4.2 Outline one's findings and experience	• Presentation of the logbook • Tips to fill in the logbook	○ Presentation by the trainer	- Logbook
4.3 Write and present the report of the internship	• Contents of the internship report • Presentation techniques	○ Group discussion ○ Role play	- Sample internship report
4.4 Participate actively to the assessment of one's internship	• Internship assessment and self-assessment guidelines	○ Group discussion ○ Presentation by the trainer	

Learning unit 5 : Develop one's competences on the workplace

Learning hours: 270

Reference books :

1. Work Readiness Training Programme – Trainer's Manual, Akazi Kanoze – Youth Livelihoods Project.
2. Work Readiness Training Programme – Participant's Manual, Akazi Kanoze – Youth Livelihoods Project.

Assessment Guidelines

In order to pass this module, the student must complete and submit to the trainer:

The portfolio, including:

1. Interview Observation Tool
2. Work habits inventory
3. CV and Application letter writing
4. Rights & Responsibilities Drawing
5. Worksheet on Rights and Responsibilities at Work
6. Rights & Responsibilities Statements
7. Observation form for demonstration
8. Using Rwandan Labor Law

Those documents are found in Work Readiness Training Programme – Trainer’s Manual, Akazi Kanoze – Youth Livelihoods Project, modules 3 and 6.

And complete (or have the relevant person to complete) and submit to the school and company:

9. Industry Attachment Company logbook
10. Industry Attachment Director/liaison officer logbook, including the Overall Assessment by Company Supervisor with a minimal C grade
11. Industry Attachment Student’s logbook, including a 90% attendance score

Documents 1 to 3 are found in the module 3, *Work habits and conducts*, of **Work Readiness Training Programme – Participant’s Manual, Akazi Kanoze – Youth Livelihoods Project.**

Documents 4 to 8 are found in the module 6, *Rights and responsibility of employers and employees*, of **Work Readiness Training Programme – Participant’s Manual, Akazi Kanoze – Youth Livelihoods Project.**

Documents 9 to 11 are the WDA’s/JICA TVET Industrial attachment program (IAP) set of documents.

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