



REPUBLIC OF KENYA

COMPETENCY BASED CURRICULUM

FOR

INTERIOR DESIGN

KNQF LEVEL 6

(CYCLE 3)

PROGRAMME ISCED CODE: 0212 554 A



TVET CDACC
P.O. BOX 15745-00100
NAIROBI

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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**

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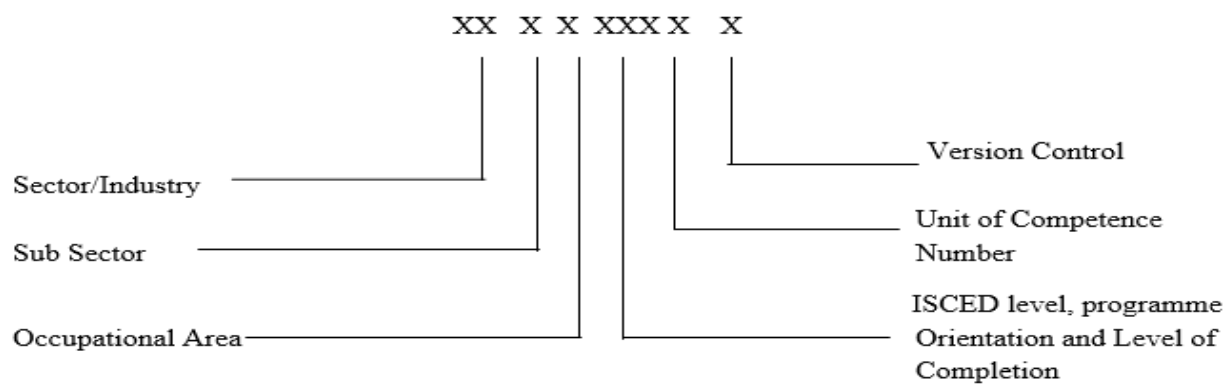
ABBREVIATIONS AND ACRONYMS

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

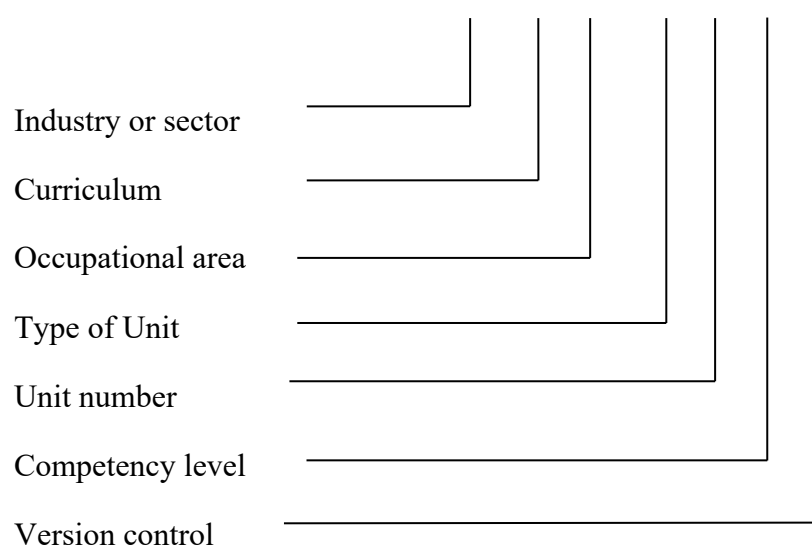
KEY TO ISCED UNIT CODE

0212 554 A



KEY TO TVET CDACC UNIT CODE

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



COURSE OVERVIEW

Interior Design Technician qualification consists of competencies that an individual must achieve to enable him or her to provide interior design artisan services. It involves: applying fundamentals of Interior Design; performing free-hand drawing; applying colour theory; performing interior design finishing; performing model making and producing technical drawing; apply digital literacy; apply communication skills; perform interior design soft furnishing; conceptualize 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; performing digital modelling and rendering; applying interior design style; performing interior design lighting and applying building components; performing interior design costing; applying interior acoustic and developing interior design project.

Summary of Units of Learning

ISCED Unit Code	TVE CDACC Unit Code	Unit of Learning Title	Duration in Hours	Credit Factor
MODULE I				
0212551 01A	CON/CU/ID/CR/01/4/MA	Fundamentals Of Interior Design	120	12
0212551 02A	CON/CU/ID/CR/02/4/MA	Freehand Drawing	120	12
0212551 03A	CON/CU/ID/CR/03/4/MA	Colour Theory	90	9
		SUB TOTAL	330	33
MODULE II				
0212551 04A	CON/CU/ID/CR/04/4/MA	Interior Design Finishing	180	18
0212551 05A	CON/CU/ID/CR/05/4/MA	Interior Design Model Making	100	10
0212551 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
0212551 07A	CON/CU/ID/CR/01/5/MA	Interior Design Soft Furnishings	180	18
0212551 08A	CON/CU/ID/CR/02/5/MA	Interior Design Conceptualization	90	9
0212551 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
0212551 10A	CON/CU/ID/CR/04/5/MA	Interior Fittings and Accessories	100	10
0212551 11A	CON/CU/ID/CR/05/5/MA	Digital Drafting	100	10
0212551 12A	CON/CU/ID/CR/06/5/MA	Interior Furniture & Fixtures	110	11
		SUB TOTAL	390	39
MODULE V				
0212551 13A	CON/CU/ID/CR/01/6/MA	Digital Modelling & Rendering (CAD)	110	11
0212551 14A	CON/CU/ID/CR/02/6/MA	Interior Design Styles	100	10
0212551 15A	CON/CU/ID/CR/03/6/MA	Interior Design Lighting	80	8
0212551 16A	CON/CU/ID/CR/04/6/MA	Interior Building Components	90	9
		SUB TOTAL	380	38
MODULE VI				
0212551 17A	CON/CU/ID/CR/05/6/MA	Interior Design Costing	100	10
0212551 18A	CON/CU/ID/CR/06/6/MA	Interior Design Acoustics	80	8
0212551 19A	CON/CU/ID/CR/07/6/MA	Interior Design Project	280	28
		SUB TOTAL	460	46
0212551 20A	CON/CU/ID/CR/08/6/MA	INDUSTRY TRAINING	480	48
		GRAND TOTAL	2860	286

Entry Requirements

An individual entering this course should have any of the following minimum requirements:

- a) Kenya Certificate of Secondary Education (KCSE)

Or

- b) Equivalent qualifications as determined by relevant regulatory body

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 320 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 for levels 5 and 6 courses

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
 - iii) 40-60 for units in module III, IV, V and VI
- 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 4 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: 0212551 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	<ul style="list-style-type: none">● Observation● Written tests● Oral questioning● Third party report● Portfolio of evidence

	1.1.5.3. Illumination 1.1.5.4. Temperature 1.1.6. Colour 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,	<ul style="list-style-type: none"> ● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	<p>Material, Theme)</p> <p>2.3.3. Proportion and Scale (Furniture, Spatial, Natural)</p> <p>2.3.4. Rhythm (Repetition, Progression, Transition)</p> <p>2.3.5. Emphasis (Focal Point, Contrast, Lighting)</p> <p>2.3.6. Contrast (Colour, Material, Shape)</p> <p>2.3.7. Functionality (Space, Accessibility, Ergonomics)</p> <p>2.3.8. Dominance (Dominance, Distribution)</p>	
3. Demonstrate visual communication	<p>3.1. Visual communication techniques</p> <p>3.1.1. Determination of visual communication techniques</p> <p>3.1.2. Freehand drawings and renderings</p> <p>3.1.3. Mood boards</p> <p>3.1.4. Material sample boards</p> <p>3.1.5. Colour Swatches</p> <p>3.2. Considerations made when selecting visual communication techniques</p> <p>3.2.1. Identification of audience, purpose and content</p> <p>3.2.2. Aesthetic approach</p> <p>3.2.3. Medium e.g. Printed images and drawings</p> <p>3.2.4. Creativity, originality, innovation and storytelling</p>	<ul style="list-style-type: none"> ● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	<p>3.2.5. Interactivity e.g. engagement, user experience and feedback</p> <p>3.2.6. Technical Accuracy including scale, proportions and annotations</p> <p>3.2.7. Consistency in style and aesthetic approach</p> <p>3.2.8. Efficiency in time, resources, and accessibility.</p> <p>3.2.9. Social and cultural factors of the audience</p> <p>3.3. Application of visual communication in interior design projects</p> <p>3.4. Display Visual communication project outcomes.</p>	
4. Demonstrate interior design process	<p>4.1. Design problem</p> <p>4.1.1. Identification of design problem</p> <p>4.1.1.1. Client Needs and Goals</p> <p>4.1.1.2. Space Analysis</p> <p>4.1.1.3. Aesthetic Considerations</p> <p>4.1.1.4. Technical Constraints</p> <p>4.1.1.5. Cost implications</p> <p>4.1.1.6. Environmental Factors</p> <p>4.1.1.7. User Experience</p> <p>4.1.1.8. Trends and Innovations</p> <p>4.1.1.9. Competitive Analysis</p> <p>4.2. Analysis of Interior design problem</p> <p>4.2.1. Identifying User Needs</p>	<ul style="list-style-type: none"> ● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	<ul style="list-style-type: none"> 4.2.2. Contextual Analysis (Site, Environment, Culture) 4.2.3. Functional Requirements (Space, 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) 	
	<ul style="list-style-type: none"> 4.3. Interior design project phases <ul style="list-style-type: none"> 4.4.1 Programming 4.4.2 Preliminary design 4.4.3 Design development 4.4.4 Construction documentation 4.4.5 Construction administration 	
	<ul style="list-style-type: none"> 4.4. Proposed solutions <ul style="list-style-type: none"> 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) 	

	<ul style="list-style-type: none"> 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) 	
	<ul style="list-style-type: none"> 4.5. Implementation of the solution <ul style="list-style-type: none"> 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 5.6 Universal design principles	<ul style="list-style-type: none"> ● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence
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	<ul style="list-style-type: none"> ● 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: 0212551 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
6.	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.	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Written tests• Observation• Oral questions

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	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> 1.4.1 Observation 1.4.2 Memory 1.4.3 Imagination 1.5 Application of human figures in interior spaces	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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 m ²	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: 0212551 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

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Produce colour wheel	<ul style="list-style-type: none">1.1. Introduction to colour theory1.2. Evolution of colour theory1.3. Emerging trends in colour theory<ul style="list-style-type: none">1.3.1. Sustainability and Eco-friendly colour innovation<ul style="list-style-type: none">1.3.1.1. Natural and bio-based pigment1.3.1.2. Low –VOC and Non-toxic paints1.3.1.3. Upcycled and recycled pigments1.4. Self-cleaning and Air-purifying paints1.5. AI in colour theory and selection<ul style="list-style-type: none">1.5.1. Pantone colour AI	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

	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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 4.2. Cultural and historical influences of colour	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing

	4.3. Effects and impacts of colours 4.4. Colour psychology application	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 m ²	1	1:25
2.	Colour Mixing & Application Lab	Equipped with colour samples & mixing stations	1	1:25
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 TWO

INTERIOR DESIGN FINISHING

ISCED UNIT CODE: 0212551 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

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Perform interior floor finishing	<ul style="list-style-type: none">1.1. Introduction of interior floor finishes1.2. Classification of floor finishes1.3. Functional requirements1.4. Material estimations and calculations1.5. Flooring material properties1.6. Floor finishing tools and equipment1.7. Types of floor finishes<ul style="list-style-type: none">1.7.1. Hard floor finishes1.7.2. Wood and wood-based floor finishes1.7.3. Resilient floor finishes1.7.4. Soft floor finishes1.7.5. Concrete floor finishes	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

	<p>1.8. Selection criteria based on sustainability and green design</p> <p>1.9. Sustainable flooring</p> <p>1.9.1. Bamboo</p> <p>1.9.2. Cork</p> <p>1.9.3. Reclaimed wood</p> <p>1.9.4. Recycled tiles</p> <p>1.9.5. Polished concrete</p> <p>1.9.6. Eco-friendly floor finishes</p> <p>1.9.7. Locally sourced materials</p> <p>1.9.8. Smart water and energy usage finishes</p> <p>1.10. Floor finishes specification</p> <p>1.11. Installations techniques</p> <p>1.12. Floor finishes repair and maintenance</p> <p>1.13. Safety precautions in handling floor finishing</p>	
2. Perform Interior wall finishing	<p>2.1. Introduction to interior walls</p> <p>2.2. Classification of walls</p> <p>2.3. Features of walls</p> <p>2.4. Functional requirements</p> <p>2.5. Wall finishing tools and equipment</p> <p>2.6. Types of Sustainable wall finishes</p> <p>2.5.1 Paint</p> <p>2.5.2 Wallpaper</p> <p>2.5.3 Plaster</p> <p>2.5.4 Wood panelling</p> <p>2.5.5 Stone or brick</p> <p>2.5.6 Tiles</p> <p>2.5.7 Fabric or Textile wall covering</p> <p>2.5.8 Concrete</p> <p>2.5.9 Stucco</p> <p>2.5.10 Wood veneer</p> <p>2.5.11 Glass or mirror</p> <p>2.7. Wall material properties</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

	<p>2.8. Wall finishes specification</p> <p>2.8.1. Eco-friendly wall finishes</p> <p>2.8.2. Locally sourced materials</p> <p>2.8.3. Smart water and energy usage finishes</p> <p>2.8.4. Material estimation and calculations</p> <p>2.9. Construction details</p> <p>2.10. Wall finishing repair and maintenance .</p> <p>2.11. Safety Precautions in handling wall finishing</p>	
3. Perform Interior ceiling finishing	<p>3.1. Introduction to interior ceilings</p> <p>3.2. Classification of ceilings</p> <p>3.3. Properties of ceiling finishes</p> <p>3.4. Ceiling finishing tools and equipment</p> <p>3.5. Functional requirements</p> <p>3.6. Material estimations and calculations</p> <p>3.7. Types of sustainable ceiling finishes</p> <p>3.7.1. Paint</p> <p>3.7.2. Plaster</p> <p>3.7.3. Drywall</p> <p>3.7.4. Wood panelling</p> <p>3.7.5. Metal finish</p> <p>3.7.6. Gypsum finish</p> <p>3.7.7. Acoustic ceiling</p> <p>3.7.8. Fabric ceiling</p> <p>3.7.9. Glass finish</p> <p>3.7.10. PVC finish</p> <p>3.7.11. Fiberglass finish</p> <p>3.8. Ceiling finishes specification</p> <p>3.9. Installation details</p> <p>3.10. Ceiling finishing repair and maintenance.</p> <p>3.11. Safety Precautions in handling ceiling finishing.</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

<p>4. Install interior mouldings</p>	<p>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.</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
<p>5. Apply interior painting</p>	<p>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 7.9.2.3. Virtual Reality (VR)</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence

	7.10 Repair and maintenance of painted surfaces	
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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 m ²	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: 0212551 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

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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing

		<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 m ²	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: 0212551 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

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.	<ul style="list-style-type: none">● 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 2.4.1 Line thickness and styles	<ul style="list-style-type: none">● Observation● Written tests● Oral questioning● Third party report● Portfolio of evidence

	<p>2.4.2 Applications of different line types</p> <p>2.4.3 Techniques for dimensioning</p> <p>2.5 Architectural symbols</p> <p>2.6 Importance of clarity in drawings</p> <p>2.7 Application of drafting lines and architectural symbols</p> <p>2.8 Dividing lines and circles into equal parts and ratios</p> <p>2.9 Inscribing and circumscribing circles</p>	
3. Produce plane geometry	<p>3.1 Construction of Geometric Forms</p> <p>3.1.1 Basic geometric shapes</p> <p>3.1.1.1 Squares</p> <p>3.1.1.2 Rectangles</p> <p>3.1.1.3 Triangles</p> <p>3.1.1.4 Circles</p> <p>3.1.2 Complex geometric forms</p> <p>3.1.2.1 Polygons,</p> <p>3.1.2.2 Curves</p> <p>3.2 Construction of Angles</p> <p>3.2.1 Types of angles</p> <p>3.2.2 Trigonometric principles applied to angles</p> <p>3.2.3 Tools for angle construction</p> <p>3.3 Measurement of Angles</p> <p>3.3.1 Tools for measuring angles</p> <p>3.3.2 Techniques for bisecting angles</p> <p>3.3.3 Accuracy and precision in measurements</p> <p>3.4 Construction of scales</p> <p>3.4.1 Diagonal scale</p> <p>3.4.2 Plain scale</p>	<ul style="list-style-type: none"> ● 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 <div> 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 </div> 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 <div> 4.5.1 front 4.5.2 side 4.5.3 plan </div> 4.6 Dimensioning and Lettering 4.7 Accurate dimensioning techniques for orthographic drawings <div> 4.7.1 Place dimensions outside the object to reduce clutter. </div>	<ul style="list-style-type: none"> ● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	<p>4.7.2 Use extension lines that don't touch the object.</p> <p>4.7.3 Align dimensions with the measured view (horizontal or vertical).</p> <p>4.7.4 Group similar dimensions together for readability.</p> <p>4.7.5 Avoid redundant dimensions to keep the drawing clean.</p> <p>4.7.6 Use consistent line weights for different line types.</p> <p>4.7.7 Use clear, uniform text sizes for dimensions.</p> <p>4.7.8 Indicate center lines for circular dimensions.</p> <p>4.7.9 Include tolerance information as needed for accuracy.</p> <p>4.7.10 Dimension from a baseline to avoid cumulative errors.</p> <p>4.8 Standards for lettering styles and alignment</p> <p>4.9 Construction of Orthographic Views</p> <p>4.10 Techniques for freehand and scaled drawings</p> <p>4.11 Freehand Drawing Techniques</p> <p>4.11.1 Use light guidelines for structure.</p> <p>4.11.2 Start with basic shapes, then add details.</p> <p>4.11.3 Keep a loose hand for smooth lines.</p> <p>4.11.4 Control line weight for emphasis.</p>	
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	<p>4.11.5 Focus on perspective and proportion.</p> <p>4.11.6 Apply crosshatching for depth.</p> <p>4.11.7 Regularly check angles and alignment.</p> <p>4.11.8 Scaled Drawing Techniques</p> <p>4.11.9 Choose an appropriate scale.</p> <p>4.11.10 Use a scale ruler for measurements.</p> <p>4.11.11 Mark measurements lightly before finalizing.</p> <p>4.11.12 Use grids to maintain proportions.</p> <p>4.11.13 Label dimensions clearly with the scale noted.</p> <p>4.11.14 Ensure all parts are proportionate.</p> <p>4.11.15 Doublecheck key measurements.</p> <p>4.12 Use of scale rulers and accuracy in scaled drawings</p> <p>4.13 Interpretation of Orthographic Drawings</p> <p>4.14 Standard conventions for orthographic projections</p> <p>4.15 Application of orthographic views in architectural and interior design contexts</p>	
5. Apply dimensions and annotations	<p>5.1 Types of dimensioning</p> <p>5.2 Purposes of dimensions</p> <p>5.3 Dimension line drawing</p> <p>5.4 Placement of dimensions</p> <p>5.5 Labelling of views, placements and materials</p> <p>5.6 Annotations</p>	<ul style="list-style-type: none"> ● Observation ● Written tests ● Oral questioning ● Third party report ● Portfolio of evidence

	5.7 Application of Standard notation and abbreviations	
6. Produce Pictorial drawings	<p>1.1 Isometric Drawings</p> <p>1.1.1 Principles of isometric projection</p> <p>1.1.2 Equal angles of 120 degrees between axes.</p> <p>1.1.3 Uniform scaling along isometric axes.</p> <p>1.1.4 Parallel lines remain true to scale.</p> <p>1.1.5 No perspective distortion; true dimensions.</p> <p>1.1.6 3D representation of width, height, and depth.</p> <p>1.1.7 Depth indicated by a 30degree angle from horizontal.</p> <p>1.1.8 Start with basic geometric shapes for form.</p> <p>1.1.9 Maintain clarity and readability; avoid excessive detail.</p> <p>1.1.10 Consistent orientation of objects for easier interpretation.</p> <p>1.2 Techniques for producing isometric drawings as per conventions</p> <p>1.3 Applications of isometric drawings in interior design and architecture</p> <p>1.4 Axonometric drawing</p> <p>1.4.1 Principles of axonometric drawing</p> <p>1.4.2 Axonometric drawing procedure</p> <p>1.4.3 Techniques for producing axonometric drawings as per the conventions</p> <p>1.5 Applications of axonometric drawings in interior design and architecture</p> <p>1.6 Oblique Drawings</p> <p>1.6.1 Oblique drawing principles</p>	<ul style="list-style-type: none"> ● 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.	
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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 THREE

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 **apply 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, performing online jobs and applying job entry techniques.

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

Summary of Learning Outcomes

Learning Outcomes, Content, and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Operate computer devices	<ul style="list-style-type: none">• Meaning and importance of digital literacy• Functions and Uses of Computers• Classification of computers• Components of a computer system• Computer Hardware<ul style="list-style-type: none">1..1. The System Unit E.g. Motherboard, CPU, casing1..2. Input Devices e.g. Pointing, keying, scanning, voice/speech recognition, direct data capture devices.	<ul style="list-style-type: none">• Observation• Written assessment• Oral assessment• Practical assessment• Portfolio of Evidence

	<p>1..3. Output Devices e.g. hardcopy output and softcopy output</p> <p>1..4. Storage Devices e.g. main memory e.g. RAM, secondary storage (Solid state devices, Hard Drives, CDs & DVDs, Memory cards, Flash drives</p> <p>1..5. Computer Ports e.g. HDMI, DVI, VGA, USB type C etc.</p> <ul style="list-style-type: none"> • 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 <p>1..1. Computer external devices management</p> <ul style="list-style-type: none"> • Device connections • Device controls (volume controls and display properties) 	
2. Solve tasks using Office suite	<p>2.1. Meaning and Importance of Word Processing</p> <p>2.2. Examples of Word Processors</p> <p>2.3. Working with word documents</p> <p>2.4. Open and close word processor</p> <p>2.5. Create a new document</p> <p>2.6. Save a document</p> <p>2.7. Switch between open documents</p> <p>2.8. Enhancing productivity</p> <p>2.9. Set basic options/preferences</p> <p>2.10. Help resources</p> <p>2.11. Use magnification/zoom tools</p> <p>2.12. Display, hide built-in tool bar</p> <p>2.13. Using navigation tools</p>	<ul style="list-style-type: none"> • Observation • Portfolio of Evidence • Project • Written assessment • Practical assessment • Oral assessment

	<ul style="list-style-type: none"> 2.14. Typing Text 2.15. Document editing (copy, cut, paste commands, spelling and Grammar check) 2.16. Document formatting <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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) 	
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	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 presentations 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 	
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	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 3.20 Performing Digital Data Backup (Online and Offline) 3.21 Emerging issues in internet	<ul style="list-style-type: none"> • Observation • Portfolio of Evidence • Project • Written assessment • Practical assessment • Oral assessment

<p>4. Perform online communication and collaboration</p>	<p>4.1 Netiquette principles</p> <p>4.2 Communication concepts</p> <p>4.2.1 Online communities</p> <p>4.2.2 Communication tools</p> <p>4.2.3 Email concepts</p> <p>4.2.3.1 Using email</p> <p>4.2.3.2 Sending email</p> <p>4.2.3.3 Receiving email</p> <p>4.2.3.4 Tools and settings</p> <p>4.2.3.5 Organizing email</p> <p>4.3 Digital content copyright and licenses</p> <p>4.4 Online collaboration tools</p> <p>4.5 Online Storage (Google Drive)</p> <p>4.6 Online productivity applications (Google Docs & Forms)</p> <p>4.7 Online meetings (Google Meet/Zoom)</p> <p>4.8 Online learning environments</p> <p>4.9 Online calendars (Google Calendars)</p> <p>4.10 Social networks (Facebook/Twitter - Settings & Privacy)</p> <p>4.11 Preparation for online collaboration</p> <p>4.12 Common setup features</p> <p>4.13 Setup</p> <p>4.14 Mobile collaboration</p> <p>4.14.1 Key concepts</p> <p>4.14.2 Using mobile devices</p> <p>4.14.3 Applications</p> <p>4.14.4 Synchronization</p>	<ul style="list-style-type: none"> • Observation • Portfolio of Evidence • Project • Written assessment • Practical assessment • Oral assessment
<p>5. Apply cybersecurity skills</p>	<p>1.1 Data protection and privacy</p> <p>1.2 Confidentiality of data/information</p> <p>1.3 Integrity of data/information</p> <p>1.4 Availability of data/information</p> <p>1.5 Internet security threats</p> <p>1.5.1 Malware attacks</p> <p>1.5.2 Social engineering attacks</p> <p>1.5.3 Distributed denial of service (DDoS)</p> <p>1.5.4 Man-in-the-middle attack (MitM)</p> <p>1.5.5 Password attacks</p>	<ul style="list-style-type: none"> • Observation • Portfolio of Evidence • Project • Written assessment • Practical assessment • Oral assessment

	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.	<ul style="list-style-type: none"> • 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 7.3.2 How long should a CV be 7.3.3 What to include in a AC	<ul style="list-style-type: none"> • Observation • Oral assessment • Portfolio of evidence • Third party report • Written assessment

	7.3.4 Format of CV 7.3.5 How to write a good CV 7.3.6 Don'ts 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	
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Suggested Methods 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

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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Oral assessment• Written assessment• Observation

	communication 2.3 Organization requirements for written communication	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Oral assessment • 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
<ul style="list-style-type: none"> • 25 Desktop computers/laptops 	Mobile phones	Flashcards
<ul style="list-style-type: none"> • Internet connection 		Flip charts
<ul style="list-style-type: none"> • 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: 0212551 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 1.9.1 Stitching	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of Evidence

	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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing

	4.5.1. Drapery finishes 4.6. Drapery construction 4.7. Fitting draperies	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 m ²	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: 0212551 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

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Conduct project inception	<ul style="list-style-type: none">1.1 Introduction to interior design1.1 Sustainable and green Interior Design<ul style="list-style-type: none">1.1.1 Energy Efficiency1.1.2 Water Conservation1.1.3 Material Sustainability1.1.4 Waste Reduction1.1.5 Indoor Air Quality (IAQ)1.1.6 Biophilic Design1.2 Client's brief and interpretation1.3 Spatial information<ul style="list-style-type: none">1.3.1 Site surveys1.3.2 Existing drawings.1.4 Project resources.1.5 Project tasks definitions1.6 Site parameters	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of Evidence

	<p>1.7 Potential, perceived and actual risk management.</p> <p>1.8 Risk mitigation strategies and contingency options</p>	
2. Perform design research	<p>2.1 Introduction to research design</p> <p>2.2 Spatial plan and site analysis</p> <p>2.3 Project structure</p> <p>2.4 Design program</p> <p>2.5 Legislative requirement in interior design</p> <p>2.5.1 Building Codes and Regulations</p> <p>2.5.2 Health and Safety Regulations</p> <p>2.5.3 Zoning and Land Use Laws</p> <p>2.5.4 Environmental and</p> <p>2.5.5 Sustainability Standards</p> <p>2.5.6 Permit and Licensing Requirements</p> <p>2.5.7 Accessibility Laws</p> <p>2.5.8 Fire Safety and Emergency Exits</p> <p>2.5.9 Workplace Safety Compliance</p> <p>2.6 Space needs and standards</p> <p>2.7 Sources of research</p> <p>2.7.1 Historical precedent</p> <p>2.7.2 Contemporary precedent</p> <p>2.7.3 Socio-cultural aspects</p> <p>2.8 Ways of design presentation</p> <p>2.8.1 Hand Sketches & Drawings</p> <p>2.8.2 Perspective Drawings</p> <p>2.8.3 Renderings</p> <p>2.8.4 Technical Drawings</p> <p>2.8.5 Mood Boards</p> <p>2.8.6 Orthographic Projections</p> <p>2.8.7 Concept Models</p> <p>2.8.8 AI generated modelling</p> <p>2.9 Provisional project cost</p> <p>2.9.1 Cost control processes</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence

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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 5.3.1 Design proposal 5.4 Client and stakeholder feedback 5.5 Design proposal revisions. 5.6 Submission of final proposal	<ul style="list-style-type: none"> • 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 GRAPICS

ISCED UNIT CODE: 0212551 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

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	<ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• Written tests• Observation• Oral questions

	<p>2.4 Image editing</p> <p>2.5 Application of layers, masks and adjustment tools</p> <p>2.6 Save files in editable formats.</p> <p>2.7 Export images</p> <p>2.8 Images production</p> <p>2.9 Presentation of raster graphics</p>	<ul style="list-style-type: none"> • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Create and edit vector graphics	<p>3.1 Introduction to Adobe Illustrator</p> <p>3.2 Adobe illustrator configuration</p> <p>3.3 Creation of new documents</p> <p>3.4 Using existing templates</p> <p>3.5 Creation of vector objects.</p> <p>3.6 Editing of paths, anchor points and curves</p> <p>3.7 Application of object attributes</p> <p>3.8 Organization of layers and groups</p> <p>3.9 Text insertion, formatting and styling.</p> <p>3.10 Application of Vector effects</p> <p>3.11 Vector transformations and appearance settings</p> <p>3.12 Save files in editable formats</p> <p>3.13 Export vector graphics</p> <p>3.14 Artwork presentation.</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Create multi-page layouts	<p>4.1 Document setup and configuration</p> <p>4.2 Creation and application master pages</p> <p>4.3 Application of grid systems, guides and alignment tools</p> <p>4.4 Creation and formatting of text frames</p> <p>4.5 Import and edit images</p> <p>4.6 Save files in editable formats</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

	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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 m ²	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 FOUR

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: applying self-management skills, promoting ethical practices and values, promoting teamwork, maintaining professional and personal development, applying problem-solving and promoting 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

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 1.9 Developing and maintaining positive self-image 1.10 Time management	<ul style="list-style-type: none">● Observation● Written assessment● Oral assessment● Third party reports● Portfolio of evidence● Project● Practical

	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	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● 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 opportunities 4.5 Assessing training needs 4.6 Mobilizing training resources	<ul style="list-style-type: none"> ● Observation ● Written assessment ● Oral assessment ● Third party reports ● Portfolio of evidence ● Project ● Practical

	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	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● 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 **apply entrepreneurial skills**. 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

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 1.9 Types of investments 1.10 Factors to consider when investing money 1.11 Insurance services	<ul style="list-style-type: none">• Observation• Project• Written assessment• Oral assessment• Third party report• Interviews• Portfolio of evidence

	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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Observation • Project • Written assessment • Oral assessment • Third party report • Portfolio of Evidence
6. Develop Business Plan	1.1 Business description 1.2 Marketing plan	<ul style="list-style-type: none"> • Observation • Written assessment • Project

	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	<ul style="list-style-type: none"> • Oral assessment • Third party report • Portfolio of Evidence
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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: 0212551 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

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	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of Evidence

	<p>3.3.1.3. Smart and AI integrated accessories</p> <p>3.3.1.4. Modular and adaptable fittings</p> <p>3.3.1.5. Interchangeable accessories</p> <p>3.3.1.6. Stackable and space-saving fittings</p> <p>3.3.1.7. High-performance and energy-efficient accessories</p> <p>3.3.1.8. Luxury and Aesthetic innovations</p> <p>3.4. Materials for bathroom fittings and accessories</p> <p>3.5. Purposes of bathroom fittings</p> <p>3.6. Selection of bathroom fittings</p> <p>3.7. Bathroom fittings installation</p> <p>3.8. Bathroom fittings testing</p>	
2. Install kitchen fittings	<p>2.1. Introduction to kitchen fittings and accessories</p> <p>2.2. Types of kitchen fittings and accessories</p> <p>2.3. Emerging trends in kitchen fittings and accessories</p> <p>2.4. Materials for kitchen fittings</p> <p>2.5. Purposes of kitchen fittings</p> <p>2.6. Kitchen fittings and accessories installation</p> <p>2.7. Kitchen fittings testing</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Create interior lampshades	<p>6.1. Functions of lampshades</p> <p>6.2. Types of lampshades</p> <p>6.3. Lampshade fittings</p> <p>6.4. Lampshade materials</p> <p>6.5. Lampshades construction materials</p> <p>6.6. Design lampshades</p> <p>6.7. Fitting lampshades</p>	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing

	7.5. Landscaping process 7.6. Interior landscaping maintenance	<ul style="list-style-type: none"> • Project and report writing • Portfolio of evidence
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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	1	1:25

		showcasing interior accessories		
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: 0212551 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

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 1.5 CADD interface	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

	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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. 4.4 Annotations application.	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing

	4.5 Leader lines, tags and callouts insertion 4.6 Documentation of drawings	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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 m ²	1	1:25
2.	Computer Lab	With 25 Workstations with drafting software (ArchiCAD, SketchUp, 3Ds Max, Lumion, AutoCAD and Adobe Suite)	1	1:25

		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: 0212551 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 furniture and 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 furniture and fixtures	20
6.	Maintain interior furniture and fixtures	15

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Determine furniture and fixtures	<ul style="list-style-type: none">1.1. Characteristics of furniture and fixtures1.2. Function of furniture and fixtures1.3. Types of furniture and fixtures1.4. Styles of furniture and fixtures1.5. Classification of furniture and fixtures1.6. Furniture and fixture selection1.7. Emerging trends in furniture and fixture<ul style="list-style-type: none">1.7.1. Sustainable and Eco-friendly materials1.7.2. AI and 3D-printed furniture	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

	<p>1.7.3. Smart and Tech-integrated furniture</p> <p>1.7.4. Non-Toxic finishes and textile</p> <p>1.7.5. Smart and energy – efficient fixture</p> <p>1.7.6. Modular and transformable furniture</p> <p>1.7.7. Health and well-being focused design</p> <p>1.8 Documentation of furniture and fixture requirements</p>	
2. Select furniture and fixtures materials	<p>2.1. Properties of furniture and fixtures materials</p> <p>2.2. Emerging trends in furniture and fixture materials</p> <p>2.3. Functions of furniture and fixtures materials</p> <p>2.4. Types of furniture and fixtures materials</p> <p>2.5. Qualities of furniture and fixtures materials</p> <p>2.6. Material selection</p> <p>2.7. Furniture and fixtures finish</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Construct furniture and fixtures	<p>3.1. Furniture and fixtures construction tools and equipment</p> <p>3.2. Construction techniques</p> <p>3.3. Joinery methods</p> <p>3.4. Furniture and fixtures finishing</p> <p>3.5. Fabrication methods</p> <p>3.6. Furniture and fixtures assembling</p> <p>3.7. Furniture and fixture inspection</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Create furniture and fixtures layout	<p>4.1. Furniture and fixtures layouts and floor plans</p> <p>4.2. Approval of layouts and plans</p> <p>4.3. Verification and revisions of installation plans</p> <p>4.4. Spatial order</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing

		<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 m ²	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

MODULE FIVE

DIGITAL MODELLING AND RENDERING

ISCED UNIT CODE: 0212551 13A

TVET CDACC UNIT CODE: CON/CU/ID/CR/01/6/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **perform digital modelling and rendering**

Duration of Unit: 100 hours

Unit Description

This unit specifies the competencies required to **perform digital modelling and rendering**. It involves; navigating user interface, applying 3D modelling techniques, integrating materials, textures and lighting, producing renders for interiors, creating walkthrough animations and presenting images and animations.

S/N	Learning Outcomes	Duration (hours)
1.	Navigate user interface	10
2.	Apply 3D modelling techniques	30
3.	Integrate materials, textures and lighting	10
4.	Produce renders for interiors	30
5.	Create walkthrough animations	20
6.	Present images and animations	10

Learning Outcomes, Content and Methods of Assessment

Learning Outcomes	Content	Methods of Assessment
1. Navigate user interface	1.1 Introduction to modelling and rendering software 1.2 Modelling and rendering software types 1.3 Modelling and rendering tools and equipment 1.4 Modelling software operation. 1.5 Modelling software interface components. 1.6 Customization of modelling and rendering workspace. 1.7 Navigation and file handling	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

2. Apply 3D modelling techniques	2.1 3D workspace parameters 2.2 Project units and coordinate systems configuration 2.3 Creation of complex interior elements 2.4 Creation of layers and groups for organizing model components 2.4.1 Schedule preparation 2.4.2 Schedule parameters (Component name, size, scale, materials required) 2.5 Camera angles and perspectives for rendering 2.6 Modelled projects organization	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Integrate materials, textures and lighting	3.1 Application of materials from software libraries 3.2 Material properties. 3.3 Lighting positioning	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Produce renders for interiors	4.1 Rendering engine selection 4.2 Cameras positioning and adjustment 4.3 Render engine settings configuration 4.4 Scenes for modelled interior projects rendering. 4.5 Export rendered output file formats	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
5. Create walkthrough animations	5.1 Camera paths and animation sequences configuration	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report

	5.2 Animation speed, camera transitions and focal points control 5.3 Present animations 5.4 Emerging technologies in animation rendering	<ul style="list-style-type: none"> • Interviewing • Project and report writing • Portfolio of evidence
6. Present images and animations	6.1 Presentation formats 6.2 Images and animation format selections 6.3 Final visuals preparation 6.4 Branding, labels and annotations applications 6.5 Project finishes identification 6.6 Project presentation.	<ul style="list-style-type: none"> • 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			
2.	Computer Graphics & Digital Design Manual		5 pcs	1:5
B	Learning Facilities and infrastructure			
3.	Lecture/Theory Room	40 m ²	1	1:25
4.	Computer Lab	With 25 Workstations with drafting software (ArchiCAD, SketchUp, 3Ds Max, Lumion, AutoCAD and	1	1:25

		Adobe Suite) and internet connectivity		
C	Consumable materials			
8.	Sketch Pads	A3 & A4 sizes	25 pcs	1:1
9.	Pencils	HB, 2B, 4B, 6B	5 sets	1:5
10.	Fine Liners	0.1, 0.3, 0.5mm	5 sets	1:5
11.	Markers	Assorted colours	5 sets	1:5
12.	Watercolour & Gouache Paints	Assorted	5 sets	1:5
13.	Drawing Boards	A2 & A3 sizes	25 pcs	1:1
14.	T-Squares & Set Squares	Standard sizes	25 pcs	1:1
9	Compass Sets	Full drafting set	5 sets	1:5
10	Cutting Mats	A3 size	10 pcs	1:3
11	Craft Knives	X-Acto knives	10 pcs	1:3
12	Paint Brushes	Assorted sizes	10 sets	1:3
13	Graphic Tablets	Wacom or similar	5 pcs	1:5
14	CAD Software	ArchiCAD, SketchUp, Revit, Twin Motion, D5 Render, Blender, Artlantis	Licensed	1 set
15	Computers	High-performance for design	25 pcs	1:1
D	Tools and Equipment			
5.	Light boxes	A3 size	5 pcs	1:5
6.	Cutting Machines	Laser Cutter	1	1:25
7.	3D Printer	PLA filament	1	1:25
8.	Digital Cameras	For documentation	5 pcs	1:5

INTERIOR DESIGN STYLES

ISCED UNIT CODE: 0212551 14A

TVET CDACC UNIT CODE: CON/CU/ID/CR/02/6/MA

Relationship to Occupational Standards

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

Duration of Unit: 100 hours

Unit Description

This unit specifies the competencies required to **apply interior design styles**. It involves applying regional styles, applying modern styles, applying rustic styles, applying traditional styles, applying country styles, applying African styles and determining emerging styles

S/N	Learning Outcomes	Duration (hours)
1.	Apply regional styles	15
2.	Apply modern styles	15
3.	Apply rustic styles	15
4.	Apply traditional styles	15
5.	Apply country styles	15
6.	Apply African styles	15
7.	Determine Emerging styles	10

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Apply regional styles	<ul style="list-style-type: none">1.1 History of interior design<ul style="list-style-type: none">1.1.1 Ancient civilisation1.1.2 Mediaeval period1.1.3 Renaissance period1.1.4 Baroque & Rococo1.1.5 Industrial revolution1.1.6 Victorian era1.1.7 Arts and crafts movements1.1.8 Modern movements1.1.9 Postmodern era1.1.10 Contemporary design and emerging trends of interior design1.2 History of interior design styles1.3 Client preferences in style selection	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

	1.4 Introduction to regional styles 1.5 Types of regional styles 1.6 Characteristics of regional styles. 1.7 Materials associated to regional styles 1.8 Application of regional styles	
2. Apply modern styles	2.1 Introduction to modern styles 2.2 Types of modern styles 2.3 Characteristics of modern styles 2.4 Materials associated to modern styles 2.5 Application of modern styles	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Apply rustic styles	3.1 Introduction to rustic styles 3.2 Types of rustic styles 3.3 Characteristics of rustic styles 3.4 Materials associated to rustic styles 3.5 Application of rustic styles	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Apply traditional styles	4.1 Introduction to traditional styles 4.2 Types of traditional styles 4.3 Characteristics of traditional styles 4.4 Materials associated to traditional styles 4.5 Application of traditional styles	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
5. Apply country styles	5.1 Introduction to country styles 5.2 Types of country styles 5.3 Characteristics of country styles 5.4 Materials associated to country styles 5.5 Application of country styles	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence
6. Apply African styles	6.1 Introduction to African styles 6.2 Types of African styles	<ul style="list-style-type: none"> • Written tests • Observation

	6.3 Characteristics of African styles 6.4 Materials associated to African styles 6.5 Application of African styles	<ul style="list-style-type: none"> • Oral questions • Third party report • Interviewing • Portfolio of evidence
7. Determine emerging styles	7.1 Introduction to emerging styles 7.2 Types of emerging styles 7.3 Characteristics of emerging styles 7.4 Materials associated to emerging styles 7.5 Application of emerging styles 7.6 Biophilic design principles 7.7 Biophilic design material associations 7.8 Futuristic design characteristics 7.9 Futuristic design material associations	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing

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.	Guide to Regional Interior Styles		5 pcs	1:5
2.	Modern & Contemporary Style Interiors Guide		5 pcs	1:5
3.	Rustic & Country Style Interiors Guide		5 pcs	1:5
4.	Traditional Style Interiors Guide		5 pcs	1:5
5.	African Style Interiors Guide		5 pcs	1:5

6.	Emerging Style Interiors Guide		5 pcs	1:5
B	Learning Facilities and infrastructure			
1.	Lecture/Theory Room	40 m ²	1	1:25
2.	Style Exhibition Space	Showcasing different design styles	1	1:25
3.	Digital Design Studio	Equipped with 3D modelling software	1	1:25
C	Consumable materials			
1.	Sample Material Boards	Wood, Stone, Tiles, Fabrics	25 pcs	1:1
2.	Minimalist Décor Samples	Glass, Metal, Neutral Colour Swatches	10 sets	1:3
3.	Wood & Natural Fibre Samples	Reclaimed Wood, Woven Textiles	10 sets	1:3
4.	Ornamental Mouldings & Classic Elements	Decorative Cornices, Panelling	10 sets	1:3
5.	Floral & Pastoral Prints	Fabric Samples	10 sets	1:3
6.	Ethnic Patterns & Handmade Textiles	Kente, Mud Cloth	10 sets	1:3
1.	Sketchbooks & Mood Boards	For style concept development	25 pcs	1:1
D	Tools and Equipment			
1.	Computers with 3D Software	AutoCAD, SketchUp, Revit	25 pcs	1:1
2.	Digital Projectors	For style presentations	5 pcs	1:5
3.	Paint & Fabric Swatches	Various styles	25 sets	1:1
4.	3D Printers	For futuristic designs	5 pcs	1:5

INTERIOR DESIGN LIGHTING

ISCED UNIT CODE: 0212551 15A

TVET CDACC UNIT CODE: CON/CU/ID/CR/03/6/MA

Relationship to Occupational Standards

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

Duration of Unit: 80 hours

Unit Description

This unit specifies the competencies required to **perform interior design lighting**. It involves determining natural lighting, apply artificial lighting, managing lighting levels, developing artistic lighting, determining light fixtures and creating lighting design.

S/N	Learning Outcomes	Duration (hours)
1.	Manage lighting levels	10
2.	Create lighting design	20
3.	Determine natural lighting	15
4.	Apply artificial lighting	15
5.	Develop artistic lighting	10
6.	Determine light fixtures	10

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Manage lighting levels	<ul style="list-style-type: none">1.1. Meaning of terms1.2. Features of lighting1.3. Methods of lighting1.4. Sources of light1.5. Types of lighting1.6. Methods of light control1.7. Distribution of light1.8. Illumination levels1.9. Emerging trends in lighting<ul style="list-style-type: none">1.9.1. Smart an AI driven lighting (Philips Hue AI)1.9.2. Sustainable and energy efficient lighting1.9.3. Biophilic and natural lighting innovations	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

	<p>1.9.4. Low-carbon and sustainable lighting materials</p> <p>1.9.5. Wireless and modular lighting innovation</p> <p>1.9 Window placement and treatment</p> <p>1.10 Colour and surface finishes selection</p>	
2. Create lighting design	<p>2.1. Lighting design ideas</p> <p>2.2. Lighting plans.</p> <p>2.3. Lighting designs and concepts</p> <p>2.4. Light sources, fixtures and control devices selection</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Determining natural lighting	<p>3.1. Meaning of terms</p> <p>3.2. Sources of natural light</p> <p>3.3. Effects of natural light on surrounding</p> <p>3.4. Site orientation and building location assessment</p> <p>3.5. Elements of natural light</p> <p>3.6. Techniques of natural lighting</p> <p>3.7. Installation methods</p> <p>3.8. Evaluation of windows, skylight and opening positions</p> <p>3.9. Application and documentation for enhancing natural light</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Apply artificial lighting	<p>4.1. Introduction to artificial lighting</p> <p>4.2. Artificial lighting sources</p> <p>4.3. Artificial lighting properties</p> <p>4.4. Location of artificial lights</p> <p>4.5. Effects of artificial lighting</p> <p>4.6. Functions of artificial lighting</p> <p>4.7. Lighting fitting process</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence

	4.8. Evaluation of lighting control methods and devices	
5. Develop artistic lighting	5.1. Introduction to artistic lighting 5.2. Characteristics of artistic lighting 5.3. Techniques and styles of artistic lighting. 5.4. Artistic lighting fixtures and effects selection 5.5. Artistic lighting design 5.6. Artistic lighting fitting	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence
6. Determine light fixtures	6.1. Types of light fixtures 6.2. Fitting and mounting techniques 6.3. Selection of light fixtures 6.4. Light fixtures materials 6.5. Design light fixtures 6.6. Fitting light fixtures	<ul style="list-style-type: none"> • 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.	Interior Lighting Design Guide		5 pcs	1:5
2.	Lighting Levels & Illumination Standards Handbook		5 pcs	1:5
3.	Natural & Artificial Lighting Techniques		5 pcs	1:5

4.	Artistic & Decorative Lighting Guide		5 pcs	1:5
5.	Light Fixture Selection & Installation Manual		5 pcs	1:5
B	Learning Facilities and infrastructure			
1.	Lecture/Theory Room	40 m ²	1	1:25
2.	Lighting Design Lab	Equipped with various lighting setups	1	1:25
3.	Natural Light Experiment Area	With adjustable daylight simulation	1	1:25
C	Consumable materials			
1.	Lux Meters	For measuring light intensity	5 pcs	1:5
2.	Window Coverings	Sheer, Blackout, Reflective	25 pcs	1:1
3.	Skylight Samples	Acrylic & Glass	10 pcs	1:3
4.	LED Bulbs	Warm, Cool, Daylight	50 pcs	2:1
5.	Incandescent & Halogen Bulbs	Various wattages	25 pcs	1:1
6.	Smart Light Bulbs	Wi-Fi & App Controlled	10 pcs	1:3
7.	Coloured LED Strips	RGB & Warm White	25 sets	1:1
8.	Projection & Accent Lights	For decorative effects	10 pcs	1:3
9.	Pendant Lights	Modern & Classic Designs	10 pcs	1:3
10.	Track Lighting Kits	Adjustable Fixtures	5 sets	1:5
11.	Table & Floor Lamps	Various Styles	25 pcs	1:1
12.	Electrical Cables	Assorted Gauge	50 meters	2:1
13.	Light Switches & Dimmers	Standard & Smart	25 pcs	1:1
D	Tools and Equipment			
1.	Light Meters	Digital & Analog	5 pcs	Light Meters

2.	Electrical Multi-meters	For testing voltage & current	5 pcs	Electrical Multi-meters
3.	Drills & Screwdrivers	Cordless & Manual	10 sets	Drills & Screwdrivers
4.	Wire Strippers & Crimpers	For electrical connections	10 sets	Wire Strippers & Crimpers
5.	Step Ladders	Adjustable Height	5 pcs	Step Ladders
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

BUILDING COMPONENTS

ISCED UNIT CODE: 0212551 16A

TVET CDACC UNIT CODE: CON/CU/ID/CR/04/6/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **apply building components**

Duration of Unit: 90 Hours

Unit Description

This unit specifies the competencies required to apply building components. It involves determining interior doors, determining interior windows, decorating interior staircases, determining interior walls, determining interior beams and columns, determining interior ceilings and decorating interior fireplaces.

S/N	Learning Outcomes	Duration (hours)
1.	Determine interior doors	15
2.	Determine interior windows	15
3.	Decorate interior staircases	15
4.	Determine interior walls	10
5.	Determine interior beams and columns	10
6.	Determine interior ceiling	15
7.	Decorate interior fireplaces	10

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Determine interior doors	1.1. Introduction to building elements and components 1.2. Emerging trends in building elements and components 1.2.1. Sustainable and Eco-friendly materials 1.2.2. Carbon-neutral and negative materials 1.2.3. Recycled and circular materials 1.2.4. Self-healing concrete and bio cement 1.3. AI and smart building component	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

	<p>1.4. Modular and prefabricated building systems</p> <p>1.4.1. Off-site prefabrication</p> <p>1.4.2. Plug and play building systems</p> <p>1.4.3. 3D-printed construction elements</p> <p>1.5. High-performance and energy-efficient elements</p> <p>1.5.1. Phase-change materials</p> <p>1.5.2. Aerogel and vacuum installation panels</p> <p>1.5.3. Energy-generating building components</p> <p>1.6. Resilient and disaster-resistant components</p> <p>1.7. Functional requirements of doors</p> <p>1.8. Purposes of doors</p> <p>1.9. Types of doors</p> <p>1.10. Construction details</p> <p>1.11. Materials for interior doors</p> <p>1.12. Door finishes</p> <p>1.13. Fitting doors</p> <p>1.14. Safety precautions and use of PPEs</p>	
2. Determine interior windows	<p>2.1. Introduction to interior windows</p> <p>2.2. Emerging trends on windows</p> <p>2.3. Functional requirements windows</p> <p>2.4. Purposes of windows</p> <p>2.5. Types of windows</p> <p>2.6. Window movements</p> <p>2.7. Construction details</p> <p>2.8. Materials used to make windows</p> <p>2.9. Window finishes</p> <p>2.10. Fitting windows</p> <p>2.11. Safety precautions and use of PPEs</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Decorate interior staircases	<p>3.1. Introduction to staircases</p> <p>3.2. Functional requirements</p> <p>3.3. Functions of staircases</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions

	3.4. Types of staircases 3.5. Staircase designs 3.6. Decoration materials for staircase 3.7. Construction details 3.8. Staircases decoration techniques 3.9. Safety precautions and use of PPEs	<ul style="list-style-type: none"> • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Determine interior walls	4.1. Introduction to interior walls 4.2. Functional requirements of walls 4.3. Functions of walls 4.4. Types of walls 4.5. Wall construction materials 4.6. Walls construction details 4.7. Walls construction 4.8. Interior partitions 4.9. Safety precautions and use of PPEs	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
5. Determine interior beams and columns	5.1. Introduction to beams and columns 5.2. Functional requirements of interior beams and columns 5.3. Types of interior beams and columns 5.4. Construction materials 5.5. Interior beams and columns construction materials 5.6. Interior beams and columns construction details 5.7. Interior beams and columns decoration techniques 5.8. Safety precautions and use of PPEs	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
6. Determine interior ceiling	6.1. Introduction to ceilings 6.2. Functional requirements of ceilings 6.3. Functions of ceilings 6.4. Ceiling designs 6.5. Types of ceilings 6.6. Ceiling materials 6.7. Ceiling construction details 6.8. Ceiling installation	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing

	6.9. Safety precautions and use of PPEs	<ul style="list-style-type: none"> Portfolio of evidence
7. Decorate interior fireplaces	7.1 Introduction to fireplaces 7.2 Types of fire places 7.3 Firebox materials properties 7.4 Firebox materials selection based on sustainability and green design. 7.4.1 Eco-friendly firebox materials 7.4.2 Sustainable fuel and emulsion reduction 7.4.3 Locally sourced materials 7.4.4 Smart water and energy usage finishes 7.5 Fireplace construction details 7.6 Design fireplace 7.7 Fireplace finishes 7.8 Decorative elements and detailing applications 7.9 Fireplace finishing, cleaning and inspection	<ul style="list-style-type: none"> 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
- 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 Construction Manual	Covers interior doors, windows, staircases,	5 pcs	1:5

		walls, fireplace, beams, columns, ceilings		
2.	Construction Codes & Standards Guide	Covers safety regulations and best practices	5 pcs	1:5
	Digital Learning Access	Online access to SketchUp, AutoCAD, Revit tutorials	25 logins	1:1
B	Learning Facilities and infrastructure			
1.	Workshop Space	Equipped with workbenches and storage for materials	1	1:25
C	Consumable materials			
1.	Wood Sheets (MDF, Plywood)	For door and window frame modelling	50 sheets	2:1
2.	Glass & Acrylic Panels	For interior window prototypes	25 panels	1:1
3.	Plaster & Drywall Sheets	For wall and ceiling construction	50 sheets	2:1
4.	Paint & Finishes	Assorted colours and textures for surface finishing	25 litres	1:1
5.	Screws, Nails, Hinges	For fastening doors, windows, and staircases	Assorted	1:1
6.	Insulation Materials	Foam, acoustic panels for walls and ceilings	25 sets	1:1
7.	Wood Sheets (MDF, Plywood)	For door and window frame modelling	50 sheets	2:1

8.	Glass & Acrylic Panels	For interior window prototypes	25 panels	1:1
9.	Plaster & Drywall Sheets	For wall and ceiling construction	50 sheets	2:1
D	Tools and Equipment			
1.	Measuring Tape	For accurate measurements	10 pcs	1:3
2.	Saw (Hand & Electric)	For cutting wood and MDF	10 pcs	1:3
3.	Drill & Screwdriver Set	For assembling elements	10 pcs	1:3
4.	Trowels & Putty Knives	For wall plastering and finishing	10 pcs	1:3
5.	Paint Brushes & Rollers	For decorative applications	25 sets	1:1
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.	Heat-Resistant Gloves	For handling hot materials	10 pairs	1:3
5.	Overall/ dust coat		25 pcs	1:1

MODULE SIX

INTERIOR DESIGN COSTING

ISCED UNIT CODE: 0212551 17A

TVET CDACC UNIT CODE: CON/CU/ID/CR/05/6/MA

Relationship to Occupational Standards

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

Duration of Unit: **100 hours**

Unit Description

This unit specifies the competencies required to **perform interior design costing**. It involves perform spatial measurement, conducting project valuation, preparing bill of quantities, preparing materials specifications, preparing unit rates, performing taking off quantities and performing project estimation.

S/N	Learning Outcomes	Duration (hours)
1.	Perform spatial measurement	10
2.	Conduct project valuation	15
3.	Prepare Bill of quantities	15
4.	Prepare materials specifications	15
5.	Prepare unit rates	15
6.	Perform taking off quantities	15
7.	Perform project estimation	15

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Perform spatial measurement	<ul style="list-style-type: none">1.1.Introduction to spatial measurement1.2.Importance of measurement1.3.Units of measurements1.4.Measurement tools1.5.Standard methods of measurement1.6.Area calculations1.7.Emerging trends on spatial measurements<ul style="list-style-type: none">1.7.1 Automated drone for site mapping1.7.2 AR and VR spatial visualization	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of Evidence

	1.7.3 Connected Laser measures 1.7.4 Robotic mapping 1.7.5 Smart tape measures and digital ruler 1.7.6 Sustainable and zero-waste measurement trends	
2. Conduct project valuation	2.1 Need for project valuation 2.2 Factors impacting project valuation 2.3 Rules to ensure cash flow 2.4 Project valuation methods 2.5 Project valuation process 2.6 Valuation reports	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence
3. Prepare bill of quantities	3.1 Purposes of bill of quantities 3.2 Types of bills of quantities 3.2.1 Operational bills 3.2.2 Elemental bills 3.2.3 Trade bills 3.3 Advantages of bill of quantities 3.4 Disadvantages of bill of quantities 3.5 Content of bill of quantities 3.5.1 Title page 3.5.2 Preliminaries 3.5.3 Specification 3.5.4 Measured works 3.5.5 Provisional and prime cost sums 3.5.6 Summary page 3.5.7 Appendices 3.6 Formats of bills of quantities 3.7 Preparation of bills of quantities (methods) 3.7.1 Traditional methods 3.7.2 Computerized methods 3.7.3 Cut and shuffle methods 3.8 Applications bill of quantities 3.9 Emerging trends in bill of quantities	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence

	<p>3.9.1 Sustainable and green bill of quantity trends</p> <p>3.9.1.1 Carbon footprint calculation in BOQ</p> <p>3.9.1.2 Eco-friendly material costing</p> <p>3.9.1.3 Lifecycle costing Analysis</p> <p>3.9.2 Digital transformation in BOQ</p> <p>3.9.2.1 AI-powered cost estimation</p> <p>3.9.2.2 Automated BOQ generation</p> <p>3.9.2.3 Digital Take-off and cloud based BOQ</p>	
4 Prepare materials specifications	<p>1.1 Material Sustainability features</p> <p>1.2 Types of interior materials</p> <p>1.2.1 Flooring materials</p> <p>1.2.2 Ceiling materials</p> <p>1.2.3 Walling materials</p> <p>1.2.4 Windows and doors materials</p> <p>1.2.5 Acoustic materials</p> <p>1.2.6 Furniture and fixtures</p> <p>1.2.7 Lighting materials</p> <p>1.2.8 Furnishing materials</p> <p>1.3 Material specifications</p> <p>1.4 Role of material specification</p> <p>1.5 Sources of information on materials</p> <p>1.5.1 Product showrooms</p> <p>1.5.2 Manufactures</p> <p>1.5.3 Magazines and websites</p> <p>1.5.4 Applications</p> <p>1.5.5 Interior design practitioners</p> <p>1.6 Specification writing</p>	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of Evidence

	1.7 Performance parameters of materials 1.7.1 Durability and lifespan 1.7.2 Energy efficiency 1.7.3 Acoustic performance 1.7.4 Water resistance 1.7.5 Fire resistance 1.7.6 Low carbon footprint 1.7.7 Low maintenance 1.7.8 Green certificate	
5 Prepare unit rates	5.1 Costs of material in the market 5.2 Unit rates of interior works in the market 5.3 Calculation of rates for interior works	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of Evidence
6 Perform taking off quantities	6.1 Material quantities 6.2 Work procedures 6.3 Analyse drawings and specification 6.4 Procedure of taking off quantities	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of Evidence
7 Perform project estimation	7.1. Material costs in the market 7.2. Methods of project estimation 1.2.1 Functional unit method 1.2.2 Approximate quantity method 1.2.3 Superficial floor area method 1.2.4 Storey enclosure methods 1.2.5 Cube method	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of Evidence

Suggested Methods of instruction

- Project
- Group discussion
- Demonstration by trainer
- Practice by the trainee
- Direct instruction
- Case study

- E-learning
- 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 Costing Guide		5 pcs	1:5
2.	Project Valuation & Estimation Manual		5 pcs	1:5
3.	Bill of Quantities & Material Specification Handbook		5 pcs	1:5
4.	Standard Unit Rate Calculation Guide		5 pcs	1:5
5.	Construction & Interior Fit-out Costing References			
B	Learning Facilities and infrastructure			
1.	Lecture/Theory Room	40 m ²	1	1:25
2.	Computer Lab	25 workstations	1	1:25
C	Consumable materials			
1.	Measuring Tapes	5m & 10m	10 pcs	1:3
2.	Digital Laser Measures	For spatial measurements	5 pcs	1:5
3.	Graph Papers	A3 & A4 sizes	25 pcs	1:1
4.	Notebooks	Lined for calculations	25 pcs	1:1
5.	Pencils	HB, 2H	5 sets	1:5
6.	Scientific Calculators	For cost estimation	10 pcs	1:3
8.	Billing sheets, Dimension sheets and abstract sheet	Printed & digital	25 sets	1:1
9.	Cost Estimation Software	Plan Swift, Excel, Cost X,	Licensed	1 set
D	Tools and Equipment			
1.	Spirit Levels	For levelling checks	5 pcs	1:5

2.	Computers	High-performance for cost estimation	25 pcs	1:1
3.	Printers & Plotters	A3 & A1 for BOQs & project drawings	1 each	1:25

INTERIOR ACOUSTICS

ISCED UNIT CODE: 0212 541 18A

TVET CDACC UNIT CODE: CON/CU/ID/CR/06/6/MA

Relationship to Occupational Standards

This unit addresses the unit of Competency: **apply interior acoustics**

Duration of Unit: 80 hours

Unit Description

This unit specifies the competencies required to **apply interior acoustics**. It involves determining room acoustics; determining sound reflection and absorption, determining sound transmission and applying acoustic treatments.

S/N	Learning Outcomes	Duration (hours)
1.	Determine room acoustics	20
2.	Determine Sound reflection and absorption	20
3.	Determine sound transmission	20
4.	Apply acoustic treatments	20

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Determine room acoustics	<ul style="list-style-type: none">1.1. Introduction to acoustics1.2. Acoustic terminologies1.3. Fundamentals of acoustics1.4. Importance of acoustics1.5. Room acoustic parameters1.6. Sources of noise1.7. Types of noise1.8. Acoustic materials and finishes1.9. Emerging trends in interior Acoustic<ul style="list-style-type: none">1.1.1 Sustainable and Eco- friendly acoustic materials1.2.1 Recycled and Bio-based acoustic panels1.3.1 Plant-Based soundproofing1.4.1 AI and smart acoustic1.5.1 AI-Powered Acoustic Optimization1.6.1 Modular and adaptive acoustic solutions	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of evidence

	1.7.1 Movable Acoustic partitions 1.8.1 3D-Printed Acoustic surface 1.9.1 Self-adjustable Acoustic panels 1.10.1 Biophilic and Nature-inspired Acoustic 1.11.1 Acoustic green walls and living panels 1.12.1 Natural fibre soundproofing 1.13.1 Wooden Sound diffuses	
2. Determine sound reflection and absorption	2.1. Meaning of terms 2.2. Characteristics of sound 2.3. Principles and techniques of sound absorption and reflection 2.4. Material and equipment selection 2.5. Sound absorption 2.6. Sound reflection 2.7. Noise measurement	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
3. Determine sound transmission	3.1. Meaning of terms 3.2. Sound transmission in buildings 3.3. Sound insulation 3.4. Sound insulation materials 3.5. Sound insulation methods	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Project and report writing • Portfolio of evidence
4. Apply acoustic treatments	4.1. Acoustic design 4.2. Installation process 4.3. Acoustic spaces evaluation 4.4. Acoustic installation techniques 4.5. Acoustic treatments 4.6. Acoustic materials installation 4.7. Evaluation of completed acoustic spaces	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party report • Interviewing • Portfolio of evidence • Project and report writing

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.	Room Acoustics & Soundproofing Guide		5 pcs	1:5
2.	Sound Reflection & Absorption Handbook		5 pcs	1:5
3.	Sound Transmission & Insulation Manual		5 pcs	1:5
	Interior Space Acoustic Design Guide		5 pcs	1:5
	Acoustic Materials & Construction Techniques		5 pcs	1:5
B	Learning Facilities and infrastructure			
1.	Lecture/Theory Room	40 m ²	1	1:25
2.	Acoustic Workshop	Equipped with sound measuring tools	1	1:25
C	Consumable materials			
1.	Acoustic Foam Panels	Egg crate & Pyramid shapes	50 pcs	2:1
2.	Bass Traps	For corners & low-frequency absorption	25 pcs	1:1
3.	Diffusers	Wooden & Plastic Panels	25 pcs	1:1
4.	Sound Absorption Blankets	Heavy-duty fabric	25 pcs	1:1
5.	Mass Loaded Vinyl (MLV)	Noise barrier material	10 rolls	1:3
6.	Soundproof Drywall	High-density gypsum boards	50 pcs	2:1
7.	Insulation Materials	Rockwool, Fiberglass	50 bags	2:1

8.	Acoustic Sealant & Tape	For airtight sealing	10 sets	1:3
9.	Acoustic Foam Panels	Egg crate & Pyramid shapes	50 pcs	2:1
10.	Bass Traps	For corners & low-frequency absorption	25 pcs	1:1
D	Tools and Equipment			
1.	Sound Level Meters	Digital dB meters	5 pcs	1:5
2.	Frequency Analysers	For measuring sound response	5 pcs	1:5
3.	Electric Drills	For panel installation	5 pcs	1:5
4.	Staple Guns	For securing acoustic fabric	5 pcs	1:5
5.	Caulking Guns	For acoustic sealant application	5 pcs	1:5
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 PROJECT

ISCED UNIT CODE: 0212551 19A

TVET CDACC UNIT CODE: CON/CU/ID/CR/07/6/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **manage interior design projects**.

Duration of Unit: 280 hours

Unit Description

This unit specifies the competencies required to **Develop interior design projects**. It involves Managing Interior Design Project and Producing Interior Design Project.

S/N	Learning Outcomes	Duration (hours)
1.	Manage interior design project	60
2.	Produce interior design project	220

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Manage Interior Design Project	<ul style="list-style-type: none">1.1.Project Scope Define1.2.Site Analysis1.3.Importance of work schedules1.4.Types of work schedule1.5.Contract requirements1.6.Project timelines1.7.Project management flowchart1.8.Emerging trends on project management<ul style="list-style-type: none">1.7.1 AI and automation in project management1.7.2 AI-powered scheduling and task management1.7.3 Predictive analytics for risk management1.7.4 Sustainability and green project management<ul style="list-style-type: none">1.7.4.1 Sustainable project planning1.7.4.2 Circular economy and waste reduction1.7.4.3 Remote and collaborative	<ul style="list-style-type: none">• Written tests• Observation• Oral questions• Third party report• Interviewing• Project and report writing• Portfolio of Evidence

Learning Outcome	Content	Methods of assessment
	<ul style="list-style-type: none"> project management 1.7.4.4 Cloud-based PM tools for remote teams 1.7.4.5 Virtual Reality (VR) and Augmented Reality (AR) for project visualization 1.8 Digital workspaces and integrated communication platforms. 1.9 Prepare work methodology <ul style="list-style-type: none"> 1.9.1 Project Milestones 1.9.2 Project Risk management 1.9.3 Project Evaluation Method 1.9.4 Technical Specifications 1.9.5 Project Management Plan 1.10 Project Resources <ul style="list-style-type: none"> 1.10.1 Cost & Budget 1.10.2 Cost Estimation methods <ul style="list-style-type: none"> 1.10.2.1 Budget & Cash flow Management 1.10.2.2 Budget & Expenditure Management 1.10.3 Time 1.10.4 Project Team 1.11 Monitor Interior Design Project <ul style="list-style-type: none"> 1.11.1 Project Progress assessment 1.11.2 Personnel Management 1.11.3 Material Scheduling 1.11.4 Time Monitoring 1.11.5 Financial Management 1.12 Project Quality Control <ul style="list-style-type: none"> 1.12.1 Quality Audits 1.12.2 Quality Variations& remedies 	

Learning Outcome	Content	Methods of assessment
	1.12.3 Quality control Management 1.13 Risk factors and Mitigation Strategies 1.14 Project Report 1.14.1 Project Documentation & Maintenance Report 1.14.2 Project Development and Planning 1.14.3 Project Components Evaluation 1.14.4 Project Performance	
2. Produce interior design project	2.1 Project brief analysis and determination of scope, objectives, constraints, 2.2 Site analysis 2.3 Emerging trends, materials and technologies 2.4 Conceptual design ideas generation 2.5 Mood boards, sketches and preliminary layouts preparation 2.6 Design proposals 2.7 Detailed design documentation 2.8 Specifications for finishes, furniture, lighting and accessories Preparation 2.9 Budget estimation 2.10 Submission of Final design package 2.11 Design documentation 1.9.Presentation of final interior design proposal 1.10. Display and Exhibition of Final Project	<ul style="list-style-type: none"> • 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
- 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 Project Management Guide		5 pcs	1:5
2.	Work Scheduling & Methodology Handbook		5 pcs	1:5
3.	Monitoring & Quality Control Manual		5 pcs	1:5
4.	Project Budgeting & Cost Management Guide		5 pcs	1:5
5.	Project Report Writing & Documentation Guide		5 pcs	1:5
B	Learning Facilities and infrastructure			
1.	Lecture/Theory Room	40 m ²	1	1:25
2.	Project Planning & Management Lab	Includes scheduling & tracking tools	1	1:25
3.	Site Visit & Monitoring Area	Real project case study	1	1:25
C	Consumable materials			
1.	Gantt Charts	Printed & digital formats	25 pcs	1:1
2.	Notebooks	Lined for project tracking	25 pcs	1:1
3.	Pencils	HB, 2B	5 sets	1:5

4.	Digital Cameras	For project documentation	5 pcs	1:5
5.	Measuring Tapes	5m & 10m	10 pcs	1:3
D	Tools and Equipment			
1.	Laptops with Project Management Software	Autodesk BIM 360, plan grid, Asana,	25 pcs	1:1
2.	Printers & Scanners	A3 for reports & contracts	1 each	1:25
3.	Safety Helmets & Vests	For site visits	10 sets	1:3