REPUBLIC OF KENYA

COMPETENCY BASED MODULAR CURRICULUM

FOR

INTERIOR DESIGN

KNQF LEVEL 5

(CYCLE 3)

PROGRAMME ISCED CODE: 0212 454 A

TVET CDACC
P.O. BOX 15745-00100
NAIROBI

FOREWORD

The provision of quality education and training is fundamental to the Government's overall strategy for social and economic development. Quality education and training contribute to the achievement of Kenya's development blueprint and sustainable development goals.

Reforms in the education sector are necessary to achieve Kenya Vision 2030 and meet the provisions of the Constitution of Kenya 2010. The education sector had to be aligned to the Constitution, and this resulted in the formulation of the Policy Framework for Reforming Education and Training in Kenya (Sessional Paper No. 14 of 2012). A key feature of this policy is the radical change in the design and delivery of TVET training. This policy document requires that training in TVET be competency-based, curriculum development be industry-led, certification be based on demonstration of competence, and the mode of delivery allow for multiple entry and exit in TVET programmes.

These reforms demand that Industry takes a leading role in curriculum development to ensure the curriculum addresses its competence needs. It is against this background that this curriculum has been developed. For trainees to build their skills on foundational hands-on activities of the occupation, units of learning are grouped in modules. This has eliminated duplication of content and streamlined exemptions based on skills acquired as a trainee progresses in the up-skilling process, while at the same time allowing trainees to be employable in the shortest time possible through the acquisition of part qualifications.

It is my conviction that this curriculum will play a great role in developing competent human resources for the Interior Design Sector's growth and development.

PRINCIPAL SECRETARY
STATE DEPARTMENT FOR TVET
MINISTRY OF EDUCATION

PREFACE

Kenya Vision 2030 aims to transform Kenya into a newly industrializing middle-income country, providing high-quality life to all its citizens by the year 2030. Kenya intends to create globally competitive and adaptive human resource base to meet the requirements of a rapidly industrializing economy through lifelong education and training. TVET has a responsibility to facilitate the process of inculcating knowledge, skills, and worker behaviour necessary for catapulting the nation to a globally competitive country, hence the paradigm shift to embrace Competency-Based Education and Training (CBET).

CAP 210A and Sessional Paper No. 1 of 2019 on Reforming Education and Training in Kenya for Sustainable Development emphasized the need to reform curriculum development, assessment, and certification. This called for a shift to CBET to address the mismatch between skills acquired through training and skills needed by industry, as well as increase the global competitiveness of the Kenyan labour force.

This curriculum has been developed in adherence to the Kenya National Qualifications Framework and CBETA standards and guidelines. The curriculum is designed and organized into Units of Learning with Learning Outcomes, suggested delivery methods, learning resources, and methods of assessing the trainee's achievement. In addition, the units of learning have been grouped in modules to concretize the skills acquisition process and streamline upskilling.

I am grateful to all expert trainers and everyone who played a role in translating the Occupational Standards into this competency-based modular curriculum.

CHAIRMAN
TVET CDACC

ACKNOWLEDGMENT

This curriculum has been designed for competency-based training and has independent units of learning that allow the trainee flexibility in entry and exit. In developing the curriculum, significant involvement and support were received from expert trainers, institutions and organizations.

I recognize with appreciation the role of the Interior Design National Sector Skills Committee (NSSC) in ensuring that competencies required by the industry are addressed in the curriculum. I also thank all stakeholders in the Interior Design sector for their valuable input and everyone who participated in developing this curriculum.

I am convinced that this curriculum will go a long way in ensuring that individuals aspiring to work in the Interior Design Sector acquire competencies to perform their work more efficiently and effectively.

COUNCIL SECRETARY/CEO
TVET CDACC

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

AI	Artificial Intelligence
CAD	Computer-Aided Design
CBET	Competency-Based Education and Training
CDACC	Curriculum Development, Assessment and Certification Council
CR	Core Competency
CU	Curriculum Unit
ID	Interior Design
ISCED	International Standard Classification of Education
KCSE	Kenya Certificate of Secondary Education
KNQA	Kenya National Qualifications Authority
KNQF	Kenya National Qualifications Framework
MDF	Medium Density Fibreboard
NSSC	National Sector Skills Committee
OS	Occupational Standards
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
RPL	Recognition of Prior Learning
TVET	Technical Vocational Education and Training
TVETA	Technical and Vocational Education and Training Authority
VOC	Volatile Organic Compound
VR	Virtual Reality

KEY TO UNIT CODE

KEY TO ISCED UNIT CODE

XX X X XXX X   X

Sector/Industry

Sub Sector

Occupational Area

Version Control

Unit of Competence
Number

ISCED level, programme
Orientation and Level of
Completion
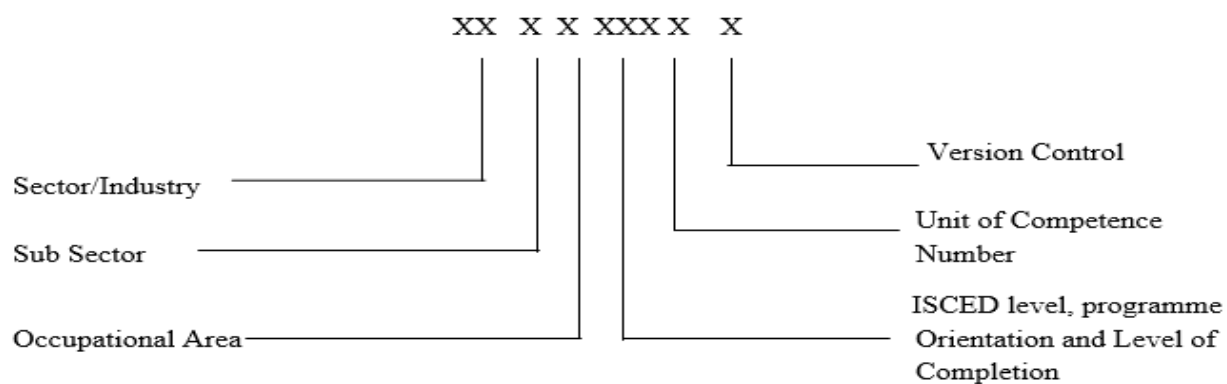
KEY TO TVET CDACC UNIT CODE

CON /CU /ID / CR / 01 / 6 / MA

Industry or sector

Curriculum

Occupational area

Type of Unit

Unit number

Competency level

Version control
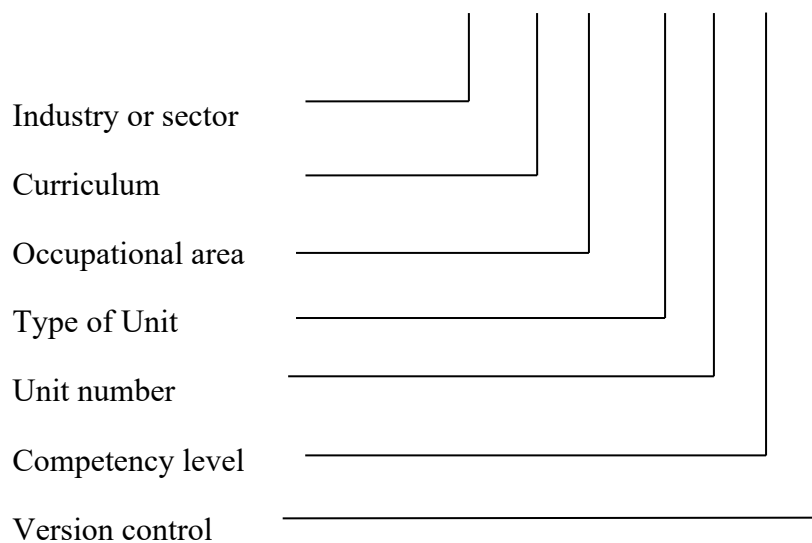
COURSE OVERVIEW

Interior Design craftsmanship qualification consists of competencies that an individual must achieve to enable him or her to provide interior design craft services. It involves: applying fundamentals of Interior Design; performing free-hand drawing; applying colour in interiors; performing interior design finishing; performing model making and producing technical drawing; applying digital literacy; applying communication skills; performing interior design soft furnishing; conceptualizing interior design; producing computer graphics; applying work ethics and practices; applying entrepreneurial skills; applying interior fittings and accessories; performing digital drafting and developing interior furniture and fixtures.

Summary of Units of Learning

ISCED Unit Code	TVE CDACC Unit Code	Unit of Learning Title	Duration in Hours	Credit Factor
MODULE I				
0212451 01A	CON/CU/ID/CR/01/4/MA	Fundamentals of Interior Design	120	12
0212451 02A	CON/CU/ID/CR/02/4/MA	Freehand Drawing	120	12
0212451 03A	CON/CU/ID/CR/03/4/MA	Colour Theory	90	9
		SUB TOTAL	**330**	**33**
MODULE II				
0212451 04A	CON/CU/ID/CR/04/4/MA	Interior Design Finishing	180	18
0212451 05A	CON/CU/ID/CR/05/4/MA	Interior Design Model Making	100	10
0212451 06A	CON/CU/ID/CR/06/4/MA	Technical Drawing	100	10
		SUB TOTAL	**380**	**38**
MODULE III				
061145101A	CON/CU/ID/BC/01/5/MA	Digital literacy	40	4
003145102A	CON/CU/ID/BC/02/5/MA	Communication skills	40	4
0212451 07A	CON/CU/ID/CR/01/5/MA	Interior Design Soft Furnishings	180	18
0212451 08A	CON/CU/ID/CR/02/5/MA	Interior Design Conceptualization	90	9
0212451 09A	CON/CU/ID/CR/03/5/MA	Computer Graphics	90	9
		SUB TOTAL	**440**	**44**
MODULE IV				
041745103A	CON/CU/ID/BC/03/5/MA	Work Ethics and Practices	40	4
041345104A	CON/CU/ID/BC/04/5/MA	Entrepreneurial skills	40	4
0212451 10A	CON/CU/ID/CR/04/5/MA	Interior Fittings and Accessories	100	10

0212451 11A	CON/CU/ID/CR/05/5/MA	Digital Drafting	100	10
0212451 12A	CON/CU/ID/CR/06/5/MA	Interior Furniture and Fixtures	110	11
		SUB TOTAL	**390**	**39**
	CON/CU/ID/CR/07/5/MA	**INDUSTRY TRAINING**	**480**	**48**
		GRAND TOTAL	**2020**	**202**

Entry Requirements

An individual entering this course should have any of the following minimum requirements:
   a) Kenya Certificate of Secondary Education (KCSE) Grade D (plain)

Or

   b) Equivalent qualifications as determined by TVETA

Trainer Qualification

Qualifications of a trainer for this course include:
   a) Possession of at least Craft level 5 certificate in interior design or in related trade area;
   b) License by TVETA; and
   c) License by regulatory body (where applicable)

Industrial Training

An individual enrolled in this course will be required to undergo Industry training for a minimum period of 480 hours in interior design sector. The industrial training may be taken after completion of all units for those pursuing the full qualification or be distributed equally in each unit for those pursuing part qualification. In the case of dual training model, industrial training shall be as guided by the dual training policy.

Assessment

The course shall be assessed formatively and summatively:

   a) During formative assessment all performance criteria shall be assessed based on performance criteria weighting.
   b) Number of formative assessments shall minimally be equal to the number of elements in a unit of competency.
   c) During summative assessment basic and common units may be integrated in the core units or assessed as discrete units.
   d) Theoretical and practical weighting for each unit of learning shall be as follows:
     i)   10-90 for units in module I and II

     ii) 30-70 for units in module III and module IV

   e) Formative and summative assessments shall be weighted at 60% and 40% respectively in the overall unit of learning score

For a candidate to be declared competent in a unit of competency, the candidate must meet the following conditions:

    i) Obtained at least 40% in theory assessment in formative and summative assessments.

    ii) Obtained at least 60% in practical assessment in formative and summative assessment where applicable.

    iii) Obtained at least 50% in the weighted results between formative assessment and summative assessment where the former constitutes 60% and the latter 40% of the overall score.

f) Assessment performance rating for each unit of competency shall be as follows:

MARKS	COMPETENCE RATING
80 -100	Attained Mastery
65 - 79	Proficient
50 - 64	Competent
49 and below	Not Yet Competent
Y	Assessment Malpractice/irregularities

g) Assessment for Recognition of Prior Learning (RPL) may lead to award of part and/or full qualification.

Certification

A candidate will be issued with a Certificate of Competency upon demonstration of competence in a core Unit of Competency. To be issued with Kenya National TVET Certificate in Interior Design Level 5 the candidate must demonstrate competence in all the Units of Competency as given in the qualification pack. Statement of Attainment certificate may be awarded upon demonstration of competence in certifiable element within a unit.

These certificates will be issued by TVET CDACC

MODULE ONE

FUNDAMENTALS OF INTERIOR DESIGN

ISCED UNIT CODE: 0212451 01A
TVET CDACC UNIT CODE: CON/CU/ID/CR/01/4/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **apply interior design fundamentals**

Duration of Unit: 120 hours

Unit Description

This unit specifies the competencies required to apply interior design fundamentals. It involves; demonstration of interior design elements, demonstrating principles of interior design, demonstrate visual communication, demonstrating interior design process, applying human factors and promoting ethical work practices and values

S/N	Learning Outcomes	Duration (hours)
1	Demonstrate elements of interior design	20
2	Demonstrate principles of interior design	20
3	Demonstrate visual communication	30
4	Demonstrate interior design process	20
5	Apply human factors	20
6	Promote ethical work practices and values	10

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods

1. Demonstrate interior design elements	1.1. Elements of interior design
	   1.1.1. Determination of elements of interior design
	   1.1.2. Space
	      1.1.2.1. Positive space
	      1.1.2.2. Negative space
	   1.1.3. Line
	      1.1.3.1. Vertical
	      1.1.3.2. Horizontal
	   1.1.4. Form (Shape)
	   1.1.5. Light
	      1.1.5.1. Artificial
	      1.1.5.2. Natural
	      1.1.5.3. Illumination
	      1.1.5.4. Temperature
	   1.1.6. Colour
		• Observation
		• Written tests
		• Oral questioning
		• Third party report
		• Portfolio of evidence

	1.1.6.1. Colour properties 1.1.6.2. Colour palletes 1.1.7. Texture 1.1.8. Pattern 1.2. Application of elements of interior design	

2. Demonstrate principles of interior design	2.1. Principles of interior design
	  2.1.1. Determination of principles of interior design
	    2.1.1.1. Balance
	    2.1.1.2. Contrast
	    2.1.1.3. Emphasis
	    2.1.1.4. Proportion and Scale
	    2.1.1.5. Rhythm
	    2.1.1.6. Harmony
	    2.1.1.7. Unity
	    2.1.1.8. Movement
	    2.1.1.9. Variety
	2.2. Analysis of principles of interior design
	  2.2.1. Symmetry and Asymmetry
	  2.2.2. Visual Weight
	  2.2.3. Focal Points
	  2.2.4. Hierarchy
	  2.2.5. Scale and Proportion
	  2.2.6. Repetition and Pattern
	  2.2.7. Continuity
	  2.2.8. Cohesion and Unity
	  2.2.9. Movement and Flow
	  2.2.10. Contrast and Differentiation
	  2.2.11. Visual Harmony
	2.3. Application of principles of interior design to spaces
	  2.3.1. Balance (Symmetry, Asymmetry, Radial)
	  2.3.2. Harmony and Unity (Colour, Material, Theme)
	  2.3.3. Proportion and Scale
		• Observation
		• Written tests
		• Oral questioning
		• Third party report
		• Portfolio of evidence

		(Furniture, Spatial, Natural)
	2.3.4. Rhythm (Repetition, Progression, Transition)	
	2.3.5. Emphasis (Focal Point, Contrast, Lighting)	
	2.3.6. Contrast (Colour, Material, Shape)	
	2.3.7. Functionality (Space, Accessibility, Ergonomics)	
	2.3.8. Dominance (Dominance, Distribution)	
3. Demonstrate visual communication	3.1. Visual communication techniques 3.1.1. Determination of visual communication techniques 3.1.2. Freehand drawings and renderings 3.1.3. Mood boards 3.1.4. Material sample boards 3.1.5. Colour Swatches 3.2. Considerations made when selecting visual communication techniques 3.2.1. Identification of audience, purpose and content 3.2.2. Aesthetic approach 3.2.3. Medium e.g. Printed images and drawings 3.2.4. Creativity, originality, innovation and storytelling 3.2.5. Interactivity e.g. engagement, user experience and feedback	● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	3.2.6. Technical Accuracy including scale, proportions and annotations 3.2.7. Consistency in style and aesthetic approach 3.2.8. Efficiency in time, resources, and accessibility. 3.2.9. Social and cultural factors of the audience 3.3. Application of visual communication in interior design projects 3.4. DisplayVisual communication project outcomes.	

4. Demonstrate interior design process	4.1. Design problem
	  4.1.1. Identification of design problem
	    4.1.1.1. Client Needs and Goals
	    4.1.1.2. Space Analysis
	    4.1.1.3. Aesthetic Considerations
	    4.1.1.4. Technical Constraints
	    4.1.1.5. Cost implications
	    4.1.1.6. Environmental Factors
	    4.1.1.7. User Experience
	    4.1.1.8. Trends and Innovations
	    4.1.1.9. Competitive Analysis
	4.2. Analysis of Interior design problem
	  4.2.1. Identifying User Needs
	  4.2.2. Contextual Analysis (Site, Environment, Culture)
	  4.2.3. Functional Requirements (Space,
		● Observation
		● Written tests
		● Oral questioning
		● Third party report
		● Portfolio of evidence

		Accessibility, Ergonomics)	
	4.2.4.	Aesthetic Considerations (Style, Materials, Appeal)	
	4.2.5.	Technical Considerations (Structure, Technology, Budget)	
	4.2.6.	SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)	
	4.2.7.	Problem Framing (Challenges, Objectives, Success Criteria)	
	4.2.8.	Stakeholder engagement	
	4.2.9.	Precedent Studies (Case Studies, Lessons, Innovations)	
	4.3.	Interior design project phases	
	4.4.1	Programming	
	4.4.2	Preliminary design	
	4.4.3	Design development	
	4.4.4	Construction documentation	
	4.4.5	Construction administration	
	4.4.	Proposed solutions	
	4.4.1.	Concept Development (Ideation, Sketching, Mood Boards)	
	4.4.2.	Functional Solutions (Space Planning, Accessibility, Ergonomics)	
	4.4.3.	Aesthetic Refinement (Style, Materials, Colour Palette)	
	4.4.4.	Technical Solutions (Structure and Technology)	
	4.4.5.	Sustainability Considerations (Energy Efficiency,	

	Material Selection, Lifecycle Impact) 4.4.6. Feasibility Analysis (Budget, Timeline, Resources) 4.4.7. Prototyping (Drawings, Mood boards, colour swatches, material sample boards, mock-ups presentations and pin ups) 4.4.8. Stakeholder reviews and Feedback 4.4.9. Presentation of ideas (drawings, rendering, material boards, colour swatches and documentation) 4.4.10. Finalization (Selection, Detailing, Approval) 4.5. Implementation of the solution 4.5.1. Brainstorming, Sketching and Ideation 4.5.2. Freehand drawings 4.5.3. Material Selection 4.5.4. Functionality 4.5.5. Integration of ergonomics, usability, and accessibility 4.5.6. Aesthetic Refinement 4.5.7. Technology Application 4.5.8. Stakeholder's feedback and reviews 4.5.9. Final Execution 4.5 Presentation of interior design solution	
5. Apply human factors	5.1 Introduction to anthropometry 5.2 Human body measurements 5.3 Determination of user needs 5.4 Ergonomic principles 5.5 Proxemics and human behaviour	● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	5.6 Universal design principles	
6. Promote ethical work practices and values	6.1 Integrity 6.2 Core Values, ethics and beliefs 6.3 Patriotism 6.4 Professionalism 6.5 Organizational codes of conduct 6.6 Industry policies and procedures	● Observation ● Written assessment ● Oral assessment ● Third party reports ● Portfolio of evidence ● Project ● Practical

Suggested methods of delivery

- Practical
- Projects
- Demonstrations
- Group discussions
- Direct instructions
- Pin up and mock up presentations
- Role playing

Recommended resources

S/No.	Category/Item	Description/Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	Computer/Laptops	Laptops with specifications for CAD and design software	25 pcs	1:1
B	Projectors	High resolution projector for presentations and design reviews	1 pc	1:25
C	Flipcharts	Flipcharts for sketching and brainstorming	5 pcs	1:5
D	Drawing Tools, Equipment, and Materials	Assorted tools (e.g., T squares, rulers, protractors, pencils, erasers, A3 drawing papers)	25 sets	1:1

E	Workstations	Individual desks with ample space for drawing and computer use	5 pcs	1:5
F	Printers	Multifunctional printers for printing, scanning, and copying	2 pcs	1:12
G	Tablets	Tablets compatible with design software for digital sketching	13 pcs	1:2
I	Internet Connectivity	Highspeed internet for accessing online resources and updates	1 connection	1:25

FREEHAND DRAWING

ISCED UNIT CODE: 0212451 02A

TVET CDACC UNIT CODE: CON/CU/ID/CR/02/4/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Perform freehand drawing

Duration of Unit: 120 hours

Unit Description

This unit specifies the competencies required to **Perform freehand drawing.** It involves applying principles of freehand drawing, producing perspective drawings, applying rendering techniques, applying colour rendering and presentation of freehand drawings.

S/N	Learning Outcomes	Duration (hours)
1.	Apply principles of freehand drawing	30
2.	Produce perspective drawings	30
3.	Apply rendering techniques	15
4.	Apply colour rendering	15
5.	Perform human figure drawing	20
	Present freehand drawings	10

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Apply principles of freehand drawing	1.1 Introduction to freehand drawing 1.2 Freehand drawing techniques 1.3 Freehand drawing tools and equipment 1.4 Drawing tools and equipment handling and maintenance 1.5 Line drawing 1.6 Basic geometric form drawings 1.7 Organic form drawings 1.8 Application of proportional relationships in drawings.	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
2. Produce perspective drawings	2.1 Principles of linear perspective	• Written tests • Observation

Learning Outcome	Content	Methods of assessment
	2.2 Establishment of Horizon line and vanishing points 2.3 Applications of Scale and proportion in drawings. 2.4 Spatial relationships. 2.5 One-point perspective drawing 2.6 Two-point perspective drawings	• Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

3. Apply rendering techniques	3.1 Introduction to freehand rendering
	3.2 Rendering techniques
	    3.2.1 Stippling
	    3.2.2 Hatching
	    3.2.3 Shading
	    3.2.4 Painting
	    3.2.5 Colouring
	3.3 Rendering media and tools
	3.4 Preparation of rendering surfaces.
	3.5 Light and shadow study
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of evidence

4. Apply colour rendering	4.1 Introduction to colour rendering 4.2 Colouring media and tools 4.3 Drawings for colour application preparation 4.4 Colour application	• Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence

5. Perform human figure drawing	1.1 Human figure proportions and ratios
	1.2 Human poses drawing
	1.3 Sighting techniques
	1.4 Visualization techniques
	    1.4.1 Observation
	    1.4.2 Memory
	    1.4.3 Imagination
	1.5 Application of human figures in interior spaces
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Portfolio of evidence

6. Present freehand drawings	6.1 Trimming of drawings 6.2 Mounting of drawings 6.3 Labelling and annotation of drawings	• Written tests • Observation • Oral questions • Third party report

Learning Outcome	Content	Methods of assessment
	6.4 Compilation of freehand drawings and renderings into portfolio. 6.5 Presentation of freehand drawings and renderings.	• Interviewing • Portfolio of evidence

Suggested Methods of instruction

- Project
- Demonstration by trainer
- Practice by the trainee
- Viewing of related videos
- Discussions
- Direct instruction
- Case study
- Audio –visual aids

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Freehand Drawing & Rendering Guide		5 pcs	1:5
2.	Colour theory Hand Book		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Lecture/Theory Room	40 m²	1	1:25
2.	Drawing studio	Includes water source, drawing tables & workbenches	1	1:25
C	**Consumable materials**			
1.	Sketch Pads	A3 & A4 sizes	25 pcs	1:1
2.	Pencils	HB, 2B, 4B, 6B	5 sets	1:5
3.	Fine Liners	0.1, 0.3, 0.5mm	5 sets	1:5
4.	Markers	Assorted colours	5 sets	1:5
5.	Watercolour & Gouache Paints	Assorted	5 sets	1:5

	6.	Measuring Tape	5 meters	25 pieces	1:1
	7.	Drawing Boards	A2 & A3 sizes	25 pcs	1:1
	8.	T-Squares & Set Squares	Standard sizes	25 pcs	1:1
2		Compass Sets	Full drafting set	5 sets	1:5
3		Forex Boards	3mm & 5mm thickness	50 sheets	2:1
4		Cutting Mats	A3 size	10 pcs	1:3
5		Craft Knives	X-Acto knives	10 pcs	1:3
6		Adhesives	Glue, double-sided tape	10 sets	1:3
7		Paint Brushes	Assorted sizes	10 sets	1:3
8		Computers	High-performance for design	25 pcs	1:1
D		**Tools and Equipment**			
	1.	Adjustable Desk Lamps		25 pcs	1:1
	2.	Light boxes	A3 size	5 pcs	1:5
	3.	Cutting Machines	Laser Cutter	1	1:25
	4.	Digital Cameras	For documentation	5 pcs	1:5

COLOUR THEORY

ISCED UNIT CODE: 0212451 03A
TVET CDACC UNIT CODE: CON/CU/ID/CR/03/4/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **Apply Colour Theory**

Duration of Unit: 90 hours

Unit Description
This unit specifies the competencies required to **Apply Colour Theory.** It involves producing colour wheel, determining colour systems, creating colour schemes, applying colour psychology and determining colour trends.

S/N	Learning Outcomes	Duration (hours)
1.	Produce colour wheel	20
2.	Apply colour systems	15
3.	Create colour schemes	20
4.	Apply colour psychology	20
5.	Determine colour trends	15
	TOTAL	**90**

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment

1. Produce colour wheel	1.1. Introduction to colour theory
	1.2. Evolution of colour theory
	1.3. Emerging trends in colour theory
	    1.3.1. Sustainability and Eco-friendly colour innovation
	        1.3.1.1. Natural and bio-based pigment
	        1.3.1.2. Low –VOC and Non-toxic paints
	        1.3.1.3. Upcycled and recycled pigments
	1.4. Self-cleaning and Air-purifying paints
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of evidence

	1.5. AI in colour theory and selection
	    1.5.1. Pantone colour AI
	1.6. Greening and Biophilic colour design
	    1.6.1. Biophilic inspired colour palettes
	    1.6.2. Ecosystem-conscious pigment and dyes
	    1.6.3. AI and robotic in sustainable colour application
	    1.6.4. Automated paint application
	    1.6.5. Colour-matching algorithms
	1.7. Colour and light
	1.8. Types of colours
	1.9. Physical properties of colour
	1.10. Application of colour theory
	1.11. Colour temperature
	1.12. Colour wheel designing
	1.13. Colour scales	

2. Apply colour systems	2.1. Meaning of terms. 2.2. Types of colour systems 2.3. Selecting colour systems 2.4. Colour system application	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Create colour schemes	3.1. Meaning of colour schemes 3.2. Colour preferences 3.3. Colour relations 3.4. Types of colour schemes 3.5. Colour schemes development 3.6. Use of colour in interior environments 3.7. Colour schemes presentation	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Apply colour psychology	4.1. Psychological associations of colour	• Written tests • Observation

		4.2. Cultural and historical influences of colour 4.3. Effects and impacts of colours 4.4. Colour psychology application	• Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
5. Determine colour trends		5.1. Meaning of colour trends 5.2. Sources of colour trends 5.3. Client colour preferences 5.4. Trend forecasting 5.5. Application of colour trends 5.6. Determination of emerging trends in colour theory	• Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence

Suggested Methods of instruction
- Project
- Demonstration by trainer
- Practice by the trainee
- Discussions
- Direct instruction
- Case study
- Audio –visual aids

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Colour Theory in Interior Design Guide		5 pcs	1:5
2.	Colour Psychology in Interiors Manual		5 pcs	1:5
3.	Colour Trends & Forecasting Guide		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Lecture/Theory Room	40 m²	1	1:25
2.	Colour Mixing & Application Lab	Equipped with colour samples	1	1:25

		& mixing stations		
3.	Digital Colour Studio	With computers & design software	1	1:25
C	**Consumable materials**			
1.	Colour Wheels	Printed & Digital Versions	25 pcs	1:1
2.	Primary Colour Paints	Red, Blue, Yellow	50 sets	2:1
3.	Secondary & Tertiary Colour Paints	Mixed tones	50 sets	2:1
4.	Colour Swatch Books	Pantone & RAL	10 sets	1:3
5.	Mood Boards & Sample Sheets	Assorted for projects	25 sets	1:1
6.	Trend Reports	Printed & Online	10 sets	1:3
7.	Paint Sample Cards	Various Brands & Finishes	25 pcs	1:1
8.	Canvas & Paper Sheets	For experiments	50 pcs	2:1
9.	Paint Brushes & Sponges	Various Sizes	25 sets	1:1
D	**Tools and Equipment**			
1.	Paint Sprayers	For large projects	5 pcs	Paint Sprayers
2.	Mixing Palettes & Containers	For blending colours	10 sets	Mixing Palettes & Containers
3.	Digital Projectors	For presentations	5 pcs	Digital Projectors
E	**Personal Protective Equipment (PPEs)**			
1.	Safety Goggles	Protects eyes from debris	25 pcs	1:1
2.	Dust Masks	For respiratory protection	25 pcs	1:1
3.	Work Gloves	Protects hands from sharp materials	25 pairs	1:1
4.	Overall/ dust coat		25 pcs	1:1

MODULE II

INTERIOR DESIGN FINISHING

ISCED UNIT CODE: 0212451 04A

TVET CDACC UNIT CODE: CON/CU/ID/CR/04/4/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: perform interior design finishing

Duration of Unit: 180 hours

Unit Description

This unit specifies the competencies required to **perform interior design finishing.** It involves performing interior floor finishing, performing interior wall finishing, performing interior ceiling finishing, installing interior mouldings and applying paint in interiors painting.

S/N	Learning Outcomes	Duration (hours)
1.	Perform Interior Floor finishing	40
2.	Perform Interior wall finishing	40
3.	Perform Interior ceiling finishing	40
4.	Install interior mouldings	20
5.	Apply interior painting	40
	TOTAL	**180**

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment

1. Perform interior floor finishing	1.1. Introduction of interior floor finishes
	1.2. Classification of floor finishes
	1.3. Functional requirements
	1.4. Material estimations and calculations
	1.5. Flooring material properties
	1.6. Floor finishing tools and equipment
	1.7. Types of floor finishes
	    1.7.1. Hard floor finishes
	    1.7.2. Wood and wood-based floor finishes
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of evidence

	1.7.3. Resilient floor finishes
	1.7.4. Soft floor finishes
	1.7.5. Concrete floor finishes
	1.8. Selection criteria based on sustainability and green design
	1.9. Sustainable flooring
	    1.9.1. Bamboo
	    1.9.2. Cork
	    1.9.3. Reclaimed wood
	    1.9.4. Recycled tiles
	    1.9.5. Polished concrete
	    1.9.6. Eco-friendly floor finishes
	    1.9.7. Locally sourced materials
	    1.9.8. Smart water and energy usage finishes
	1.10. Floor finishes specification
	1.11. Installations techniques
	1.12. Floor finishes repair and maintenance
	1.13. Safety precautions in handling floor finishing	

2. Perform Interior wall finishing	2.1. Introduction to interior walls
	2.2. Classification of walls
	2.3. Features of walls
	2.4. Functional requirements
	2.5. Wall finishing tools and equipment
	2.6. Types of Sustainable wall finishes
	    2.5.1 Paint
	    2.5.2 Wallpaper
	    2.5.3 Plaster
	    2.5.4 Wood panelling
	    2.5.5 Stone or brick
	    2.5.6 Tiles
	    2.5.7 Fabric or Textile wall covering
	    2.5.8 Concrete
	    2.5.9 Stucco
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of evidence

	2.5.10 Wood veneer
	2.5.11 Glass or mirror
	2.7. Wall material properties
	2.8. Wall finishes specification
	    2.8.1. Eco-friendly wall finishes
	    2.8.2. Locally sourced materials
	    2.8.3. Smart water and energy usage finishes
	    2.8.4. Material estimation and calculations
	2.9. Construction details
	2.10. Wall finishing repair and maintenance .
	2.11. Safety Precautions in handling wall finishing	

3. Perform Interior ceiling finishing	3.1. Introduction to interior ceilings
	3.2. Classification of ceilings
	3.3. Properties of ceiling finishes
	3.4. Ceiling finishing tools and equipment
	3.5. Functional requirements
	3.6. Material estimations and calculations
	3.7. Types of sustainable ceiling finishes
	    3.7.1. Paint
	    3.7.2. Plaster
	    3.7.3. Drywall
	    3.7.4. Wood panelling
	    3.7.5. Metal finish
	    3.7.6. Gypsum finish
	    3.7.7. Acoustic ceiling
	    3.7.8. Fabric ceiling
	    3.7.9. Glass finish
	    3.7.10. PVC finish
	    3.7.11. Fiberglass finish
	3.8. Ceiling finishes specification
	3.9. Installation details
	3.10. Ceiling finishing repair and maintenance.
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of evidence

	3.11. Safety Precautions in handling ceiling finishing.	

4. Install interior mouldings	4.1. Introduction to interior mouldings
	4.2. Types of mouldings finishes
	4.3. Moulding materials
	4.4. Moulding Selection criteria
	4.5. Mouldings Specification
	    4.5.1. Eco-friendly moulding finishes
	    4.5.2. Locally sourced materials
	    4.5.3. Smart water and energy usage finishes
	4.6. Installation techniques
	4.7. Constructions details
	4.8. Safety Precautions in handling moulding finishing.
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of evidence

5. Apply interior painting	7.1. Introduction to paints.
	7.2. Types of paints
	7.3. Paint effects
	7.4. Painting tools and equipment
	7.5. Colour schemes
	7.6. Painting techniques
	7.7. Paint application
	7.8. Painting process
	7.9. Emerging trends on paint and painting techniques
	  7.9.1. Eco-friendly and Sustainable paints
	    7.9.1.1. Bio-based paints
	    7.9.1.2. VOC –free paints
	    7.9.1.3. Recycled paints
	    7.9.1.4. Water-based and plant-based paints
	  7.9.2. Painting techniques and innovation
	    7.9.2.1. AI-Powered colour matching and selection (Pantone AI)
	    7.9.2.2. Automated painting robots
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Portfolio of evidence

		7.9.2.3. Virtual Reality (VR) 7.10 Repair and maintenance of painted surfaces	

Suggested Methods of instruction
- Project
- Demonstration by trainer
- Practice by the trainee
- Discussions
- Direct instruction
- Case study
- Audio –visual aids
- Role-play

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Interior Finishes & Materials Handbook		5 pcs	1:5
2.	Flooring Installation Guide		5 pcs	1:5
3.	Wall & Ceiling Finishes Handbook		5 pcs	1:5
4.	Moulding Installation Guide		5 pcs	1:5
5.	Interior Painting & Surface Finishing Guide		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Lecture/Theory Room	40 m²	1	1:25
2.	Interior Finishes Workshop	With workbenches & sample boards	1	1:25
3.	Paint Mixing & Application Area	Ventilated space for training	1	1:25
C	**Consumable materials**			
1.	Floor Tiles	Ceramic, Porcelain, Vinyl	100 pcs	4:1

2.	Wooden Flooring Planks	Laminate, Engineered Wood	50 pcs	2:1
3.	Adhesives & Grout	For tile & wood flooring	10 sets	1:3
4.	Drywall Sheets	Gypsum & MDF	50 pcs	2:1
5.	Plaster & Joint Compound	For wall finishing	20 bags	4:5
6.	Crown Mouldings	Wood & PVC	50 pcs	2:1
7.	Paints	Assorted	13 litres	1:2
D	**Tools and Equipment**			
1.	Tile Cutters	Manual & Electric	5 pcs	1:5
2.	Flooring Spacers	For tile alignment	10 sets	1:3
3.	Plastering Trowels		10 pcs	1:3
4.	Drywall Sanders	Electric & Manual	5 pcs	1:5
5.	Mitre Saws	For precise cuts	5 pcs	1:5
6.	Drills & Fasteners	Cordless drills & screws	5 sets	1:5
7.	Heat-Resistant Gloves	For handling hot materials	10 pairs	1:3
8.	Masonry Trowels & Levels	For brick alignment	5 sets	1:5
9.	Paint Sprayers	For large surfaces	5 pcs	1:5
10.	Paint Brushes	For surfaces	25pc	1:1
11.	Ladder & Scaffolding	Adjustable height	5 sets	1:5
	Personal Protective Equipment (PPEs)			
1.	Safety Goggles	Protects eyes from debris	25 pcs	1:1
2.	Dust Masks	For respiratory protection	25 pcs	1:1
3.	Work Gloves	Protects hands from sharp materials	25 pairs	1:1
4.	Overall/ dust coat		25 pcs	1:1

INTERIOR DESIGN MODEL MAKING

ISCED UNIT CODE: 0212451 05A
TVET CDACC UNIT CODE: CON/CU/ID/CR/05/4/MA

Relationship to Occupational Standards
This unit addresses the Unit of Competency: **Perform Model Making**

Duration of Unit: 100 hours

Unit Description

This unit specifies the competencies required to **perform model making.** It involves interpretation of interior design drawings, production of different types of models, crafting of interior design models, application of finishing techniques to models and presentation of interior design models**.**

S/N	Learning Outcomes	Duration (hours)
1.	Interpret interior design drawings	10
2.	Produce different types of models	30
3.	Craft interior design models	30
4.	Apply finishing techniques to models	20
5.	Present interior design models	10
	TOTAL	**100**

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Interpret interior design drawings	1.1 Introduction to model making 1.2 Interpretation of architectural and interior design drawings 1.3 Spatial elements in interior design 1.4 Scaling models	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
2. Produce Model Types	2.1 Residential space model making 2.2 Types of models (physical) 2.3 Model type requirements 2.4 Scale selection 2.5 Types of model making materials 2.6 Model making techniques	• Written tests • Observation • Oral questions • Third party report • Interviewing

		• Project and report writing • Portfolio of evidence
3. Craft interior design models	3.1 Safety requirements and PPEs 3.2 Identification of materials 3.3 Model making tools and equipment 3.4 Material type selection 3.5 Construction methods 3.6 Model making process 3.7 Challenges in model making 3.8 Interpretation of 2D drawings to 3D templates. 3.9 Cutting of model components 3.10 Assembling model components 3.11 Model Construction Techniques & Quality Standards	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Apply finishing techniques to models	4.1 Model finishing tools and materials 4.2 Model finishing techniques 4.3 Application of model finishing techniques 4.4 Model finishes	• Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence
5. Present interior design models	5.1 Introduction to model display 5.2 Model display methods 5.3 Model display preparation 5.4 Installation and mounting of models 5.5 Model labelling 5.6 Model setup 5.7 Models presentation	• Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence

Suggested Methods of instruction
- Project
- Demonstration by trainer
- Practice by the trainee
- Viewing of related videos
- Discussions

- Direct instruction
- Case study
- Audio –visual aids

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Architectural and Interior Design Drawing Guide		5 pcs	1:5
2.	Model Making Techniques Guide		5 pcs	1:5
3.	Model Making Handbook		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Lecture/Theory Room	40 m²	1	1:25
2.	Model Making Studio	Includes cutting tables & workbenches	1	1:25
C	**Consumable materials**			
1.	Sketch Pads	A3 & A4 sizes	25 pcs	1:1
2.	Pencils	HB, 2B, 4B, 6B	5 sets	1:5
3.	Fine Liners	0.1, 0.3, 0.5mm	5 sets	1:5
4.	Markers	Assorted colours	5 sets	1:5
5.	Watercolour & Gouache Paints	Assorted	5 sets	1:5
6.	Drawing Boards	A2 & A3 sizes	25 pcs	1:1
7.	T-Squares & Set Squares	Standard sizes	25 pcs	1:1
2	Compass Sets	Full drafting set	5 sets	1:5
3	Forex Boards	3mm & 5mm thickness	50 sheets	2:1
4	Cutting Mats	A3 size	10 pcs	1:3
5	Craft Knives	X-Acto knives	10 pcs	1:3
6	Adhesives	Glue, double-sided tape	10 sets	1:3
7	Paint Brushes	Assorted sizes	10 sets	1:3
8	Computers	High-performance for design	25 pcs	1:1
D	**Tools and Equipment**			

1.	Adjustable Desk Lamps		25 pcs	1:1
2.	Light boxes	A3 size	5 pcs	1:5
3.	Cutting Machines	Laser Cutter	1	1:25
4.	3D Printer	PLA filament	1	1:25
5.	Printer	A4	1	1:25
6.	Digital Cameras	For documentation	5 pcs	1:5

TECHNICAL DRAWING

ISCED UNIT CODE: 0212451 06A

TVET CDACC UNIT CODE: CON/CU/ID/CR/06/4/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Produce Technical Drawing

Duration of Unit: 100 hours

Unit Description

This unit covers the competencies required to produce technical drawings. It involves determining tools and equipment, applying line types and symbols, producing plane geometry, producing orthographic projections, applying dimensions and annotations and producing pictorial drawing.

S/N	Learning Outcomes	Duration (hours)
1.	Determine tools and equipment	5
2.	Apply line types and symbols	15
3.	Produce plane geometry	15
4.	Produce orthographic projections	25
5.	Apply dimensions and annotations	15
6.	Produce pictorial drawings	25
	TOTAL	**100**

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Determine tools and equipment	1.1 Introduction to technical drawing 1.2 Identification of manual drafting tools 1.3 Tools specification and selection 1.4 Application of Drafting tools. 1.5 Maintenance of Drafting tools are maintained.	● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence
2. Apply line types and symbols	2.1 Mounting drawing sheets. 2.2 Identification of border lines and title blocks 2.3 Standards for lettering styles 2.4 Types of lines and their meanings	● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	2.4.1 Line thickness and styles 2.4.2 Applications of different line types 2.4.3 Techniques for dimensioning 2.5 Architectural symbols 2.6 Importance of clarity in drawings 2.7 Application of drafting lines and architectural symbols 2.8 Dividing lines and circles into equal parts and ratios 2.9 Inscribing and circumscribing circles	

3. Produce plane geometry	3.1 Construction of Geometric Forms
	
	    3.1.1 Basic geometric shapes
	       3.1.1.1 Squares
	       3.1.1.2 Rectangles
	       3.1.1.3 Triangles
	       3.1.1.4 Circles
	    3.1.2 Complex geometric forms
	       3.1.2.1 Polygons,
	       3.1.2.2 Curves
	 3.2 Construction of Angles
	    3.2.1 Types of angles
	    3.2.2 Trigonometric principles applied to angles
	    3.2.3 Tools for angle construction
	 3.3 Measurement of Angles
	    3.3.1 Tools for measuring angles
	    3.3.2 Techniques for bisecting angles
	    3.3.3 Accuracy and precision in measurements
	 3.4 Construction of scales
	    3.4.1 Diagonal scale
	    3.4.2 Plain scale
		• Observation
		• Written tests
		• Oral questioning
		• Third party report
		• Portfolio of evidence

	3.5 Geometric construction techniques 3.6 Labelling of Constructed figures 3.7 Presentation of Constructed figures	

4. Produce orthographic Projections	4.1 Identification of Drawing Lines
	    4.1.1 Types of lines and their meanings in orthographic projections
	    4.1.2 Visible (Object) Lines
	    4.1.3 Hidden Lines
	    4.1.4 Center Lines
	    4.1.5 Dimension Lines
	    4.1.6 Extension Lines
	    4.1.7 Leader Lines
	    4.1.8 Cutting Plane Lines
	    4.1.9 Section Lines (Hatching)
	    4.1.10 Break Lines
	    4.1.11 Phantom Lines
	
	4.2 Line thickness and applications for technical clarity
	
	4.3 Orthographic Projection Techniques
	
	4.4 Principles of first angle and third angle projections
	4.5 Views in orthographic drawings
	    4.5.1 front
	    4.5.2 side
	    4.5.3 plan
	4.6 Dimensioning and Lettering
	4.7 Accurate dimensioning techniques for orthographic drawings
	    4.7.1 Place dimensions outside the object to reduce clutter.
		● Observation
		● Written tests
		● Oral questioning
		● Third party report
		● Portfolio of evidence

	4.7.2 Use extension lines that don't touch the object.	
	4.7.3 Align dimensions with the measured view (horizontal or vertical).	
	4.7.4 Group similar dimensions together for readability.	
	4.7.5 Avoid redundant dimensions to keep the drawing clean.	
	4.7.6 Use consistent line weights for different line types.	
	4.7.7 Use clear, uniform text sizes for dimensions.	
	4.7.8 Indicate center lines for circular dimensions.	
	4.7.9 Include tolerance information as needed for accuracy.	
	4.7.10 Dimension from a baseline to avoid cumulative errors.	
	4.8 Standards for lettering styles and alignment	
	4.9 Construction of Orthographic Views	
	4.10 Techniques for freehand and scaled drawings	
	4.11 Freehand Drawing Techniques	
	4.11.1 Use light guidelines for structure.	
	4.11.2 Start with basic shapes, then add details.	
	4.11.3 Keep a loose hand for smooth lines.	
	4.11.4 Control line weight for emphasis.	

	4.11.5 Focus on perspective and proportion. 4.11.6 Apply crosshatching for depth. 4.11.7 Regularly check angles and alignment. 4.11.8 Scaled Drawing Techniques 4.11.9 Choose an appropriate scale. 4.11.10 Use a scale ruler for measurements. 4.11.11 Mark measurements lightly before finalizing. 4.11.12 Use grids to maintain proportions. 4.11.13 Label dimensions clearly with the scale noted. 4.11.14 Ensure all parts are proportionate. 4.11.15 Doublecheck key measurements. 4.12 Use of scale rulers and accuracy in scaled drawings 4.13 Interpretation of Orthographic Drawings 4.14 Standard conventions for orthographic projections 4.15 Application of orthographic views in architectural and interior design contexts	
5. Apply dimensions and annotations	5.1 Types of dimensioning 5.2 Purposes of dimensions 5.3 Dimension line drawing 5.4 Placement of dimensions 5.5 Labelling of views, placements and materials 5.6 Annotations	● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	5.7 Application of Standard notation and abbreviations	

6. Produce Pictorial drawings	1.1 Isometric Drawings
	  1.1.1 Principles of isometric projection
	  1.1.2 Equal angles of 120 degrees between axes.
	  1.1.3 Uniform scaling along isometric axes.
	  1.1.4 Parallel lines remain true to scale.
	  1.1.5 No perspective distortion; true dimensions.
	  1.1.6 3D representation of width, height, and depth.
	  1.1.7 Depth indicated by a 30-degree angle from horizontal.
	  1.1.8 Start with basic geometric shapes for form.
	  1.1.9 Maintain clarity and readability; avoid excessive detail.
	  1.1.10 Consistent orientation of objects for easier interpretation.
	1.2 Techniques for producing isometric drawings as per conventions
	1.3 Applications of isometric drawings in interior design and architecture
	1.4 Axonometric drawing
	  1.4.1 Principles of axonometric drawing
	  1.4.2 Axonometric drawing procedure
	  1.4.3 Techniques for producing axonometric drawings as per the conventions
	1.5 Applications of axonometric drawings in interior design and architecture
	1.6 Oblique Drawings
	  1.6.1 Oblique drawing principles
		● Observation
		● Written tests
		● Oral questioning
		● Third party report
		● Portfolio of evidence

	1.6.2 Standard techniques for oblique projections 1.7 Distinctions between isometric and oblique views 1.8 Real world applications of oblique drawings 1.9 Perspective Drawings 1.9.1 One point and two-point perspective 1.9.2 Techniques for producing and interpreting perspective drawings 1.9.3 Importance of perspective in visualization and presentation in interior design 1.10 Display of the pictorial drawings 1.11 Presentation of the pictorial drawings displayed.	

Suggested methods of delivery
- Role playing
- Viewing of related videos
- Discussion
- Direct Instruction
- Audio Visual aids

Recommended resources

S/No.	Category/Item	Description/Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	Classroom	Standard classroom for training	1	1:25
B	Calculators	Basic scientific calculators for technical use	25 pcs	1:1
C	Drawing Papers	A3 drawing papers	25 pcs	1:1
D	Stationery	Pens, pencils, erasers, rulers, etc.	25 pcs	1:1

MODULE III

DIGITAL LITERACY

ISCED UNIT CODE: 061145101A

TVET CDACC UNIT CODE: CON/CU/ID/BC/01/5/MA

Relationship to Occupational Standards
This unit addresses the Unit of Competency: Apply Digital Literacy

Duration of Unit: 40 Hours

Unit Description
This unit covers the competencies required to demonstrate digital literacy. It involves operating computer devices, solving tasks using the Office suite, managing data and information, performing online communication and collaboration, applying cybersecurity skills and job entry techniques, and performing jobs online.

S/N	Learning Outcomes	Duration (hours)
1.	Operate Computer Devices	6
2.	Solve Tasks Using Office Suite	14
3.	Manage Data and Information	6
4.	Perform Online Communication and Collaborations	4
5.	Apply Cybersecurity Skills	4
6.	Perform Online Jobs	4
7.	Apply job entry techniques.	2
	TOTAL	**40**

Summary of Learning Outcomes

Learning Outcomes, Content, and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Operate computer devices	- Meaning and importance of digital literacy - Functions and Uses of Computers - Classification of computers - Components of a computer system - Computer Hardware 1..1. The System Unit E.g. Motherboard, CPU, casing 1..2. Input Devices e.g. Pointing,	- Observation - Written assessment - Oral assessment - Practical assessment - Portfolio of Evidence

	keying, scanning, voice/speech recognition, direct data capture devices. 1..3. Output Devices e.g. hardcopy output and softcopy output 1..4. Storage Devices e.g. main memory e.g. RAM, secondary storage (Solid state devices, Hard Drives, CDs & DVDs, Memory cards, Flash drives 1..5. Computer Ports e.g. HDMI, DVI, VGA, USB type C etc. • Classification of computer software • Operating system functions • Procedure for turning/off a computer • Mouse use techniques • Keyboard Parts and Use Techniques • Desktop Customization • File and Files Management using an operating system • Computer Internet Connection Options • Mobile Networks/Data Plans • Wireless Hotspots • Cabled (Ethernet/Fiber) • Dial-Up • Satellite 1..1. Computer external devices management • Device connections • Device controls (volume controls and display properties)	
2. Solve tasks using Office suite	2.1. Meaning and Importance of Word Processing 2.2. Examples of Word Processors 2.3. Working with word documents 2.4. Open and close word processor 2.5. Create a new document 2.6. Save a document 2.7. Switch between open documents 2.8. Enhancing productivity 2.9. Set basic options/preferences 2.10. Help resources	● Observation ● Portfolio of Evidence ● Project ● Written assessment ● Practical assessment ● Oral assessment

	2.11. Use magnification/zoom tools
	2.12. Display, hide built-in tool bar
	2.13. Using navigation tools
	2.14. Typing Text
	2.15. Document editing (copy, cut, paste commands, spelling and Grammar check)
	2.16. Document formatting
	    2.16.1. Formatting text
	    2.16.2. Formatting paragraph
	    2.16.3. Formatting styles
	    2.16.4. Alignment
	2.17. Creating tables
	2.18. Formatting tables
	2.19. Graphical objects
	    2.19.1. Insert object (picture, drawn object)
	    2.19.2. Select an object
	    2.19.3. Edit an object
	    2.19.4. Format an object
	2.20. Document Print setup
	2.21. Page layout,
	2.22. Margins set up
	2.23. Orientation.
	2.24. Word Document Printing
	2.25. Meaning & Importance of electronic spreadsheets
	    2.25.1 Components of Spreadsheets
	    2.25.2 Application areas of spreadsheets
	    2.25.3 Using spreadsheet application
	    2.25.4 Parts of Excel screen: ribbon, formula bar, active cell, name box, column letter,row number, Quick Access Toolbar.
	    2.25.5 Cell Data Types
	    2.25.6 Block operations
	    2.25.7 Arithmetic operators (formula bar (-, +, *, /).
	    2.25.8 Cell Referencing
	    2.25.9 Data Manipulation
	    2.25.10Using Functions (Sum,	

		Average, SumIF, Count, Max, Max, IF, Rank, Product, mode etc)	
		2.25.11 Using Formulae	
		2.25.12 Sorting data	
		2.25.13 Filtering data	
		2.25.14 Visual representation using charts	
		2.25.15 Worksheet printing	
		2.26 Electronic Presentations	
		2.26.1 Meaning and Importance of electronic presentations	
		2.26.2 Examples of Presentation Software	
		2.26.3 Using the electronic presentation application	
		2.26.4 Parts of the PowerPoint screen (slide navigation pane, slide pane, notes, the ribbon, quick access toolbar, and scroll bars).	
		2.26.5 Open and close presentations	
		2.26.6 Creating Slides (Insert new slides, duplicate, or reuse slides.)	
		2.26.7 Text Management (insert, delete, copy, cut and paste, drag and drop, format, and use spell check).	
		2.26.8 Use magnification/zoom tools	
		2.26.9 Apply or change a theme.	
		2.26.10 Save a presentation	
		2.26.11 Switch between open presentations	
		2.26.12 Developing a presentation	
		2.26.13 Presentation views	
		2.26.14 Slides	
		2.26.15 Master slide	
		2.26.16 Text	
		2.26.17 Editing text	
		2.26.18 Formatting	
		2.26.19 Tables	
		2.26.20 Charts	

	2.26.21 Using charts 2.26.22 Organization charts 2.26.23 Graphical objects 2.26.24 Insert, manipulate 2.26.25 Drawings 2.26.26 Prepare outputs 2.26.27 Applying slide effects and transitions 2.26.28 Check and deliver 2.26.29 Spell check a presentation 2.26.30 Slide orientation 2.26.31 Slide shows, navigation 2.26.32 Print presentations (slides and handouts)	
3. Manage Data and Information	3.1 Meaning of Data and Information 3.2 Importance and Uses of data and information 3.3 Types of internet services 3.4 Communication Services 3.5 Information Retrieval Services 3.6 File Transfer 3.7 World Wide Web Services 3.8 Web Services 3.9 Automatic Network Address Configuration 3.10 NewsGroup 3.11 Ecommerce 3.12 Types of Internet Access Applications 3.13 Web browsing concepts 3.14 Key concepts 3.15 Security and safety 3.16 Web browsing 3.16.1 Using the web browser 3.16.2 Tools and settings 3.16.3 Clearing Cache and cookies 3.16.4 URIs 3.16.5 Bookmarks 3.16.6 Web outputs 3.16.7 Web based information 3.16.8 Search 3.17 Critical evaluation of information 3.18 Copyright, data protection 3.19 Downloads Management	• Observation • Portfolio of Evidence • Project • Written assessment • Practical assessment • Oral assessment

	3.20 Performing Digital Data Backup (Online and Offline) 3.21 Emerging issues in internet	

4. Perform online communication and collaboration	4.1 Netiquette principles
	4.2 Communication concepts
	        4.2.1 Online communities
	        4.2.2 Communication tools
	        4.2.3 Email concepts
	            4.2.3.1 Using email
	            4.2.3.2 Sending email
	            4.2.3.3 Receiving email
	            4.2.3.4 Tools and settings
	            4.2.3.5 Organizing email
	4.3 Digital content copyright and licenses
	4.4 Online collaboration tools
	4.5 Online Storage (Google Drive)
	4.6 Online productivity applications (Google Docs & Forms)
	4.7 Online meetings (Google Meet/Zoom)
	4.8 Online learning environments
	4.9 Online calendars (Google Calendars)
	4.10 Social networks (Facebook/Twitter - Settings & Privacy)
	4.11 Preparation for online collaboration
	4.12 Common setup features
	4.13 Setup
	4.14 Mobile collaboration
	        4.14.1 Key concepts
	        4.14.2 Using mobile devices
	        4.14.3 Applications
	        4.14.4 Synchronization
		• Observation
		• Portfolio of Evidence
		• Project
		• Written assessment
		• Practical assessment
		• Oral assessment

5. Apply cybersecurity skills	1.1 Data protection and privacy
	1.2 Confidentiality of data/information
	1.3 Integrity of data/information
	1.4 Availability of data/information
	1.5 Internet security threats
	    1.5.1 Malware attacks
	    1.5.2 Social engineering attacks
	    1.5.3 Distributed denial of service (DDoS)
		• Observation
		• Portfolio of Evidence
		• Project
		• Written assessment
		• Practical assessment
		• Oral assessment

	1.5.4 Man-in-the-middle attack (MitM)
	1.5.5 Password attacks
	1.5.6 IoT Attacks
	1.5.7 Phishing Attacks
	1.5.8 Ransomware
	1.6 Computer threats and crimes
	1.7 Cybersecurity control measures
	  1.7.1 Physical Controls
	  1.7.2 Technical/Logical Controls (Passwords, PINs, Biometrics)
	  1.7.3 Operational Controls
	1.8 Laws governing protection of ICT in Kenya
	  1.8.1 The Computer Misuse and Cybercrimes Act No. 5 of 2018
	  1.8.2 The Data Protection Act No. 24 Of 2019	

6. Perform Online Jobs	6.1 Introduction to online working
	  6.1.1 Types of online Jobs
	  6.1.2 Online job platforms
	    6.1.2.1 Remotask
	    6.1.2.2 Data annotation tech
	    6.1.2.3 Cloud worker
	    6.1.2.4 Upwork
	    6.1.2.5 Oneforma
	    6.1.2.6 Appen
	6.2 Online account and profile management
	6.3 Identifying online jobs/job bidding
	6.4 Online digital identity
	6.5 Executing online tasks
	6.6 Management of online payment accounts.
		• Observation
		• Portfolio of Evidence
		• Project
		• Written assessment
		• Practical assessment
		• Oral assessment

7. Apply job entry techniques	7.1 Types of job opportunities
	  7.1.1 Self-employment
	  7.1.2 Service provision
	  7.1.3 product development
	  7.1.4 salaried employment
	7.2 Sources of job opportunities
	7.3 Resume/ curriculum vitae
	  7.3.1 What is a CV
		• Observation
		• Oral assessment
		• Portfolio of evidence
		• Third party report
		• Written assessment

		7.3.2 How long should a CV be	
		7.3.3 What to include in a AC	
		7.3.4 Format of CV	
		7.3.5 How to write a good CV	
		7.3.6 Don't s of writing a CV	

7.3.2 How long should a CV be
7.3.3 What to include in a AC
7.3.4 Format of CV
7.3.5 How to write a good CV
7.3.6 Don't s of writing a CV
7.4 Job application letter
    7.4.1 What to include
    7.4.2 Addressing a cover letter
    7.4.3 Signing off a cover letter
7.5 Portfolio of Evidence
    7.5.1 Academic credentials
    7.5.2 Letters of commendations
    7.5.3 Certification of participations
    7.5.4 Awards and decorations
7.6 Interview skills
    7.6.1 Listening skills
    7.6.2 Grooming
    7.6.3 Language command
    7.6.4 Articulation of issues
    7.6.5 Body language
    7.6.6 Time management
    7.6.7 Honesty
    7.6.8 Generally knowledgeable in current affairs and technical area

Suggested Methods of Instruction

- Instructor-led facilitation using active learning strategies
- Demonstration by trainer
- Practical work by trainees
- Viewing of related videos
- Group discussions
- Project
- Role play
- Case study

Recommended Resources for 25 Trainees
- 25 computers with the following software:
- Windows/Linux/Macintosh Operating System
- Microsoft Office Software

- Google Workspace Account
- Antivirus Software
- Printers
- Printing Papers
- External storage media
- 1 Projector
- 1 Whiteboard
- 1 Smartboard/Smart TV (Where applicable)
- Assorted whiteboard markers
- Internet connection
- samples of CVs
- samples of job applications

COMMUNICATION SKILLS

ISCED UNIT CODE: 003145102A

TVET CDACC UNIT CODE: CON/CU/ID/BC/02/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Apply Communication Skills

Duration of Unit: 40 hours

Unit Description

This unit covers the competencies required to apply communication skills. It involves applying communication channels, written, non-verbal, oral, and group communication skills.

S/N	Learning Outcomes	Duration (hours)
1.	Apply communication channels.	8
2.	Apply written communication skills.	8
3.	Apply non-verbal communication skills	8
4.	Apply oral communication skills.	8
5.	Apply group communication skills.	8
	TOTAL	**40**

Learning Outcomes, Content, and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Apply communication channels	1.1 Communication process 1.2 Principles of effective communication 1.3 Channels/medium/modes of communication 1.4 Factors to consider when selecting a channel of communication 1.5 Barriers to effective communication 1.6 Flow/patterns of communication 1.7 Sources of information 1.8 Organizational policies	• Oral questions • Written assessment • Observation • Portfolio of Evidence • Practical assessment • Third party report
2. Apply written communication skills	2.1 Types of written communication 2.2 Elements of communication 2.3 Organization requirements for written communication	• Oral assessment • Written assessment • Observation • Portfolio of Evidence • Practical assessment • Third party report

3. Apply non-verbal communication skills	3.1 Utilize body language and gestures 3.2 Apply body posture 3.3 Apply workplace dressing code	• Oral assessment • Written assessment • Observation • Portfolio of Evidence • Practical assessment • Third party report
4. Apply oral communication skills	4.1 Types of oral communication pathways 4.2 Effective questioning techniques 4.3 Workplace etiquette 4.4 Active listening	• Oral assessment • Written assessment • Observation • Portfolio of Evidence • Practical assessment • Third party report
5. Apply group discussion skills	5.1 Establishing rapport 5.2 Facilitating resolution of issues 5.3 Developing action plans 5.4 Group organization techniques 5.5 Turn-taking techniques 5.6 Conflict resolution techniques 5.7 Team-work	• Oral assessemnt • Written assessment • Observation • Portfolio of Evidence • Practical assessment

Suggested Methods of Instruction
- Discussion
- Roleplaying
- Simulation
- Direct instruction
- Demonstration
- Field trips

Recommended Resources for 25 trainees

General Resources	Tools and Equipment	Materials and Supplies
• 25 Desktop computers/laptops	Mobile phones	Flashcards
• Internet connection		Flip charts
• 1 Projector • 1 Printer		2 packets of assorted colours of whiteboard marker pens
• 1 Whiteboard		Printing papers
• Report writing templates		

INTERIOR DESIGN SOFT FURNISHING

ISCED UNIT CODE: 0212451 07A

TVET CDACC UNIT CODE: CON/CU/ID/CR/01/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **perform interior design soft furnishing**

Duration of Unit: 180 hours

Unit Description

This unit specifies the competencies required to **perform interior design soft furnishing.** It involves; performing sewing machine operations, designing interior pillows and cushions, selecting interior rugs and carpets, fitting interior draperies, constructing interior upholstery and constructing interior bedding.

S/N	Learning Outcomes	Duration (hours)
1.	Perform sewing machine operation	40
2.	Construct pillows and cushions	30
3.	Construct interior rugs and carpets	30
4.	Construct interior draperies	30
5.	Construct interior upholstery	30
6.	Construct interior bedding	20

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Perform sewing machine operation	1.1. Sewing machines and their functions 1.2. Sewing machine parts and their functions 1.3. Tools and supplies for sewing machines operation 1.4. Setting the sewing machine 1.5. Operating the sewing machine 1.6. Stitching techniques 1.7. Common sewing machine faults and their remedies 1.8. Maintenance of the sewing machine 1.9. Safety precautions 1.10. Construction techniques	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence

	1.9.1 Stitching 1.9.2 Seams 1.9.3 Control of fullness 1.9.4 Edge finishes 1.9.5 Fastenings 1.9.6 Decorative techniques	

2. Construct pillows and cushions	2.1. Meaning of terms
	2.2. Classification of furnishings
	2.3. Importance of furnishings
	2.4. Emerging trends in soft furnishing
	  2.4.1. Organic and natural fabrics
	  2.4.2. Recycled and upcycled materials
	  2.4.3. Low- impact dyes and finishes
	  2.4.4. Eco-friendly materials
	  2.4.5. Use of AI driven fabric selection and customization
	2.4.5.1. AI Textile designer
	2.5. Types of pillows and cushions materials
	2.6. Types of Pillows and cushion designs
	2.7. Pillows and cushions construction
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of Evidence

3. Construct interior rugs and carpets	3.1. Meaning of terms 3.2. Classification rugs and carpets 3.3. Importance of rugs and carpets 3.4. Rugs and carpets selection 3.5. Rugs and carpets materials 3.6. Rugs and carpets construction methods 3.7. Rugs and carpets construction	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of
4. Construct interior draperies	4.1. Meaning of terms 4.2. Classification of draperies 4.3. Importance of draperies 4.4. Draperies selection and designs 4.5. Drapery materials	• Written tests • Observation • Oral questions • Third party report • Interviewing

		4.5.1. Drapery finishes 4.6. Drapery construction 4.7. Fitting draperies	• Project and report writing • Portfolio of Evidence
5.	Construct interior upholstery	5.1. Meaning of terms 5.2. Properties of upholstery 5.3. Importance of upholstery 5.4. Upholstery selection and designs 5.5. Upholstery materials 5.6. Upholstery finishes 5.7. Upholstery construction 5.8. Upholstery fitting	• Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of Evidence
6.	Construct interior bedding	6.1. Meaning of terms 6.2. Classification of bedding 6.3. Importance of bedding 6.4. Bedding selection and designs 6.5. Bedding materials 6.6. Bedding finishes 6.7. Bedding construction	• Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of Evidence

Suggested Methods of instruction

- Project
- Demonstration by trainer
- Practice by the trainee
- Discussions
- Direct instruction
- Case study
- Audio –visual aids

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Soft Furnishing Design Guide		5 pcs	1:5
2.	Pillow & Cushion Making Handbook		5 pcs	1:5
3.	Rugs & Carpet Installation Guide		5 pcs	1:5

4.	Drapery & Curtain Sewing Manual		5 pcs	1:5
5.	Upholstery & Fabric Selection Guide		5 pcs	1:5
6.	Bedding & Textile Care Handbook		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Lecture/Theory Room	40 m²	1	1:25
2.	Soft Furnishing Workshop	With sewing & upholstery stations	1	1:25
3.	Fabric Cutting & Drapery Lab	Equipped with tables & tools	1	1:25
C	**Consumable materials**			
1.	Pillow Inserts	Assorted sizes	50 pcs	2:1
2.	Cushion Covers	Cotton, Velvet, Linen	50 pcs	2:1
3.	Stuffing Materials	Foam, Fiberfill	20 bags	4:5
4.	Carpet Samples	Wool, Nylon, Polyester	25 pcs	1:1
5.	Rug Backing Materials	Latex & Non-Slip	10 sets	1:3
6.	Fabric Rolls	Sheer, Blackout, Cotton	20 rolls	4:5
7.	Curtain Rods & Hooks	Metal & Wooden	25 sets	1:1
8.	Canvas & Frames	For textile art	25 pcs	1:1
9.	Decorative Tapestry Fabrics	Assorted Designs	10 sets	1:3
10.	Upholstery Fabrics	Leather, Linen, Velvet	20 rolls	4:5
11.	Foam Padding	High-Density Foam	10 sets	1:3
12.	Bed Linens	Cotton, Silk, Blends	50 sets	2:1
13.	Quilt & Duvet Fillings	Polyester, Wool, Feather	10 sets	1:3
D	**Tools and Equipment**			
1.	Sewing Machines	Industrial & Domestic	5 pcs	Sewing Machines

2.	Overlock Machines	For fabric edges	5 pcs	Overlock Machines
3.	Fabric Scissors & Rotary Cutters	Assorted sizes	10 sets	Fabric Scissors & Rotary Cutters
4.	Carpet Seam Cutters	For joining pieces	5 pcs	Carpet Seam Cutters
5.	Rug Tufting Guns	Electric & Manual	5 pcs	Rug Tufting Guns
6.	Curtain Steamers	For wrinkle removal	5 pcs	Curtain Steamers
7.	Curtain Rod Installers	Drills & Fasteners	5 sets	Curtain Rod Installers
8.	Staple Guns	For upholstery	5 pcs	Staple Guns
9.	Upholstery Tack Pullers	For removing old fabric	5 pcs	Upholstery Tack Pullers
E	**Personal Protective Equipment (PPEs)**			
1.	Safety Goggles	Protects eyes from debris	25 pcs	1:1
2.	Dust Masks	For respiratory protection	25 pcs	1:1
3.	Work Gloves	Protects hands from sharp materials	25 pairs	1:1
4.	Overall/ dust coat		25 pcs	1:1

INTERIOR DESIGN CONCEPTUALIZATION

ISCED UNIT CODE: 0212451 08A

TVET CDACC UNIT CODE: CON/CU/ID/CR/02/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Conceptualize Interior Design

Duration of Unit: 90 hours

Unit Description

This unit specifies the competencies required to **conceptualize interior design.** It involves conducting project inception, performing design research, producing schematic drawings refining design concepts and presenting design proposal.

S/N	Learning Outcomes	Duration (hours)
1.	Conduct project Inception	15
2.	Create Perform design research	15
3.	Produce schematic drawings	25
4.	Refine design concepts	20
5.	Present design proposal	15
	TOTAL	**90**

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Conduct project inception	1.1 Introduction to interior design 1.1 Sustainable and green Interior Design 1.1.1 Energy Efficiency 1.1.2 Water Conservation 1.1.3 Material Sustainability 1.1.4 Waste Reduction 1.1.5 Indoor Air Quality (IAQ) 1.1.6 Biophilic Design 1.2 Client's brief and interpretation 1.3 Spatial information 1.3.1 Site surveys 1.3.2 Existing drawings. 1.4 Project resources.	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence

	1.5 Project tasks definitions 1.6 Site parameters 1.7 Potential, perceived and actual risk management. 1.8 Risk mitigation strategies and contingency options	

2. Perform design research	2.1 Introduction to research design
	2.2 Spatial plan and site analysis
	2.3 Project structure
	2.4 Design program
	2.5 Legislative requirement in interior design
	   2.5.1 Building Codes and Regulations
	   2.5.2 Health and Safety Regulations
	   2.5.3 Zoning and Land Use Laws
	   2.5.4 Environmental and
	   2.5.5 Sustainability Standards
	   2.5.6 Permit and Licensing Requirements
	   2.5.7 Accessibility Laws
	   2.5.8 Fire Safety and Emergency Exits
	   2.5.9 Workplace Safety Compliance
	2.6 Space needs and standards
	2.7 Sources of research
	2.7.1 Historical precedent
	2.7.2 Contemporary precedent
	2.7.3 Socio-cultural aspects
	2.8 Ways of design presentation
	   2.8.1 Hand Sketches & Drawings
	   2.8.2 Perspective Drawings
	   2.8.3 Renderings
	   2.8.4 Technical Drawings
	   2.8.5 Mood Boards
	   2.8.6 Orthographic Projections
	   2.8.7 Concept Models
	   2.8.8 AI generated modelling
	2.9 Provisional project cost
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of Evidence

	2.9.1 Cost control processes	
3. Produce schematic drawings	3.1 Project requirements and schedules 3.2 Matrix diagrams 3.3 Zoning 3.4 Bubble diagrams 3.5 Sketching 3.6 Preliminary floor plans 3.7 Spatial layouts 3.8 Schematic drawings	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence
4. Refine design concepts	4.1 Refined floor plans and working drawings 4.2 Spatial layouts 4.3 Integration of themes and concepts 4.4 Refined drawings and proposed models 4.5 Evaluation and criteria of drawing selections 4.6 Proposed design selection process 4.7 Design solutions. 4.8 Design evaluation. 4.9 Design testing and reflection. 4.10 Design solution documentation 4.11 Proposed design adjustment 4.12 Progress solutions	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

5. Present design proposal	5.1 Presentation requirements
	
	5.2 Ways of presentation
	    5.2.1 Print
	    5.2.2 Show case models and prototypes
	    5.2.3 Pin-ups
	    5.2.4 Oral
	5.3 Content of presentation
	    5.3.1 Design proposal
	
	5.4 Client and stakeholder feedback
	5.5 Design proposal revisions.
	5.6 Submission of final proposal
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Portfolio of evidence

Suggested Methods of Instruction
- Instructor-led facilitation
- Demonstration by trainer
- Practical work by trainees
- Group discussions
- Presentations
- Projects
- Case studies
- Problem based learning
- Experiential learning
- Question and answer
- Team training
- Team learning
- E-learning
- Academic trips

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Book covering interior design concept development		5 pcs	1:5
2.	Resources for rendering and visualizing interior designs		5 pcs	1:5
3.	Manual on drafting detailed drawings		5 pcs	1:5
4.	Guide on presenting design proposals effectively		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Design Studio/ Presentation room	Equipped for concept development, sketching, projector, whiteboard, and pin-up boards	40m2	1:25
2.	Research Library	Storage for design references and case studies	1	1:25

3.	Computer Lab	Workstations with drafting software Adobe Suite, Deep AI or an equivalent software and internet connectivity.	1	1:25
C	**Consumable materials**			
1.	Sketching Paper	A3 and A4 sizes for concept development	10 reams	1:5
2.	Markers & Pens/pencils	Assorted colours and thicknesses	5 sets	1:5
3.	Model-Making Materials	Foam board, Forex board, cardboard	10 sets	1:5
4.	Adhesives	Glue, double-sided tape, spray adhesive	5 sets	1:5
5.	Fabric & Texture Samples	Various fabric, wood, and surface textures	5 sets	1:5
6.	Printing and Binding Materials	For professional presentation of proposals	5 sets	1:5
D	**Tools and Equipment**			
6.	Drafting Table	Adjustable tables for sketching and rendering	5 pcs	1:5
7.	Drawing Tools	Rulers, set squares, compasses, erasers, sharpeners	10 sets	1:5
8.	Digital Tablets	For digital sketching and rendering	5 pcs	1:5
9.	Laptops/Desktops	With design software installed	5 pcs	1:5

10.	Measuring Tape	For spatial planning and scaling	5 pcs	1:5
11.	Light Box	For tracing and detailed drawings	2 pcs	1:10
12.	Presentation Room	Mounted boards for displaying design concepts	5 pcs	1:5

COMPUTER GRAPHICS

ISCED UNIT CODE: 0212451 09A

TVET CDACC UNIT CODE: CON/CU/ID/CR/03/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **Produce Computer Graphics.**

Duration of Unit: 90 hours

UNIT DESCRIPTION

This unit specifies the competencies required to **produce computer graphics.** It involves: applying digital graphics software fundamentals; creating and editing raster graphics; creating and editing vector graphics; creating multi-page layouts; applying typography to projects and presenting digital design work.

S/N	Learning Outcomes	Duration (hours)
1.	Apply digital graphics software fundamentals	5
2.	Create and edit raster graphics	25
3.	Create and edit vector graphics	25
4.	Create multi-page layouts	20
5.	Apply typography to projects	10
6.	Present digital design work	5
	TOTAL	**90**

Learning Outcomes, Content and Methods of assessment

Learning Outcomes	Content	Methods of assessment
1. Apply digital graphics software fundamentals	1.1 Introduction to graphic design as applied in interior design practice 1.2 Purpose of graphics software in interior design 1.3 2D graphics software 1.4 Interface features 1.5 Raster file formats 1.6 Vector file formats 1.7 Workspace customization. 1.8 Management of project files	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

2.	Create and edit raster graphics	2.1 Introduction to Photoshop 2.2 Photoshop workspace 2.3 Image sourcing and importation. 2.4 Image editing 2.5 Application of layers, masks and adjustment tools 2.6 Save files in editable formats. 2.7 Export images 2.8 Images production 2.9 Presentation of raster graphics	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3.	Create and edit vector graphics	3.1 Introduction to Adobe Illustrator 3.2 Adobe illustrator configuration 3.3 Creation of new documents 3.4 Using existing templates 3.5 Creation of vector objects. 3.6 Editing of paths, anchor points and curves 3.7 Application of object attributes 3.8 Organization of layers and groups 3.9 Text insertion, formatting and styling. 3.10 Application of Vector effects 3.11 Vector transformations and appearance settings 3.12 Save files in editable formats 3.13 Export vector graphics 3.14 Artwork presentation.	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4.	Create multi-page layouts	4.1 Document setup and configuration 4.2 Creation and application master pages 4.3 Application of grid systems, guides and alignment tools	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

	4.4 Creation and formatting of text frames 4.5 Import and edit images 4.6 Save files in editable formats 4.7 Files exportation. 4.8 Multi-page layout presentation.	
5. Apply typography to projects	5.1 Typography Project requirements. 5.2 Fonts and typefaces selection. 5.3 Type hierarchy 5.4 Combination of text and images. 5.5 Text integration with visual elements 5.6 Application of colour in typography 5.7 Design presentation	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
6. Present digital design work	6.1 Presentation objectives and client requirements 6.2 Presentation format(s) selection. 6.3 Sequencing of completed works 6.4 Delivery methods selections. 6.5 Final presentation	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

Suggested Methods of instruction

- Project
- Demonstration by trainer
- Practice by the trainee
- Viewing of related videos
- Discussions
- Direct instruction
- Case study
- Audio –visual aids
- Simulation

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Computer Graphics & Digital Design Manual		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Lecture/Theory Room	40 m²	1	1:25
2.	Computer Lab	With 25 Workstations with drafting software Adobe Suite and internet connectivity	1	1:25
C	**Consumable materials**			
1.	Sketch Pads	A3 & A4 sizes	25 pcs	1:1
2.	Pencils	HB, 2B, 4B, 6B	5 sets	1:5
3.	Fine Liners	0.1, 0.3, 0.5mm	5 sets	1:5
4.	Markers	Assorted colours	5 sets	1:5
5.	Watercolour & Gouache Paints	Assorted	5 sets	1:5
6.	Drawing Boards	A2 & A3 sizes	25 pcs	1:1
7.	T-Squares & Set Squares	Standard sizes	25 pcs	1:1
2	Compass Sets	Full drafting set	5 sets	1:5
3	Cutting Mats	A3 size	10 pcs	1:3
4	Graphic Tablets	Wacom or similar	5 pcs	1:5
5	CAD Software	Photoshop, Illustrator	Licensed	1 set
6	Computers	High-performance for design	25 pcs	1:1
D	**Tools and Equipment**			
1.	Adjustable Desk Lamps		25 pcs	1:1
2.	Light boxes	A3 size	5 pcs	1:5
3.	Cutting Machines	Laser Cutter	1	1:25
4.	3D Printer	PLA filament	1	1:25
5.	Digital Cameras	For documentation	5 pcs	1:5

MODULE IV

WORK ETHICS AND PRACTICES

ISCED UNIT CODE: 041745103A

TVET CDACC UNIT CODE: CON/OS/ID/BC/03/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Apply work ethics and practices.

Duration of Unit: 40 hours

Unit Description

This unit covers competencies required to demonstrate employability skills. It involves the ability to: conduct self-management, promote ethical work practices and values, promote teamwork, manage workplace conflicts, maintain professional and personal development, apply problem-solving, and promote customer care.

S/N	Learning Outcomes	Duration (hours)
1.	Apply self-management skills	10
2.	Promote ethical practices and values	4
3.	Promote Teamwork	10
4.	Maintain professional and personal development	10
5.	Apply Problem-solving skills	4
6.	Promote Customer care.	2
	TOTAL	**40**

Learning Outcomes, Content, and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Apply self-management skills	1.1 Self-awareness 1.2 Formulating personal vision, mission, and goals 1.3 Healthy lifestyle practices 1.4 Strategies for overcoming work challenges 1.5 Emotional intelligence 1.6 Coping with Work Stress. 1.7 Assertiveness versus aggressiveness and passiveness 1.8 Developing and maintaining high self-esteem	● Observation ● Written assessment ● Oral assessment ● Third party reports ● Portfolio of evidence ● Project ● Practical

	1.9 Developing and maintaining positive self-image 1.10 Time management 1.11 Setting performance targets 1.12 Monitoring and evaluating performance targets	
2. Promote ethical work practices and values	6.7 Integrity 6.8 Core Values, ethics and beliefs 6.9 Patriotism 6.10 Professionalism 6.11 Organizational codes of conduct 6.12 Industry policies and procedures	● Observation ● Written assessment ● Oral assessment ● Third party reports ● Portfolio of evidence ● Project ● Practical
3. Promote Teamwork	3.1 Types of teams 3.2 Team building 3.3 Individual responsibilities in a team 3.4 Determination of team roles and objectives 3.5 Team parameters and relationships 3.6 Benefits of teamwork 3.7 Qualities of a team player 3.8 Leading a team 3.9 Team performance and evaluation 3.10 Conflicts and conflict resolution 3.11 Gender and diversity mainstreaming 3.12 Developing Healthy workplace relationships 3.13 Adaptability and flexibility 3.14 Coaching and mentoring skills	● Observation ● Written assessment ● Oral assessment ● Third party reports ● Portfolio of evidence ● Project ● Practical
4. Maintain professional and personal development	4.1 Personal vs professional development and growth 4.2 Avenues for professional growth 4.3 Recognizing career advancement 4.4 Training and career	● Observation ● Written assessment ● Oral assessment ● Third party reports ● Portfolio of evidence ● Project ● Practical

		opportunities	
		4.5 Assessing training needs	
		4.6 Mobilizing training resources	
		4.7 Licenses and certifications for professional growth and development	
		4.8 Pursuing personal and organizational goals	
		4.9 Managing work priorities and commitments	
		4.10 Dynamism and on-the-job learning	
5.	Apply Problem-solving skills	1.1 Causes of problems 1.2 Methods of solving problems 1.3 Problem-solving process 1.4 Decision making 1.5 Creative thinking and critical thinking process in development of innovative and practical solutions	● Observation ● Written assessment ● Oral assessment ● Third party reports ● Portfolio of evidence ● Project ● Practical
6.	Promote Customer Care	6.1 Identifying customer needs 6.2 Qualities of good customer service 6.3 Customer feedback methods 6.4 Resolving customer concerns 6.5 Customer outreach programs 6.6 Customer retention	● Observation ● Written assessment ● Oral assessment ● Third party reports ● Portfolio of evidence ● Project ● Practical

Suggested Methods of Instruction

- Instructor lead facilitation of theory using active learning strategies.
- Demonstrations
- Simulation/Role play
- Group Discussion
- Presentations
- Projects
- Case studies
- Assignments

Recommended Resources for 25 Trainees

- Computers
- Stationery
- Charts

- Video clips
- Audio tapes
- Radio sets
- TV sets
- LCD projectors

ENTREPRENEURIAL SKILLS

ISCED UNIT CODE: 041345104A

TVET CDACC UNIT CODE: CON/OS/ID/BC/04/5/MA

Relationship to occupational standards

This unit addresses the unit of competency: Apply Entrepreneurial skills.

Duration of unit: 40 hours

Unit Description:

This unit covers the competencies required to demonstrate an understanding of entrepreneurship. It involves demonstrating an understanding of financial literacy, applying entrepreneurial concepts identifying entrepreneurship opportunities, applying business legal aspects, and developing business innovative strategies and business plans.

S/N	Learning Outcomes	Duration (hours)
1.	Apply financial literacy	6
2.	Apply the entrepreneurial concept	4
3.	Identify entrepreneurship opportunities	6
4.	Apply business legal aspects	6
5.	Innovate Business Strategies	6
6.	Develop business plan	12
	TOTAL	**40**

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Apply financial literacy	1.1 Personal finance management 1.2 Balancing between needs and wants 1.3 Budget Preparation 1.4 Saving management 1.5 Factors to consider when deciding where to save 1.6 Debt management 1.7 Factors to consider before taking a loan 1.8 Investment decisions	• Observation • Project • Written assessment • Oral assessment • Third party report • Interviews • Portfolio of evidence

	1.9 Types of investments 1.10 Factors to consider when investing money 1.11 Insurance services 1.12 insurance products available in the market 1.13 Insurable risks	
2.Apply entrepreneurial concept	2.1 Difference between Entrepreneurs and Business persons 2.2 Types of entrepreneurs 2.3 Ways of becoming an entrepreneur 2.4 Characteristics of Entrepreneurs 2.5 salaried employment and self-employment 2.6 Requirements for entry into self-employment 2.7 Roles of an Entrepreneur in an enterprise 2.8 Contributions of Entrepreneurship	• Observation • Project • Written assessment • Oral assessment • Third party report • Portfolio of Evidence
3.Identify entrepreneurship opportunities	3.1 Sources of business ideas 3.2 Factors to consider when evaluating business opportunity 3.3 Business life cycle	• Observation • Project • Written assessment • Oral assessment • Third party report • Portfolio of Evidence
4.Apply business legal aspects	4.1 Forms of business ownership 4.2 Business registration and licensing processing 4.3 Types of contracts and agreements 4.4 Employment laws 4.5 Taxation laws	• Observation • Project • Written assessment • Oral assessment • Third party report • Portfolio of Evidence
5.Innovate business Strategies	5.1 Creativity in business 5.2 Innovative business strategies 5.3 Entrepreneurial Linkages 5.4 ICT in business growth and development	• Observation • Project • Written assessment • Oral assessment • Third party report

		• Portfolio of Evidence
6.Develop Business Plan	1.1 Business description 1.2 Marketing plan 1.3 Organizational/Management Plan 1.4 Production/operation plan 1.5 Financial plan 1.6 Executive summary 1.7 Business plan presentation 1.8 Business idea incubation	• Observation • Written assessment • Project • Oral assessment • Third party report • Portfolio of Evidence

Suggested Methods of Instruction
- Direct instruction with active learning strategies
- Project (Business plan)
- Case studies
- Field trips
- Group Discussions
- Demonstration
- Question and answer
- Problem solving
- Experiential
- Team training
- Guest speakers
-

Recommended Resources for 25 Trainees
- 5 Case studies
- 5 Business plan templates
- 10 Computers
- 1 Overhead projectors
- Internet
- Video clips
- 5 Newspapers and Handouts
- 5 Business Journals
- 25 sets of Writing materials

INTERIOR FITTINGS AND ACCESSORIES

ISCED UNIT CODE: 0212451 10A

TVET CDACC UNIT CODE: CON/CU/ID/CR/04/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **Apply interior fittings and accessories**

Duration of Unit: 100 hours

Unit Description

This unit specifies the competencies required to **apply interior fittings and accessories.** It involves installing bathroom fittings, installing kitchen fittings, creating interior lampshades, determining interior chandeliers, determining sculpture, determining interior wall hangings, determining interior vases, performing interior landscaping and applying interior crafts.

S/N	Learning Outcomes	Duration (hours)
1.	Install bathroom fittings	15
2.	Install kitchen fittings	15
3.	Create interior lampshades	15
4.	Determine interior chandeliers	10
5.	Determine sculpture	10
6.	Determine interior wall hangings	10
7.	Determine interior vases	10
8.	Perform interior landscaping	15
	TOTAL	**100**

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Install bathroom fittings	3.1. Introduction to fittings and accessories 3.2. Types of bathroom fittings and accessories 3.3. Emerging trends in fitting and accessories 　3.3.1. Sustainable and Eco-friendly materials 　　3.3.1.1. Recycled and bio-based materials 　　3.3.1.2. Lead-free and non-toxic coatings	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence

	3.3.1.3. Smart and AI integrated accessories 3.3.1.4. Modular and adaptable fittings 3.3.1.5. Interchangeable accessories 3.3.1.6. Stackable and space-saving fittings 3.3.1.7. High-performance and energy-efficient accessories 3.3.1.8. Luxury and Aesthetic innovations 3.4. Materials for bathroom fittings and accessories 3.5. Purposes of bathroom fittings 3.6. Selection of bathroom fittings 3.7. Bathroom fittings installation 3.8. Bathroom fittings testing	
2. Install kitchen fittings	2.1. Introduction to kitchen fittings and accessories 2.2. Types of kitchen fittings and accessories 2.3. Emerging trends in kitchen fittings and accessories 2.4. Materials for kitchen fittings 2.5. Purposes of kitchen fittings 2.6. Kitchen fittings and accessories installation 2.7. Kitchen fittings testing	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Create interior lampshades	6.1. Functions of lampshades 6.2. Types of lampshades 6.3. Lampshade fittings 6.4. Lampshade materials 6.5. Lampshades construction materials 6.6. Design lampshades 6.7. Fitting lampshades	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence

4. Determine interior chandeliers	4.1. Introduction to chandeliers 4.2. Functions of chandeliers 4.3. Types of chandeliers 4.4. Styles of chandeliers 4.5. Chandelier construction materials 4.6. Design chandeliers 4.7. Fitting chandeliers	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence
5. Determine sculpture	5.1. Introduction to interior sculptures 5.2. Classification of sculptures 5.3. Materials for sculptures 5.4. Selection of sculptures 5.5. Design sculptures 5.6. Sculptures placement	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence
6. Determine interior wall hangings	1.1 Introduction to wall hangings 1.2 Classification of wall hangings 1.3 Emerging trends in wall hangings 1.4 Wall hanging materials 1.5 Wall hanging construction method 1.6 Wall hanging mounting techniques	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
7. Determine interior vases	7.1 Introduction to vases 7.2 Emerging trends in vases 7.3 Classification of vases 7.4 Vases making materials 7.5 Selection of vases 7.6 Design vases 7.7 Vase placement	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
8. Perform interior landscaping	7.1. Interior landscaping elements 7.2. Space preparation 7.3. Emerging trends in interior landscape 7.4. Arrangement of interior landscaping components	• Written tests • Observation • Oral questions • Third party report • Interviewing

	7.5. Landscaping process 7.6. Interior landscaping maintenance	• Project and report writing • Portfolio of evidence

Suggested Methods of instruction

- Project
- Demonstration by trainer
- Practice by the trainee
- Discussions
- Direct instruction
- Case study
- Audio –visual aids

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Interior Design Accessories Manual/Guides	Covers bathroom/kitchen fittings, lighting, sculptures, aquariums, vases, landscaping	5 pcs	1:5
2.	Product Design & Materials Guide	Information on materials for fittings and accessories	5 pcs	1:5
3.	Digital Learning Access	Online access to SketchUp, AutoCAD, 3D modeling tutorials	25 logins	1:1
B	**Learning Facilities and infrastructure**			
1.	Workshop Space	Equipped with workbenches and storage for materials	1	1:25

2.	Display Area	Space for assembling and showcasing interior accessories	1	1:25
C	**Consumable materials**			
1.	Bathroom Fittings	Assorted taps, sinks, towel holders, showerheads	25 sets	1:1
2.	Kitchen Fittings	Cabinet handles, faucets, countertops samples	25 sets	1:1
3.	Lampshades	Fabric, metal, and glass materials	25 pcs	1:1
4.	Chandeliers	Miniature models for practice	10 pcs	1:3
5.	Wall-hanging	Wall hanging base, assorted materials such as fabric, thread, paints, glass, wood, metal and clay	25 sets	1:1
6.	Sculpture Materials	Clay, wood, metal, carving tools	25 sets	1:1
7.	Vases	Ceramic, glass, wood	25 pcs	1:1
8.	Landscaping Elements	Potted plants, artificial grass, pebbles, small fountains	25 sets	1:1
D	**Tools and Equipment**			
1.	Measuring Tape	For accurate fittings measurements	10 pcs	1:3
2.	Tile Cutter	For modifying kitchen/bathroom fixtures	10 pcs	1:3

3.	Drill & Screwdriver Set	For installing fittings	10 pcs	1:3
4.	Paint Brushes & Spray Guns	For finishing accessories	25 sets	1:1
5.	Glass Cutting Tool	For aquarium and vases	10 pcs	1:3
E	**Personal Protective Equipment (PPEs)**			
1.	Safety Goggles	Protects eyes from debris	25 pcs	1:1
2.	Dust Masks	For respiratory protection	25 pcs	1:1
3.	Work Gloves	Protects hands from sharp materials	25 pairs	1:1
4.	Overall/ dust coat		25 pcs	1:1

DIGITAL DRAFTING

ISCED UNIT CODE: 0212451 11A
TVET CDACC UNIT CODE: CON/CU/ID/CR/05/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **perform digital drafting**

Duration of Unit: 100 hours

UNIT DESCRIPTION

This unit specifies the competencies required to **perform digital drafting.** It involves: applying digital drafting principles; setting up drawing environments; creating 2D drawings; modifying and editing drawings; applying dimensioning and annotation; presenting drafted drawings.

S/N	Learning Outcomes	Duration (hours)
1.	Apply digital drafting principles	10
2.	Set up drawing environments	10
3.	Create 2D drawings	30
4.	Modify and edit drawings	20
5.	Apply dimensioning and annotation	20
6.	Present drafted drawings	10
	TOTAL	**100**

Learning Outcomes, Content and Methods of assessment

Learning Outcomes	Content	Methods of assessment

1. Apply digital drafting principles	1.1 Introduction to computer aided design and drafting
	1.2 Principles of digital drafting
	1.3 Types of architectural and interior design software
	   1.3.1 ArchiCAD
	   1.3.2 SketchUp
	   1.3.3 Blender
	   1.3.4 3Ds Max
	   1.3.5 Lumion
	   1.3.6 AutoCAD
	   1.3.7 Twin Motion
	1.4 Advantages of CAD
		• Written tests
		• Observation
		• Oral questions
		• Third party report
		• Interviewing
		• Project and report writing
		• Portfolio of evidence

	1.5 CADD interface 1.6 Architectural software operation. 1.7 Architectural software file formatting 1.8 Creation of files		
2. Set up drawing environments	2.1 Preparation of software environment. 2.2 Drawing units and tools 2.3 Scaling of drawing 2.4 Template configuration. 2.5 Layer systems, colours and line types set up. 2.6 Dimensioning drawings 2.7 Grids, snaps and reference settings configuration 2.8 Workspace layouts are customisation 2.9 Save files in editable formats	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence	
3. Create 2D drawings	3.1 Tools and commands for constructing 2D drawings. 3.2 Walls, doors, windows and partitions drawing. 3.3 Floor plan drawing 3.4 Elevations and sections production. 3.5 Details in 2D drawings 3.6 Hatching, fills and line weights applications. 3.7 Layers and drawing organization	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence	
4. Modify and edit drawings	5.1 Modification of drawings. 5.2 Modification tools and commands application. 5.3 Design proposed concepts. 5.4 Revision of drawings 5.5 Save file into editable formats	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence	
5. Apply dimensioning and annotation	4.1 Dimension styles. 4.2 Annotation text styles configuration 4.3 Dimensions application.	• Written tests • Observation • Oral questions • Third party report	

		4.4 Annotations application. 4.5 Leader lines, tags and callouts insertion 4.6 Documentation of drawings	• Interviewing • Project and report writing • Portfolio of evidence
6.	Present drafted drawings	6.1 Layout sheets creation 6.2 Title blocks customization. 6.3 Drawings arrangement. 6.4 Drawings exportation 6.5 Drawing printing 6.6 Project presentation.	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

Suggested Methods of instruction

- Project
- Demonstration by trainer
- Practice by the trainee
- Viewing of related videos
- Discussions
- Direct instruction
- Case study
- Audio –visual aids

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	**Learning Materials**			
1.	Computer Graphics & Digital Design Manual		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Lecture/Theory Room	40 m²	1	1:25
2.	Computer Lab	With 25 Workstations with drafting software (ArchiCAD, SketchUp,3Ds Max, Lumion,	1	1:25

		AutoCAD and Adobe Suite) and internet connectivity		
C	**Consumable materials**			
1.	Sketch Pads	A3 & A4 sizes	25 pcs	1:1
2.	Pencils	HB, 2B, 4B, 6B	5 sets	1:5
3.	Fine Liners	0.1, 0.3, 0.5mm	5 sets	1:5
4.	Markers	Assorted colours	5 sets	1:5
5.	Watercolour & Gouache Paints	Assorted	5 sets	1:5
6.	Drawing Boards	A2 & A3 sizes	25 pcs	1:1
7.	T-Squares & Set Squares	Standard sizes	25 pcs	1:1
2	Compass Sets	Full drafting set	5 sets	1:5
3	Cutting Mats	A3 size	10 pcs	1:3
4	Craft Knives	X-Acto knives	10 pcs	1:3
5	Paint Brushes	Assorted sizes	10 sets	1:3
6	Graphic Tablets	Wacom or similar	5 pcs	1:5
7	CAD Software	ArchiCAD, SketchUp, Revit, Twin Motion	Licensed	1 set
8	Computers	High-performance for design	25 pcs	1:1
D	**Tools and Equipment**			
1.	Light boxes	A3 size	5 pcs	1:5
2.	Cutting Machines	Laser Cutter	1	1:25
3.	3D Printer	PLA filament	1	1:25
4.	Digital Cameras	For documentation	5 pcs	1:5

INTERIOR FURNITURE AND FIXTURES

ISCED UNIT CODE: 0212451 12A

TVET CDACC UNIT CODE: CON/CU/ID/CR/06/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **develop interior furniture and fixtures**

Duration of Unit: 110 hours

Unit Description

This unit specifies the competencies required to **develop interior furniture and fixtures.** It involves determining furniture and fixtures, selecting furniture and fixtures materials, constructing interior furniture and fixtures, creating furniture and fixtures layout, installing interior fixtures and maintaining interior furniture and fixtures.

S/N	Learning Outcomes	Duration (hours)
1.	Determine furniture and fixtures	15
2.	Select furniture and fixtures materials	15
3.	Construct furniture and fixtures	30
4.	Create furniture and fixtures layout	15
5.	Install interior fixtures	20
6.	Maintain interior furniture and fixtures	15
	TOTAL	**110**

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Determine furniture and fixtures	1.1. Characteristics of furniture and fixtures 1.2. Function of furniture and fixtures 1.3. Types of furniture and fixtures 1.4. Styles of furniture and fixtures 1.5. Classification of furniture and fixtures 1.6. Furniture and fixture selection 1.7. Emerging trends in furniture and fixture 1.7.1. Sustainable and Eco-friendly materials	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

	1.7.2. AI and 3D-printed furniture 1.7.3. Smart and Tech-integrated furniture 1.7.4. Non-Toxic finishes and textile 1.7.5. Smart and energy – efficient fixture 1.7.6. Modular and transformable furniture 1.7.7. Health and well-being focused design 1.8 Documentation of furniture and fixture requirements	
2. Select furniture and fixtures materials	2.1. Properties of furniture and fixtures materials 2.2. Emerging trends in furniture and fixture materials 2.3. Functions of furniture and fixtures materials 2.4. Types of furniture and fixtures materials 2.5. Qualities of furniture and fixtures materials 2.6. Material selection 2.7. Furniture and fixtures finish	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Construct furniture and fixtures	3.1. Furniture and fixtures construction tools and equipment 3.2. Construction techniques 3.3. Joinery methods 3.4. Furniture and fixtures finishing 3.5. Fabrication methods 3.6. Furniture and fixtures assembling 3.7. Furniture and fixture inspection	• Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Create furniture and fixtures layout	4.1. Furniture and fixtures layouts and floor plans 4.2. Approval of layouts and plans 4.3. Verification and revisions of installation plans	• Written tests • Observation • Oral questions • Third party report • Interviewing

	4.4. Spatial order		• Project and report writing • Portfolio of evidence
5. Install interior furniture and fixtures	5.1. Tools and equipment 5.2. Site preparation 5.3. Furniture and fixtures arrangement methods 5.4. Fixtures preparation 5.5. Installation techniques 5.6. Hardware and decorative accessories 5.7. Installation process 5.8. Fixing methods 5.9. Fixture installation 5.10. Hardware and accessories installation 5.11. Safety precautions in handling tools 5.12. Project evaluation		• Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence
6. Maintain interior furniture and fixtures	6.1. Maintenance materials, tools and equipment 6.2. Repairing furniture and fixtures 6.3. Cleaning detergents 6.4. Furniture and fixtures repair process 6.5. Furniture and fixtures cleaning process		• Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence

Suggested Methods of instruction
- Project
- Demonstration by trainer
- Practice by the trainee
- Discussions
- Direct instruction
- Case study
- Audio –visual aids

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio

				(Item: Trainee)
A	**Learning Materials**			
1.	Furniture & Fixture Design Guide		5 pcs	1:5
2.	Woodworking & Joinery Techniques		5 pcs	1:5
3.	Furniture Installation & Assembly Manual		5 pcs	1:5
4.	Furniture Maintenance & Restoration Guide		5 pcs	1:5
B	**Learning Facilities and infrastructure**			
1.	Lecture/Theory Room	40 m²	1	1:25
2.	Furniture Construction Workshop	Equipped with workbenches & tools	1	1:25
C	**Consumable materials**			
1.	Hardwood Planks	Oak, Mahogany, Teak	50 pcs	2:1
2.	Plywood & MDF Boards	Various thicknesses	50 pcs	2:1
3.	Metal Tubing	Steel & Aluminium	25 pcs	1:1
4.	Glass Panels	Tempered & Frosted	10 pcs	1:3
5.	Fasteners & Screws	Assorted sizes	10 sets	1:3
6.	Adhesives	Wood Glue, Epoxy	10 sets	1:3
7.	Nails & Staples	For woodworking	10 sets	1:3
8.	Hinges & Drawer Slides	Assorted types	25 sets	1:1
9.	Table & Chair Legs	Wooden & Metal	50 pcs	2:1
10.	Sandpaper & Polish	For wood finishing	10 sets	1:3
D	**Tools and Equipment**			
1.	Hand Saws & Jigsaws	Manual & Electric	10 pcs	1:3
2.	Chisels & Wood Carving Tools	Various sizes	10 sets	1:3
3.	Cordless Drills & Drivers	For screwing & assembling	5 pcs	1:5

4.	Clamps & Vises	For securing materials	10 sets	1:3
5.	Measuring Tapes & Levels	For alignment	10 pcs	1:3
E	**Personal Protective Equipment (PPEs)**			
1.	Safety Goggles	Protects eyes from debris	25 pcs	1:1
2.	Dust Masks	For respiratory protection	25 pcs	1:1
3.	Work Gloves	Protects hands from sharp materials	25 pairs	1:1
4.	Overall/ dust coat		25 pcs	1:1