



Republic of Rwanda
Ministry of Education



RTB | RWANDA
TVET BOARD

GENTD301

TECHNICAL DRAWING

Apply Technical Drawing

Competence

RQF Level: 3

Learning Hours



Credits: 5

Sector: Arts and crafts

Trade: Fashion Design

Module Type: General

Curriculum: ARCFAD3001- TVET Certificate 3 in Fashion Design

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Purpose statement	This module describes the skills and knowledge required to prepare drawing equipment, tools, and to identify tailoring drawing symbols. After this module trainee will be able to differentiate and apply lines and lettering in drawing. Also the learners will be able to make different figures or drawings and to apply the dimensioning on drawing.				
Learning assumed to be in place	Apply basic algebra and trigonometry				
Delivery modality	Training delivery	100%	Assessment	Total 100%	
	Theoretical content	30%	Formative assessment	30%	
	Practical work:	70%		70%	50%
	<ul style="list-style-type: none"> Group project and presentation 20% 				
	<ul style="list-style-type: none"> Individual project /Work 50% 				
			Summative Assessment	50%	

Elements of Competency and Performance Criteria

Elements of competency	Performance criteria
1. Prepare of workplace	1.1. drawing equipment are appropriately prepared according to their use
	1. 2. Tools are appropriately prepared according to their use
	1.3 tailoring drawing symbols are appropriately identified according to the work
2. Differentiate lines and lettering	2.1. Lines are properly categorized according to their types
	2.2. lines are correctly applied according to their types
	2.3. letter are properly classified according to their styles
3. Make Dimension on drawing	3.1. drawing are proper set on drawing sheet according to the lines
	3.2. Scale are appropriately selected according to their types
	3.3. dimension are properly applied according to drawing

Course content

Learning outcomes	At the end of the module the learner will be able to: <ol style="list-style-type: none">1. Prepare of workplace2. Differentiate lines and lettering3. Make Dimension on drawing
Learning outcome 1: Prepare workplace	Learning hours: 15
Indicative content	
<ul style="list-style-type: none">• Prepare drawing equipment<ul style="list-style-type: none">✓ Introduction of technical drawing✓ Importance of drawing equipment✓ Drawing equipment:<ul style="list-style-type: none">✚ drawing board,✚ drawing sheet✓ Size of drawing sheet✓ Lay out of drawing sheet• Prepare drawing tools<ul style="list-style-type: none">✓ Drawing tools:<ul style="list-style-type: none">✚ Set Squares✚ Protractor✚ Drawing Instrument Box✚ Drawing Pencils✚ Mechanical pencils✚ Compass✚ Eraser✚ French curves template✓ Important of drawing tools✓ Organization of drawing tools• Identify tailoring drawing symbols<ul style="list-style-type: none">✓ Different symbols of tailoring tools:<ul style="list-style-type: none">✚ Pins✚ Iron✓ Types of symbols used for different materials:<ul style="list-style-type: none">✚ Interfacing,✚ Interlining,✚ Elastic,✚ Velcro,✚ Zip,✓ Different types of operation symbols:<ul style="list-style-type: none">✚ Cut	

- ✚ Sew
- ✚ Hand working
- ✚ Zigzag
- ✚ Overcasting
- ✚ Invisible stitches
- ✚ Warp threads
- ✚ Weft thread

- **Types views and sewing sections**

- ✓ Right views
- ✓ Top views
- ✓ Left views
- ✓ Back views

Resources required for the learning outcome

Equipment	Drawing Board, Drafter (Drafting machine)
Materials	Drawing Sheet, Drawing Pencils, Mechanical, pencils, eraser.
Tools	Set Squares, Protractor, Drawing Instrument Box, Compass, French curves template.
Facilitation techniques	<ul style="list-style-type: none"> • Demonstration and simulation • Individual and group work • Practical exercise • Individualized • Trainer guided • Group discussion
Formative assessment methods	<ul style="list-style-type: none"> • Written assessment • Oral presentation • Performance assessment

Learning outcome 2: Differentiate lines and lettering

Learning hours: 15

Indicative content

- **Categorize lines**
 - ✓ Definition of lines
 - ✓ Types of lines
 - ✓ Conventional presentation of lines

- **Apply types of lines**

- ✓ Application of lines:

- ✚ continuous thin,
- ✚ medium
- ✚ thick line

- ✓ Technical application types of lines:

- ✚ Visible lines
- ✚ Hidden line
- ✚ Section line
- ✚ Cutting line
- ✚ Freehand line
- ✚ Break line
- ✚ Dimension line
- ✚ Centre line
- ✚ Construction line
- ✚ Projection line
- ✚ Guide line

- **Classify letter styles**

- ✓ Technical of lettering:

- ✚ Proportion and form of the letter and the order of the strokes.
- ✚ The spacing between of the letters and words
- ✚ Tracing of guides lines
- ✚ Writing of letter style

Equipment	Drawing Board, Drafter (Drafting machine)
Materials	Drawing Sheet, Drawing Pencils, Mechanical, pencils, eraser.
Tools	Set Squares, Protractor, Drawing Instrument Box, Compass, French curves template.
Facilitation techniques	<ul style="list-style-type: none"> • Demonstration and simulation

	<ul style="list-style-type: none"> • Individual and group work • Practical exercise • Individualized • Trainer guided • Group discussion
Formative assessment methods	<ul style="list-style-type: none"> • Written assessment • Oral presentation • Performance assessment

Learning outcome 3: Make Dimension on drawing	Learning hours: 20
Indicative content	
<ul style="list-style-type: none"> • Set drawing on drawing sheet <ul style="list-style-type: none"> ✓ Setting of margin on drawing sheet ✓ Using technical position of drawing on drawing sheet • Select scale <ul style="list-style-type: none"> ✓ Definition of scale ✓ Different types of scale: <ul style="list-style-type: none"> ✚ enlarge scale ✚ full size scale ✚ reduced scale ✚ Calculation of scale • Apply dimensioning on drawing <ul style="list-style-type: none"> ✓ Introduction of dimensioning ✓ Different element of dimensioning: <ul style="list-style-type: none"> ✚ Dimension line, ✚ extension line, ✚ arrows head line, ✚ number ✓ Steps of dimensioning drawing 	
Resources required for the indicative content	

Equipment	Drawing Board, Drafter (Drafting machine)
Materials	Drawing Sheet, Drawing Pencils, Mechanical, pencils, eraser.
Tools	Set Squares, Protractor, Drawing Instrument Box, Compass, French curves template.
Facilitation techniques	<ul style="list-style-type: none"> • Demonstration and simulation • Individual and group work • Practical exercise • Individualized • Trainer guided • Group discussion
Formative assessment methods	<ul style="list-style-type: none"> • Written assessment • Oral presentation • Performance assessment

References:

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 2. Dessin technique Habillement Projet Belgo Zairois I.S.A.M. KINSHASA 1990
 3. Engineering Drawing for Manufacture by Brian Griffiths ISBN: 18 5718033X, Pub .date February 2003, Publisher: Elsevier Science & Technology Books
 4. JFM210 Technical drawing and computer application, lecture notes (first part), Assist. Prof. Dr. G. Gülsev Uyar Aldas
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