

	<b>Curriculum Document</b>			
<b>Curriculum Code</b>	<b>Curriculum Title</b>		<b>[insert image here]</b>	
683401000	Furniture Upholsterer			
	<b>Name</b>	<b>Email</b>	<b>Phone</b>	<b>Logo</b>
<b>Development Quality Partner</b>	Fibre Processing and Manufacturing SETA	johnnym@fpmseta.org.za	0114031700	<b>[insert image here]</b>

\_\_\_\_\_  
**Learner QDF Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**QDF Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**DQP Representative Signature**

\_\_\_\_\_  
**Date**

I dont see where it its having theory questions for the candidates whether she/he qualify for doing this level.

## Table of content

SECTION 1: CURRICULUM SUMMARY .....	6
1. Occupational Information.....	6
1.1 Associated Occupation .....	6
1.2 Occupation or Specialisation Addressed by this Curriculum .....	6
1.3 Alternative Titles used by Industry .....	6
2. Curriculum Information.....	6
2.1 Curriculum Structure.....	6
2.2 Entry Requirements.....	8
3. Assessment Quality Partner Information .....	8
4. Part Qualification Curriculum Structure.....	8
SECTION 2: OCCUPATIONAL PROFILE .....	12
1. Occupational Purpose.....	12
2. Occupational Tasks.....	12
3. Occupational Task Details.....	12
3.1. Read and interpret a design, drawing or sketch and take accurate measurements and calculate/estimate the amount of fabrics, leather, man-made fabrics, padding and other raw material such as springs, webbing, etc. (NQF Level 4).....	12
3.2. Make upholstery patterns and produce templates from sketches, customer descriptions or blueprints which matches all quality standards (NQF Level 3).....	12
3.3. Lay out, measure, cut and sew upholstery materials following patterns, templates, sketches, or design specifications (NQF Level 2) .....	13
3.4. Interpret specifications and prepare foundations for upholstered frames by attaching webbing, springs, foam and / or padding securely to the frame (NQF Level 2) .....	13
3.5. Fit slipcovers and loose material panels to cover frames with materials using staples, tacks and/or glue (NQF Level 3) .....	13
3.6. Manufacture upholstered furniture, upholstery prototypes and repair and re-upholster damaged furniture (NQF Level 4) .....	14
SECTION 3: CURRICULUM COMPONENT SPECIFICATIONS.....	15
SECTION 3A: KNOWLEDGE MODULE SPECIFICATIONS .....	15
List of Knowledge Modules for which Specifications are included.....	15

1. 683401000-KM-01, Basic Principles for Manufacturing of Upholstered Furniture, NQF Level 2, Credits 4 .....	16
2. 683401000-KM-02, Upholstered furniture frame preparation, NQF Level 2, Credits 8 24	
3. 683401000-KM-03, Upholstered Furniture Basic Cover Fitting, NQF Level 2, Credits 834	
4. 683401000-KM-04, Advanced Upholstery Furniture Technology, NQF Level 3, Credits 2 42	
5. 683401000-KM-05, Upholstery Pattern and Template Making Principles, Methods and Equipment, NQF Level 3, Credits 5.....	49
6. 683401000-KM-06, Cutting Lay Requirements for Upholstery Fabrics and Materials, NQF Level 3, Credits 3.....	54
7. 683401000-KM-07, Advanced Covering Techniques for Complex and Exposed Frames, NQF Level 3, Credits 4 .....	60
8. 683401000-KM-08, Advanced Complex Covers for Upholstery, NQF Level 3, Credits 465	
9. 683401000-KM-09, Complex Shaped Cushions and Padded Items, NQF Level 3, Credits 2 .....	68
10. 683401000-KM-10, Deep Buttoning of Upholstered Furniture, NQF Level 3, Credits 571	
11. 683401000-KM-11, Upholstered Furniture and Prototype Making Principles, NQF Level 4, Credits 13.....	74
12. 683401000-KM-12, Raw Materials, Consumables, Tools and Equipment Used in Manufacturing of Upholstered Furniture Prototypes, NQF Level 4, Credits 8 .....	77
13. 683401000-KM-13, Manufacturing Principles and Processes for Upholstered Furniture Prototype Manufacturing and Reengineering, NQF Level 4, Credits 17.....	81
14. 683401000-KM-14, Cutting and Sewing of Fabric and Material for Upholstered Furniture Prototypes, NQF Level 2, Credits 10.....	86
15. 683401000-KM-15, Cover Making and Covering Methods for Upholstered Furniture Prototypes and Repairs, NQF Level 4, Credits 15 .....	88
16. 683401000-KM-16, Technical Specifications and Configuration of Upholstery Production Equipment for Manufacturing, NQF Level 4, Credits 10.....	90
17. 683401000-KM-17, Communication and Interpersonal Relations in the Workplace, NQF Level 4, Credits 7 .....	95
18. 683401000-KM-18, Leadership and supervision in the upholstery departments, NQF Level 3, Credits 4 .....	100
SECTION 3B: PRACTICAL SKILL MODULE SPECIFICATIONS.....	106
List of Practical Skill Module Specifications.....	106
1. 683401000-PM-01, Prepare Foundations for Upholstered Frames, NQF Level 2, Credits 20 .....	107

2. 683401000-PM-02, Cover Prepared Upholstered Frames with Fabric and Other Materials, NQF Level 2, Credits 20 .....	124
3. 683401000-PM-03, Perform Advanced Covering Operations for Complex and Exposed Frames, NQF Level 3, Credits 10 .....	139
4. 683401000-PM-04, Perform Deep Buttoning Procedures to Decorate Upholstered Furniture, NQF Level 3, Credits 10 .....	144
5. 683401000-PM-05, Produce Cutting Lay Requirements for Cutting of Upholstered Cover Components, NQF Level 3, Credits 4 .....	148
6. 683401000-PM-06, Produce upholstery patterns and templates for the upholstery frame preparation and cutting departments, NQF Level 3, Credits 16.....	151
7. 683401000-PM-07, Lay Out, Measure, Cut and Sew Upholstery Materials According to Templates or Specifications and Optimising Material Usage, NQF Level 2, Credits 20	156
8. 683401000-PM-08, Manufacture Upholstery Bespoke Furniture or Prototypes for Bulk Production, NQF Level 4, Credits 30.....	161
9. 683401000-PM-09, Repair and Re-Upholster Upholstery Furniture, NQF Level 4, Credits 10 .....	163
10. 683401000-PM-10, Inspect Upholstery Furniture During Various Stages of the Manufacturing Process to Ensure Conformance to Quality Standards, NQF Level 4, Credits 15 .....	165
11. 683401000-PM-11, Reengineer Upholstery Furniture Products to Address Development or Manufacturing Defects, NQF Level 4, Credits 15.....	167
12. 683401000-PM-12, Develop Technical Specifications and Line Setup Requirements for Manufacturing of Upholstery Furniture, NQF Level 4, Credits 15.....	171
13. 683401000-PM-13, Guide Teams in the Upholstery Manufacturing Departments to Achieve Set Targets and Outputs, NQF Level 3, Credits 4.....	175
<b>SECTION 3C: WORK EXPERIENCE MODULE SPECIFICATIONS.....</b>	<b>180</b>
List of Work Experience Module Specifications .....	180
1. 683401000-WM-01, Upholstery Furniture Frame Preparation Processes, NQF Level 2, Credits 24.....	181
2. 683401000-WM-02, Upholstery Furniture Frame Cover Fitting Processes, NQF Level 2, Credits 24.....	187
3. 683401000-WM-03, Upholstery Pattern and Template Making Processes, NQF Level 3, Credits 15.....	192
4. 683401000-WM-04, Upholstery Cutting Lay Preparation, NQF Level 3, Credits 10..	195
5. 683401000-WM-05, Advanced Upholstery Covering Processes, NQF Level 3, Credits 25 .....	198

6. 683401000-WM-06, Material Cutting and Sewing Processes for Upholstery Prototypes or Bespoke Furniture, NQF Level 2, Credits 24 .....	202
7. 683401000-WM-07, Bespoke Upholstery Furniture and/or Upholstery Prototypes Manufacturing and Reparatons, NQF Level 4, Credits 56 .....	206
8. 683401000-WM-08, Furniture Re-upholstery Department, NQF Level 4, Credits 17	211
9. 683401000-WM-09, Upholstery Furniture Technical Specifications and Re-engineering, NQF Level 4, Credits 20 .....	215
10. 683401000-WM-10, Supervision in the Upholstery Department, NQF Level 4, Credits 16 .....	220
<b>SECTION 4: STATEMENT OF WORK EXPERIENCE.....</b>	<b>224</b>

Here are we talking about the result of achieving or level or experience which he qualified for meaning produce qualification of experience

## SECTION 1: CURRICULUM SUMMARY

### 1. Occupational Information

#### 1.1 Associated Occupation

683401: Upholsterer

#### 1.2 Occupation or Specialisation Addressed by this Curriculum

683401000: Furniture Upholsterer

#### 1.3 Alternative Titles used by Industry

- Semi-skilled upholsterer
- Upholstery Prototype Manufacturer
- Upholstery Cutter and Marker
- Sewing Machine Operator
- Knocker-on/assembler
- Cushion Filler
- Quality Controller
- [Framemaker /wood machinist](#)

## 2. Curriculum Information

### 2.1 Curriculum Structure

This qualification is made up of the following compulsory Knowledge and Practical Skill Modules:

Knowledge Modules:

- 683401000-KM-01, Basic Principles for Manufacturing of Upholstered Furniture, NQF Level 2, Credits 4
- 683401000-KM-02, Upholstered furniture frame preparation, NQF Level 2, Credits 8
- 683401000-KM-03, Upholstered Furniture Basic Cover Fitting, NQF Level 2, Credits 8
- 683401000-KM-04, Advanced Upholstery Furniture Technology, NQF Level 3, Credits 2
- 683401000-KM-05, Upholstery Pattern and Template Making Principles, Methods and Equipment, NQF Level 3, Credits 5
- 683401000-KM-06, Cutting Lay Requirements for Upholstery Fabrics and Materials, NQF Level 3, Credits 3
- 683401000-KM-07, Advanced Covering Techniques for Complex and Exposed Frames, NQF Level 3, Credits 4
- 683401000-KM-08, Advanced Complex Covers for Upholstery, NQF Level 3, Credits 4

- 683401000-KM-09, Complex Shaped Cushions and Padded Items, NQF Level 3, Credits 2
- 683401000-KM-10, Deep Buttoning of Upholstered Furniture, NQF Level 3, Credits 5
- 683401000-KM-11, Upholstered Furniture and Prototype Making Principles, NQF Level 4, Credits 13
- 683401000-KM-12, Raw Materials, Consumables, Tools and Equipment Used in Manufacturing of Upholstered Furniture Prototypes, NQF Level 4, Credits 8
- 683401000-KM-13, Manufacturing Principles and Processes for Upholstered Furniture Prototype Manufacturing and Reengineering, NQF Level 4, Credits 17
- 683401000-KM-14, Cutting and Sewing of Fabric and Material for Upholstered Furniture Prototypes, NQF Level 2, Credits 10
- 683401000-KM-15, Cover Making and Covering Methods for Upholstered Furniture Prototypes and Repairs, NQF Level 4, Credits 15
- 683401000-KM-16, Technical Specifications and Configuration of Upholstery Production Equipment for Manufacturing, NQF Level 4, Credits 10
- 683401000-KM-17, Communication and Interpersonal Relations in the Workplace, NQF Level 4, Credits 7
- 683401000-KM-18, Leadership and supervision in the upholstery departments, NQF Level 3, Credits 4

Total number of credits for Knowledge Modules: 129

Practical Skill Modules:

- 683401000-PM-01, Prepare Foundations for Upholstered Frames, NQF Level 2, Credits 20
- 683401000-PM-02, Cover Prepared Upholstered Frames with Fabric and Other Materials, NQF Level 2, Credits 20
- 683401000-PM-03, Perform Advanced Covering Operations for Complex and Exposed Frames, NQF Level 3, Credits 10
- 683401000-PM-04, Perform Deep Buttoning Procedures to Decorate Upholstered Furniture, NQF Level 3, Credits 10
- 683401000-PM-05, Produce Cutting Lay Requirements for Cutting of Upholstered Cover Components, NQF Level 3, Credits 4
- 683401000-PM-06, Produce upholstery patterns and templates for the upholstery frame preparation and cutting departments, NQF Level 3, Credits 16
- 683401000-PM-07, Lay Out, Measure, Cut and Sew Upholstery Materials According to Templates or Specifications and Optimising Material Usage, NQF Level 2, Credits 20
- 683401000-PM-08, Manufacture Upholstery Bespoke Furniture or Prototypes for Bulk Production, NQF Level 4, Credits 30
- 683401000-PM-09, Repair and Re-Upholster Upholstery Furniture, NQF Level 4, Credits 10
- 683401000-PM-10, Inspect Upholstery Furniture During Various Stages of the Manufacturing Process to Ensure Conformance to Quality Standards, NQF Level 4, Credits 15

- 683401000-PM-11, Reengineer Upholstery Furniture Products to Address Development or Manufacturing Defects, NQF Level 4, Credits 15
- 683401000-PM-12, Develop Technical Specifications and Line Setup Requirements for Manufacturing of Upholstery Furniture, NQF Level 4, Credits 15
- 683401000-PM-13, Guide Teams in the Upholstery Manufacturing Departments to Achieve Set Targets and Outputs, NQF Level 3, Credits 4

Total number of credits for Practical Skill Modules: 189

This qualification also requires the following Work Experience Modules:

- 683401000-WM-01, Upholstery Furniture Frame Preparation Processes, NQF Level 2, Credits 24
- 683401000-WM-02, Upholstery Furniture Frame Cover Fitting Processes, NQF Level 2, Credits 24
- 683401000-WM-03, Upholstery Pattern and Template Making Processes, NQF Level 3, Credits 15
- 683401000-WM-04, Upholstery Cutting Lay Preparation, NQF Level 3, Credits 10
- 683401000-WM-05, Advanced Upholstery Covering Processes, NQF Level 3, Credits 25
- 683401000-WM-06, Material Cutting and Sewing Processes for Upholstery Prototypes or Bespoke Furniture, NQF Level 2, Credits 24
- 683401000-WM-07, Bespoke Upholstery Furniture and/or Upholstery Prototypes Manufacturing and Repairs, NQF Level 4, Credits 56
- 683401000-WM-08, Furniture Re-upholstery Department, NQF Level 4, Credits 17
- 683401000-WM-09, Upholstery Furniture Technical Specifications and Re-engineering, NQF Level 4, Credits 20
- 683401000-WM-10, Supervision in the Upholstery Department, NQF Level 4, Credits 16

Total number of credits for Work Experience Modules: 231

## 2.2 Entry Requirements

NQF Level 1 OR 3 years relevant experience

## 3. Assessment Quality Partner Information

Name of body: National Artisan Moderating Body (NAMB)

Address of body: Department: Higher Education and Training 123 Francis Baard Street Pretoria 0001

Contact person name: Mr G van Staden

Contact person work telephone number: 0112061123

## 4. Part Qualification Curriculum Structure

### Part Qualification 1:

**Title:**

Upholstery Frame Preparer, NQF Level 2, Credits 56

**Purpose:**

Upholstery Frame Preparer prepares upholstery frames for final covering by attaching springs, webbing and foam or other padding

**Applicable Modules (Rules of Combination)**

Knowledge Modules:

- 683401000-KM-01, Basic Principles for Manufacturing of Upholstered Furniture, NQF Level 2, Credits 4
- 683401000-KM-02, Upholstered furniture frame preparation, NQF Level 2, Credits 8

Total number of credits for Knowledge Modules: 12

Practical Skill Modules:

- 683401000-PM-01, Prepare Foundations for Upholstered Frames, NQF Level 2, Credits 20

Total number of credits for Practical Skill Modules: 20

This qualification also requires the following Work Experience Modules:

- 683401000-WM-01, Upholstery Furniture Frame Preparation Processes, NQF Level 2, Credits 24

Total number of credits for Work Experience Modules: 24

Assessment Qualification Standards:

- Prepare upholstery frame for final covering by hand-building the suspension of the frame applying safety procedures and conduct a quality inspection (15%)

**Part Qualification 2:**

**Title:**

Upholstery Cover Fitter, NQF Level 2, Credits 52

**Purpose:**

Fit and attach prepared covers and loose material panels onto prepared upholstery frames using staples, tacks and/or glue

**Applicable Modules (Rules of Combination)**

Knowledge Modules:

- 683401000-KM-01, Basic Principles for Manufacturing of Upholstered Furniture, NQF Level 2, Credits 4
- 683401000-KM-03, Upholstered Furniture Basic Cover Fitting, NQF Level 2, Credits 8

Total number of credits for Knowledge Modules: 12

Practical Skill Modules:

- 683401000-PM-02, Cover Prepared Upholstered Frames with Fabric and Other Materials, NQF Level 2, Credits 20

Total number of credits for Practical Skill Modules: 20

This qualification also requires the following Work Experience Modules:

- 683401000-WM-02, Upholstery Furniture Frame Cover Fitting Processes, NQF Level 2, Credits 24

Total number of credits for Work Experience Modules: 24

Assessment Qualification Standards:

- Fit and attach prepared covers and loose material panels onto prepared upholstery frames using staples, tacks and/or glue (10%)

### **Part Qualification 3:**

#### **Title:**

Upholstery Cover Fitter and Template Maker, NQF Level 3, Credits 72

#### **Purpose:**

Fit and attach advanced upholstery covers to complex and exposed prepared upholstery frames using hand and power tools

#### **Applicable Modules (Rules of Combination)**

Knowledge Modules:

- 683401000-KM-04, Advanced Upholstery Furniture Technology, NQF Level 3, Credits 2
- 683401000-KM-05, Upholstery Pattern and Template Making Principles, Methods and Equipment, NQF Level 3, Credits 5

Total number of credits for Knowledge Modules: 7

Practical Skill Modules:

- 683401000-PM-03, Perform Advanced Covering Operations for Complex and Exposed Frames, NQF Level 3, Credits 10
- 683401000-PM-04, Perform Deep Buttoning Procedures to Decorate Upholstered Furniture, NQF Level 3, Credits 10
- 683401000-PM-05, Produce Cutting Lay Requirements for Cutting of Upholstered Cover Components, NQF Level 3, Credits 4
- 683401000-PM-06, Produce upholstery patterns and templates for the upholstery frame preparation and cutting departments, NQF Level 3, Credits 16

Total number of credits for Practical Skill Modules: 40

This qualification also requires the following Work Experience Modules:

- 683401000-WM-03, Upholstery Pattern and Template Making Processes, NQF Level 3, Credits 15
- 683401000-WM-04, Upholstery Cutting Lay Preparation, NQF Level 3, Credits 10
- 683401000-WM-05, Advanced Upholstery Covering Processes, NQF Level 3, Credits 25

Total number of credits for Work Experience Modules: 50

Assessment Qualification Standards:

- Upholster furniture by fitting and attaching upholstery covers to complex and exposed prepared upholstery frames using hand and power tools (30%)

Its stapling of a cover into frame

## **SECTION 2: OCCUPATIONAL PROFILE**

### **1. Occupational Purpose**

A furniture upholsterer manufactures an upholstered furnishing item by fitting suspension and padding and covering a frame to give it shape, comfort and functionality for a range of domestic, commercial and decorative uses.

### **2. Occupational Tasks**

- Read and interpret a design, drawing or sketch and take accurate measurements and calculate/estimate the amount of fabrics, leather, man-made fabrics, padding and other raw material such as springs, webbing, etc. (NQF Level 4)
- Make upholstery patterns and produce templates from sketches, customer descriptions or blueprints which matches all quality standards (NQF Level 3)
- Lay out, measure, cut and sew upholstery materials following patterns, templates, sketches, or design specifications (NQF Level 2)
- Interpret specifications and prepare foundations for upholstered frames by attaching webbing, springs, foam and / or padding securely to the frame (NQF Level 2)
- Fit slipcovers and loose material panels to cover frames with materials using staples, tacks and/or glue (NQF Level 3)
- Manufacture upholstered furniture, upholstery prototypes and repair and re-upholster damaged furniture (NQF Level 4)

### **3. Occupational Task Details**

#### **3.1. Read and interpret a design, drawing or sketch and take accurate measurements and calculate/estimate the amount of fabrics, leather, man-made fabrics, padding and other raw material such as springs, webbing, etc. (NQF Level 4)**

##### **Unique Product or Service:**

Cutting lists available and optimum line set-up achieved

##### **Occupational Responsibilities:**

- Develop Technical Specifications and Line Setup Requirements for Manufacturing of Upholstery Furniture

##### **Occupational Contexts:**

- Upholstery prototype manufacturing department

#### **3.2. Make upholstery patterns and produce templates from sketches, customer descriptions or blueprints which matches all quality standards (NQF Level 3)**

##### **Unique Product or Service:**

Upholstery patterns and templates

**Occupational Responsibilities:**

- Produce upholstery patterns and templates for the upholstery frame preparation and cutting departments
- Produce Cutting Lay Requirements for Cutting of Upholstered Cover Components

**Occupational Contexts:**

- Upholstery Pattern and Template Making Processes

**3.3. Lay out, measure, cut and sew upholstery materials following patterns, templates, sketches, or design specifications (NQF Level 2)****Unique Product or Service:**

Cut and sewn upholstery components and cushions

**Occupational Responsibilities:**

- Lay Out, Measure, Cut and Sew Upholstery Materials According to Templates or Specifications and Optimising Material Usage

**Occupational Contexts:**

- Upholstery Cutting Lay Preparation
- Material Cutting and Sewing Processes for Upholstery Prototypes or Bespoke Furniture

**3.4. Interpret specifications and prepare foundations for upholstered frames by attaching webbing, springs, foam and / or padding securely to the frame (NQF Level 2)****Unique Product or Service:**

Prepared upholstery frames

**Occupational Responsibilities:**

- Prepare Foundations for Upholstered Frames

**Occupational Contexts:**

- Upholstery Furniture Frame Preparation Processes

**3.5. Fit slipcovers and loose material panels to cover frames with materials using staples, tacks and/or glue (NQF Level 3)****Unique Product or Service:**

Upholstery cover fitting procedures

**Occupational Responsibilities:**

- Cover Prepared Upholstered Frames with Fabric and Other Materials

- Perform Advanced Covering Operations for Complex and Exposed Frames
- Perform Deep Buttoning Procedures to Decorate Upholstered Furniture

**Occupational Contexts:**

- Upholstery Furniture Frame Cover Fitting Processes
- Advanced Upholstery Covering Processes

**3.6. Manufacture upholstered furniture, upholstery prototypes and repair and re-upholster damaged furniture (NQF Level 4)**

**Unique Product or Service:**

Upholstered prototypes for bulk production or upholstered bespoke furniture

**Occupational Responsibilities:**

- Manufacture Upholstery Bespoke Furniture or Prototypes for Bulk Production
- Repair and Re-Upholster Upholstery Furniture
- Inspect Upholstery Furniture During Various Stages of the Manufacturing Process to Ensure Conformance to Quality Standards
- Reengineer Upholstery Furniture Products to Address Development or Manufacturing Defects
- Guide Teams in the Upholstery Manufacturing Departments to Achieve Set Targets and Outputs

**Occupational Contexts:**

- Bespoke Upholstery Furniture and/or Upholstery Prototypes Manufacturing and Repairs
- Furniture Re-upholstery Department
- Upholstery Furniture Technical Specifications and Re-engineering
- Supervision in the Upholstery Department

I think we must first before we start everything he must produce a check list .

## SECTION 3: CURRICULUM COMPONENT SPECIFICATIONS

### SECTION 3A: KNOWLEDGE MODULE SPECIFICATIONS

List of Knowledge Modules for which Specifications are included

- 683401000-KM-01, Basic Principles for Manufacturing of Upholstered Furniture, NQF Level 2, Credits 4
- 683401000-KM-02, Upholstered furniture frame preparation, NQF Level 2, Credits 8
- 683401000-KM-03, Upholstered Furniture Basic Cover Fitting, NQF Level 2, Credits 8
- 683401000-KM-04, Advanced Upholstery Furniture Technology, NQF Level 3, Credits 2
- 683401000-KM-05, Upholstery Pattern and Template Making Principles, Methods and Equipment, NQF Level 3, Credits 5
- 683401000-KM-06, Cutting Lay Requirements for Upholstery Fabrics and Materials, NQF Level 3, Credits 3
- 683401000-KM-07, Advanced Covering Techniques for Complex and Exposed Frames, NQF Level 3, Credits 4
- 683401000-KM-08, Advanced Complex Covers for Upholstery, NQF Level 3, Credits 4
- 683401000-KM-09, Complex Shaped Cushions and Padded Items, NQF Level 3, Credits 2
- 683401000-KM-10, Deep Buttoning of Upholstered Furniture, NQF Level 3, Credits 5
- 683401000-KM-11, Upholstered Furniture and Prototype Making Principles, NQF Level 4, Credits 13
- 683401000-KM-12, Raw Materials, Consumables, Tools and Equipment Used in Manufacturing of Upholstered Furniture Prototypes, NQF Level 4, Credits 8
- 683401000-KM-13, Manufacturing Principles and Processes for Upholstered Furniture Prototype Manufacturing and Reengineering, NQF Level 4, Credits 17
- 683401000-KM-14, Cutting and Sewing of Fabric and Material for Upholstered Furniture Prototypes, NQF Level 2, Credits 10
- 683401000-KM-15, Cover Making and Covering Methods for Upholstered Furniture Prototypes and Repairs, NQF Level 4, Credits 15
- 683401000-KM-16, Technical Specifications and Configuration of Upholstery Production Equipment for Manufacturing, NQF Level 4, Credits 10
- 683401000-KM-17, Communication and Interpersonal Relations in the Workplace, NQF Level 4, Credits 7
- 683401000-KM-18, Leadership and supervision in the upholstery departments, NQF Level 3, Credits 4

## **1. 683401000-KM-01, Basic Principles for Manufacturing of Upholstered Furniture, NQF Level 2, Credits 4**

### **1.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of upholstery design, construction specifications, materials, equipment and production techniques associated with preparing an upholstered furniture frame for covering

The learning will enable learners to demonstrate an understanding of:

- KM-01-KT01: Furniture types, uses and styles (5%)
- KM-01-KT02: Upholstered furniture construction (15%)
- KM-01-KT03: Ergonomics related to furniture manufacturing (10%)
- KM-01-KT04: Quality in the upholstered furniture manufacturing process (20%)
- KM-01-KT05: Compressors and compressed air (10%)
- KM-01-KT06: Drawings for furniture manufacturing (5%)
- KM-01-KT07: Productivity and efficiency in the production of upholstered furniture (10%)
- KM-01-KT08: Upholstery related health and safety principles and practices (20%)
- KM-01-KT09: Housekeeping, cleaning and record keeping (5%)

### **1.2 Guidelines for Topics**

#### **1.2.1. KM-01-KT01: Furniture types, uses and styles (5%)**

***Topic elements to be covered include:***

- KT0101 Furniture types and products and their uses
- KT0102 Styles of upholstered furniture, including other soft furnishings
- KT0103 Historical factors and technology influencing the design and development of furniture, including traditional foundations like coil springs, animal and vegetable fibre paddings, and foam

***Internal Assessment Criteria and Weight***

- IAC0101 Different types of furniture are identified and the respective uses are explained
- IAC0102 The main historical factors and eras that influenced the development of furniture design including the impact of the industrial revolution, world wars, development of new materials and technology are outlined
- IAC0103 Various types and styles of upholstered furniture, including other soft furnishings are identified and respective uses are explained

***(Weight 5%)***

#### **1.2.2. KM-01-KT02: Upholstered furniture construction (15%)**

***Topic elements to be covered include:***

- KT0201 Terminology used in the upholstery industry
- KT0202 Standard dimensions of upholstered furniture
- KT0203 Furniture frame construction including parts identification, joints and assembly techniques
- KT0204 Furniture frame construction materials including hardwood, soft wood, composite wood products, plastic, fibre glass and metal frames
- KT0205 Traditional and modern foundations including coil springs, animal and vegetable fibre paddings, and foam
- KT0206 Furniture cover construction including parts identification, joints and assembly techniques
- KT0207 Furniture upholstery materials including natural and man-made fabric and finishings
- KT0208 Impact of design and construction faults

***Internal Assessment Criteria and Weight***

- IAC0201 The influence of standard dimensions and the science of ergonomics on the design of upholstered furniture design is reasoned
- IAC0202 Parts of various types of upholstered furniture are identified using the correct abbreviations and the respective functions are explained
- IAC0203 Types of traditional and modern materials used to produce seat frames are identified and the effect of their characteristics on the upholstery process is reasoned
- IAC0204 Components used for various upholstered furniture products are identified
- IAC0205 The consequences of poor frame construction and raw material faults and defects on the cover preparation process, final product, and the production output of the department are evaluated

***(Weight 15%)***

**1.2.3. KM-01-KT03: Ergonomics related to furniture manufacturing (10%)**

***Topic elements to be covered include:***

- KT0301 Definition
- KT0302 Principles
- KT0303 Purpose
- KT0304 Concepts of ergonomic pertaining to upholstered furniture
- KT0305 Standard measurements for furniture
- KT0306 Lifting and stacking
- KT0307 Moving materials and equipment

***Internal Assessment Criteria and Weight***

- IAC0301 Ergonomics is defined in terms of its applications and impact in furniture manufacturing processes
- IAC0302 The principles and best practices of ergonomics in the industry is outlined
- IAC0303 The purpose of ergonomics is described in terms of the effect on the finished product and the production processes
- IAC0304 The need for standard sizes in furniture manufacture is motivated with reference to ergonomics
- IAC0305 Lifting and moving equipment are listed and their uses describe
- IAC0306 The lifting and moving equipment's impact on ergonomics during production is outlined
- IAC0307 Material storage (such as stacking) is described with reference to the different sizes, the use of spacers and the avoidance of damage
- IAC0308 The correct equipment is used based on the situation such as ladders of sufficient lengths for the heights involved
- IAC0309 The principles of ergonomics are applied to lifting to identify correct lifting procedures and minimizing the risk of injury to self

***(Weight 10%)***

#### **1.2.4. KM-01-KT04: Quality in the upholstered furniture manufacturing process (20%)**

***Topic elements to be covered include:***

- KT0401 Definition and importance of quality, quality control and quality assurance
- KT0402 Principles and practices of quality control
- KT0403 Principles and practices of quality assurance
- KT0404 Types and causes of quality problems, including raw material faults and defects, tools and equipment faults and defects
- KT0405 Consequences of poor quality management for the frame preparing and frame covering department, the company and the industry
- KT0406 Production routines, product inspections and quality control during upholstery frame covering processes
- KT0407 Concepts of product defects and faults and their causes
- KT0408 Principles and concepts of final quality check for product defects and faults
- KT0409 Reporting procedures for the final prepared frame
- KT0410 Materials handling and product stacking and storing for the next process
- KT0411 Storage and dispatch of upholstered frame components and complete products

***Internal Assessment Criteria and Weight***

- IAC0401 Concepts of quality, quality control and quality assurance are defined and differentiated

- IAC0402 Causes of quality problems in the frame preparation and frame covering department such as raw frame faults and defects, wrong materials, material faults and defects, waste of materials and consumables, equipment and tool breakdowns, power outages, poor team work, and absenteeism are identified and the implications thereof on quality is assessed
- IAC0403 The consequences of poor or no quality management systems for the furniture covering department, the company and the industry are evaluated
- IAC0404 Pre-production, production and post-production routines and quality control checks in the furniture covering process, are described and their respective contributions to the quality management process are evaluated
- IAC0405 Possible defects and faults of furniture covered during the frame preparation and cover fitting upholstery process are assessed and their causes analysed
- IAC0406 Reasons for final quality check procedures are justified
- IAC0407 Possible consequences of poor materials handling methods and unsafe product stacking and storing are analysed

**(Weight 20%)**

#### **1.2.5. KM-01-KT05: Compressors and compressed air (10%)**

***Topic elements to be covered include:***

- KT0501 Compressed air
- KT0502 Compressed air generation
- KT0503 Compressed air properties
- KT0504 Compressed air uses
- KT0505 Problem identification and solving
- KT0506 Hazards and risks
- KT0507 Pneumatic tools

***Internal Assessment Criteria and Weight***

- IAC0501 The concept of compressed air is described
- IAC0502 The process of compressed air generation is outlined
- IAC0503 Different compressors are identified and their advantages and disadvantages are outlined
- IAC0504 The properties of compressed air is listed and linked to the uses thereof
- IAC0505 Hazards arising from various air tools, including noise, vibration, fumes, hoses and connectors are explained
- IAC0506 The safety requirements and procedures of working with compressed air is outlined and linked to the hazards they are meant to address
- IAC0507 The standard operating procedures for pneumatic devices such as start-up and shut down procedures are outlined

- IAC0508 Common and critical faults of equipment are listed and described to aid early identification and the proper channels for fault reporting are given
- IAC0509 The importance of setting the correct pressure on all pneumatic tools and machines is explained
- IAC0510 The importance of draining water out of airlines is explained
- IAC0511 The proper colour coding for airlines is described
- IAC0512 The components of the compressor (isolation switches, motor, receiver, dryer, pressure gauges, oil and water filters and traps) are identified and the consequences of incorrect air pressure, hose leaks and water in the hoses for pneumatic tools are assessed

**(Weight 10%)**

#### **1.2.6. KM-01-KT06: Drawings for furniture manufacturing (5%)**

***Topic elements to be covered include:***

- KT0601 Sketches and engineering drawings
- KT0602 Isometric views
- KT0603 Lines used
- KT0604 Hidden detail
- KT0605 Legends and symbols

***Internal Assessment Criteria and Weight***

- IAC0601 Sketches and engineering drawings are identified according to type and use
- IAC0602 Engineering drawings are correctly interpreted and the relevant actions and processes are identified
- IAC0603 Line structure and dimensions are correctly identified and their meanings described
- IAC0604 The interpretation is done methodically to ensure that all the important details are incorporated into the manufacturing process
- IAC0605 Work pieces to be used are identified based on the engineering drawing
- IAC0606 Hidden details are listed and the actions to be taken are outlined

**(Weight 5%)**

#### **1.2.7. KM-01-KT07: Productivity and efficiency in the production of upholstered furniture (10%)**

***Topic elements to be covered include:***

- KT0701 Productivity
- KT0702 Interruptions

- KT0703 Waste management
- KT0704 Quality of raw material and consumables
- KT0705 Raw material and consumables faults and defects
- KT0706 Product quality of the frame preparation and upholstery processes and defects

***Internal Assessment Criteria and Weight***

- IAC0701 The importance of planning the job in avoiding delays is explained
- IAC0702 The importance of productivity is discussed
- IAC0703 The factors influencing productivity are outlined along with their impact on manufacturing processes
- IAC0704 The role of accurate cutting lists, specification sheets and routing sheets are described
- IAC0705 The importance of minimizing waste is discussed
- IAC0706 The need to reuse raw material and store reusable raw materials is motivated
- IAC0707 The role of planned interruptions are explained
- IAC0708 The procedures for dealing with unplanned interruption are outlined

***(Weight 10%)***

**1.2.8. KM-01-KT08: Upholstery related health and safety principles and practices (20%)**

***Topic elements to be covered include:***

- KT0801 Occupational health and safety act, regulations and responsibilities of employer and employee
- KT0802 Hazards, safety, hazardous substances, incidents
- KT0803 Hazard identification and safe work procedures
- KT0804 Incidents and incident investigation
- KT0805 Safety and information signs, location of first aid and firefighting equipment and personnel, emergency evacuation procedures and meeting points
- KT0806 Hazardous substances, MSDS and storage
- KT0807 Personal protective equipment (PPE)
- KT0808 First aid and first aiders in the workplace
- KT0809 Fire extinguishers and fire fighters in the workplace
- KT0810 Emergency procedures: evacuation and emergency meeting points

***Internal Assessment Criteria and Weight***

- IAC0801 The responsibilities of the employer and employee in terms of the OHSA are listed and explained
- IAC0802 Terms hazard, safe work practices, hazardous substance, incident are defined and discussed
- IAC0803 Hazards and potential hazards in the upholstery department are identified and discussed
- IAC0804 Safety and information signs in the workplace (hearing protection, respirator area, dust mask area, exit signs, first aid location signs, fire extinguisher and hose reel location signs, eye wash location, emergency alarm signs, first aider on duty, fire fighter on duty, emergency numbers, emergency meeting points, colour coding of pneumatic air pipes, demarcation lines for aisles) are defined
- IAC0805 Hazardous substances in the frame preparation department (adhesives, foam, solvents, and lubricants) are defined and the interpretation of material safety datasheets (MSDS) is discussed
- IAC0806 Safe storage of hazardous substances is argued
- IAC0807 Various types of fire extinguishers in the workplace are identified and the safe usage is discussed
- IAC0808 Legal compliance aspects of working with compressors and compressed air are evaluated
- IAC0809 The use and function of appropriate PPE to wear in the upholstery covering department are analysed and consequences of not complying with the legal requirements are reasoned
- IAC0810 The importance of emergency procedures for workplace incidents is justified

**(Weight 20%)**

### **1.2.9. KM-01-KT09: Housekeeping, cleaning and record keeping (5%)**

***Topic elements to be covered include:***

- KT0901 Housekeeping principles and requirements
- KT0902 Cleaning agents and equipment
- KT0903 Routine cleaning
- KT0904 Product change cleaning
- KT0905 Contamination

***Internal Assessment Criteria and Weight***

- IAC0901 Housekeeping principles and requirements are explained
- IAC0902 Cleaning requirements are defined
- IAC0903 The prevention of product contamination is evaluated

**(Weight 5%)**

## **1.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience

*Legal Requirements:*

- OHS compliant

**1.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process

## 2. 683401000-KM-02, Upholstered furniture frame preparation, NQF Level 2, Credits 8

### 2.1 Purpose of the Knowledge Modules

The main focus of the learning in this knowledge module is to build an understanding of upholstery design, construction specifications, materials, equipment and production techniques associated with preparing an upholstered furniture frame for covering by hand building the suspension

The learning will enable learners to demonstrate an understanding of:

- KM-02-KT01: Specifications for upholstered furniture (10%)
- KM-02-KT02: Upholstery raw materials and consumables types and characteristics (15%)
- KM-02-KT03: Raw materials and consumables used in the frame padding process (5%)
- KM-02-KT04: Use of chemicals: adhesives and solvents (5%)
- KM-02-KT05: Upholstery tools and equipment (10%)
- KM-02-KT06: Upholstery measurements, measuring tools, techniques and calculations (5%)
- KM-02-KT07: Upholstered furniture manufacturing processes (5%)
- KM-02-KT08: Frame preparation: knocking-on principles (5%)
- KM-02-KT09: Knocker on techniques (15%)
- KM-02-KT10: Foaming-up or padding-up principles (10%)
- KM-02-KT11: Foaming-up or padding-up techniques (10%)
- KM-02-KT12: Joints and bracings of the frame (5%)

### 2.2 Guidelines for Topics

#### 2.2.1. KM-02-KT01: Specifications for upholstered furniture (10%)

***Topic elements to be covered include:***

- KT0101 Function of product specifications and standards in the manufacturing process
- KT0102 Types of product specifications including sketches, technical drawings, samples, prototypes, cutting lists and job cards, and their uses
- KT0103 Principles and concepts of interpreting specifications and workplace instructions to determine the type, quality, sizes and quantities of raw materials and consumables for the frame preparation process
- KT0104 Frame and upholstery components construction and parts identification
- KT0105 Compliance and non-compliance
- KT0106 Consequences of prepared frames and covered furniture not meeting specified standards

***Internal Assessment Criteria and Weight***

- IAC0101 Various types of product specifications used in the upholstery industry are compared and differentiated
- IAC0102 Various aspects of basic sketches and engineering drawings such as isometric, oblique and orthographic views and projections, sectional views, component parts, dimensioning, scaling, line structures and geometry, drawing labelling, curves and radiuses are identified and each function explained
- IAC0103 Aspects included in industry and workplace product specification concepts such as raw material standards, drawing standards, engineering symbols, abbreviations and conventions are identified
- IAC0104 The concepts of compliance and non-compliance is explained
- IAC0105 The consequences for the upholstery process of prepared and covered frames not meeting the specified product standard are evaluated

**(Weight 10%)**

### **2.2.2. KM-02-KT02: Upholstery raw materials and consumables types and characteristics (15%)**

***Topic elements to be covered include:***

- KT0201 Furniture raw materials with reference to natural (hard woods, soft woods, bamboo, cane and veneers) and engineered / composite materials
- KT0202 Location and procurement of raw materials and consumables
- KT0203 Raw frames and consumables supplied by frame making department
- KT0204 Types and gauges of various springs needed for the knocker-on process, including coil springs and zig-zag springs
- KT0205 Types, sizes, quantity and quality of consumables including clips, nails, staples, edge rolls, twine and cord needed for the springing up process
- KT0206 Types of webbing needed for the knocker on process, including manmade elastic and rubber webbing, and those made from natural fibers like jute webbing and hessian.
- KT0207 Density, thickness and types of foam required for the foaming up process
- KT0208 Types of padding for covering coil springs
- KT0209 Consumables required for the foaming up process, including profile jigs and templates
- KT0210 Fabrics used for covering webbing, springs, foam and padding including calico, hessian, polypropylene, Dacron and flock
- KT0211 Labels, codes and the coding system and traceability
- KT0212 Principles and concepts of safe materials handling and storage methods
- KT0213 Identify raw materials used in furniture making and explain the characteristics of each

***Internal Assessment Criteria and Weight***

- IAC0201 The use of specifications and workplace instructions to determine the type, quality, sizes and quantities of raw materials and consumables for the frame preparation process is reasoned
- IAC0202 Various types of frames and their raw materials and type of foundation materials to be used for each component are identified
- IAC0203 Types and gauges of various springs needed for the knocker-on process are identified including coil springs and zig-zag springs
- IAC0204 Types, sizes, quantity and quality of consumables such as clips, nails, staples, edge rolls, twine and cord needed for the springing up process are identified
- IAC0205 Differences between the types of webbing needed for the knocker on process, such as manmade elastic and rubber webbing, and natural fibres like jute webbing are evaluated
- IAC0206 Types, sizes, quantity and quality of consumables such as clips, tacks, and staples needed for the webbing up process are identified
- IAC0207 Methods for identifying density and thickness of various types of foam required for the foaming up process are described
- IAC0208 Consumables required for the foaming up process are listed
- IAC0209 Raw materials required for the padding and covering of coil springs are listed
- IAC0210 Fabrics used for covering webbing, springs, foam and padding including calico, hessian (burlap), polypropylene, Dacron, cambric and flock are listed
- IAC0211 Principles and concepts of safe materials handling and storage methods are reasoned

**(Weight 15%)**

### **2.2.3. KM-02-KT03: Raw materials and consumables used in the frame padding process (5%)**

***Topic elements to be covered include:***

- KT0301 Fabric types, characteristics and uses, safe handling and storage (such as coir, kapok, wadding)
- KT0302 Man-made fibre and cloths, characteristics and uses, safe handling and storage (foam)
- KT0303 Padding materials and foam characteristics and uses
- KT0304 Safe handling and storage of raw materials

***Internal Assessment Criteria and Weight***

- IAC0301 Types of natural raw materials used as padding for upholstered furniture are identified and the respective uses and characteristics are evaluated
- IAC0302 Types of man-made raw materials used as padding for upholstered furniture are identified and the respective uses and characteristics are evaluated
- IAC0303 The importance of safe handling and storage of raw materials is justified

**(Weight 5%)**

#### **2.2.4. KM-02-KT04: Use of chemicals: adhesives and solvents (5%)**

***Topic elements to be covered include:***

- KT0401 Chemical types, characteristics, properties and purpose
- KT0402 Types of solvents characteristics, properties and purpose
- KT0403 Application equipment, tools and dispensers
- KT0404 Measuring and application techniques and procedures
- KT0405 Preparation and application techniques
- KT0406 Safety hazards and risks

***Internal Assessment Criteria and Weight***

- IAC0401 The various types of chemicals used in upholstery processes are named
- IAC0402 Characteristics and properties of the chemicals used in upholstery processes are described
- IAC0403 The purpose of each of these chemicals used in the process is explained
- IAC0404 Various types of solvents used in upholstery processes are listed
- IAC0405 Characteristics and properties of these solvents are explained
- IAC0406 The purpose of each solvent used in the process is explained
- IAC0407 The application techniques and sequence used for chemicals and solvents are described
- IAC0408 Safety procedures, hazards and risks associated with handling of chemicals and solvents are described
- IAC0409 Standard operating procedures dealing with spillages, waste and effluent are explained
- IAC0410 Types, usage and care of personal protective equipment used in textile wet product preparation processes are described

***(Weight 5%)***

#### **2.2.5. KM-02-KT05: Upholstery tools and equipment (10%)**

***Topic elements to be covered include:***

- KT0501 Upholstery hand tools for the knocker on springing, webbing and foaming processes: operation, components and parts, uses, safe storage and handling
- KT0502 Pneumatic tools, settings and operation of, components and parts, relationship between parts, uses, safe storage and handling, supply systems for knocker on springing, webbing and foaming processes
- KT0503 Upholstery electric portable power tools for the knocker on springing, webbing and foaming processes: settings and operation of, components and parts, uses, safe storage and handling
- KT0504 Upholstery frame preparation equipment

- KT0505 Spraying equipment for adhesive application and foaming up workstations
- KT0506 Personal protective equipment and materials handling equipment
- KT0507 Tools and equipment maintenance, fault finding and standard operating procedures
- KT0508 Safety measures and mechanisms

***Internal Assessment Criteria and Weight***

- IAC0501 Hand tools used by the frame preparing department are identified and their purposes are explained
- IAC0502 Parts of the hand tools are identified
- IAC0503 Maintenance procedures for each tool explained
- IAC0504 The consequences of not handling, cleaning and maintaining hand tools correctly are assessed
- IAC0505 Pneumatic power tools used in the frame preparing department are identified and their purposes explained
- IAC0506 Parts and safety mechanisms of the pneumatic power tools are identified and the maintenance procedures for each tool is explained
- IAC0507 The consequences of not handling, cleaning and maintaining pneumatic power tools correctly are assessed
- IAC0508 Electric power tools used in the frame preparation department are identified and respective purpose is explained
- IAC0509 Parts and safety mechanisms of the electric power tools are identified and maintenance procedures for each tool is assessed
- IAC0510 Consequences of not handling, cleaning and maintaining electric power tools correctly is evaluated
- IAC0511 The identification, selection and loading staples, nails, bits and other consumables into the relevant power tool are explained
- IAC0512 The consequences of not cleaning the spray equipment and spray booth thoroughly after use are assessed
- IAC0513 The equipment used by a frame preparer to prepare springs and foam are identified and their parts, safety mechanisms and purpose are identified

***(Weight 10%)***

**2.2.6. KM-02-KT06: Upholstery measurements, measuring tools, techniques and calculations (5%)**

***Topic elements to be covered include:***

- KT0601 Principles of accurate measurements during the frame preparation process
- KT0602 Units of measurement and measuring tools and equipment required for the frame preparation process

- KT0603 Measuring techniques
- KT0604 Calculations and angles
- KT0605 Calculating allowances
- KT0606 Problem solving

***Internal Assessment Criteria and Weight***

- IAC0601 Various units, conversions and terminology for measurements, including quantity, deflection, and compressed air volume and pressure are explained and applied
- IAC0602 Calculations required during the upholstery process are explained and applied
- IAC0603 Measuring tools such as steel tape measure, cloth tape measure, squares, steel rules, vernier calliper, templates and patterns, and pressure gauges and their parts are identified and their functions analysed
- IAC0604 Calculations involving dimensions, spacing, quantities, volume, and air pressure using consistent units and conversions and appropriate mathematical operation are completed, recorded and checked
- IAC0605 Consequences of inaccurate measurements on the upholstery process and the output of the department are assessed

***(Weight 5%)***

**2.2.7. KM-02-KT07: Upholstered furniture manufacturing processes (5%)**

***Topic elements to be covered include:***

- KT0701 Upholstered furniture manufacturing process from raw frame to finished product
- KT0702 Process flow and productivity
- KT0703 Operations in the process flow: knocker on operations, foaming up operations, padding sprung foundations and frames and covering operations
- KT0704 Routing sheets
- KT0705 Cutting lists
- KT0706 Product specifications
- KT0707 Finishing aids

***Internal Assessment Criteria and Weight***

- IAC0701 Workshop processes of producing upholstered items from raw frame to finished product and the implications of design and construction faults on the final product are analysed
- IAC0702 The process of furniture manufacture is briefly outlined
- IAC0703 The operations in furniture manufacture such as machining, assembling and finishing operations are reviewed
- IAC0704 The finishing processes of furniture is outlined

- IAC0705 The importance of productivity and methods to enhance productivity are discussed
- IAC0706 The role of the routing sheet is described
- IAC0707 Job card information such as component sizes and details, shoulder-to-shoulder size and chemicals to use is explained
- IAC0708 Product specifications are understood and their impact on the manufacturing process is discussed in terms of the process flow and methods that will be used

**(Weight 5%)**

#### **2.2.8. KM-02-KT08: Frame preparation: knocking-on principles (5%)**

***Topic elements to be covered include:***

- KT0801 Stretch, tension and deflection of webbing and springs
- KT0802 Spacing of tacks, nails and staples
- KT0803 Spacing of webbing
- KT0804 Correct sizes of nails and staples
- KT0805 Positioning of the staples, nails, tacks
- KT0806 Keeping the working edge clean for the next operation

***Internal Assessment Criteria and Weight***

- IAC0801 Frame preparation principles are identified and the effect thereof on quality end-product is analysed

**(Weight 5%)**

#### **2.2.9. KM-02-KT09: Knocker on techniques (15%)**

***Topic elements to be covered include:***

- KT0901 Tacking
- KT0902 Stapling
- KT0903 Nailing
- KT0904 Rasping
- KT0905 Stretching
- KT0906 Tensioning
- KT0907 Interlacing
- KT0908 Removing of staples and nails
- KT0909 Web pattern

- KT0910 Cut to size and curl the end of zig-zag spring
- KT0911 Sequence of tasks “ from left to right or other way round
- KT0912 Standing in the correct position and apply correct posture

***Internal Assessment Criteria and Weight***

- IAC0901 Techniques of selecting, measuring, cutting, edge bending, spacing and using hand and power tools to attach zig zag springs securely to a frame with the correct tension
- IAC0902 Techniques of selecting, measuring, cutting allowances, spacing, interweaving and using hand and power tools to attach webbing securely to a frame
- IAC0903 Techniques of spacing and using hand and power tools to attach coil springs securely to a webbing and to the frame
- IAC0904 Identify the types of knots and clips used when securing coil springs and zig zag springs to each other and to the frame

***(Weight 15%)***

**2.2.10. KM-02-KT10: Foaming-up or padding-up principles (10%)**

***Topic elements to be covered include:***

- KT1001 Safety
- KT1002 Apply correct amount of glue for good bonding
- KT1003 Foam: correct densities, correct sizes, correct shapes or profile, the feel of the foam, good bonding
- KT1004 Correct positioning and appearance of the padding and foam
- KT1005 Centralized, according to the divisions of the couch
- KT1006 Stretch, tension and deflection of fabric
- KT1007 Spacing of tacks, nails and staples
- KT1008 Uniformity of a pair of arms and wings, pleating and folding and buttoning
- KT1009 Positioning of the cover and alignments
- KT1010 Pattern matching of fabric
- KT1011 Correct shaping edges and corners

***Internal Assessment Criteria and Weight***

- IAC1001 Foaming-up or padding-up principles are identified and described and the effect thereof on quality end-product is analysed

***(Weight 10%)***

### **2.2.11. KM-02-KT11: Foaming-up or padding-up techniques (10%)**

#### ***Topic elements to be covered include:***

- KT1101 Bonding foam to foam
- KT1102 Bonding foam to other substances
- KT1103 Shaping according to design or style
- KT1104 Templates and cutters
- KT1105 Building and shaping a profile with layers
- KT1106 Apply the sequence depending on the design
- KT1107 Tacking, sewing, tying and bonding to the sprung foundations and frame

#### ***Internal Assessment Criteria and Weight***

- IAC1101 Techniques of padding and edge rolls when covering coil springs and arms.
- IAC1102 Techniques of selecting specified densities of foam, applying adhesive to bond foam-to-foam and using templates and tools to construct and shape the foam and attach it to the frame over the springs and webbing.
- IAC1103 Techniques of selecting specified padding / stuffing materials, applying and attaching it by means of tacking, sewing, tying and bonding to the sprung foundations and frame, and shaping it to meet specifications.
- IAC1104 Techniques of measuring, cutting and attaching the specified fabric to cover the foam and paddings
- IAC1105 Importance of following workplace procedures handle and stack and store completed prepared frame for the next upholstery procedure and explain the types and consequences of damage to the product

***(Weight 10%)***

### **2.2.12. KM-02-KT12: Joints and bracings of the frame (5%)**

#### ***Topic elements to be covered include:***

- KT1201 Types
- KT1202 Uses
- KT1203 Requirements
- KT1204 Manufacturing

#### ***Internal Assessment Criteria and Weight***

- IAC1201 Various types of joints and bracings of the frame is described with reference to uses, requirements and manufacturing thereof

***(Weight 5%)***

## **2.3 Provider Programme Accreditation Criteria**

### *Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

### *Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience

### *Legal Requirements:*

- OHS compliant

## **2.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process

### 3. 683401000-KM-03, Upholstered Furniture Basic Cover Fitting, NQF Level 2, Credits 8

#### 3.1 Purpose of the Knowledge Modules

The main focus of the learning in this knowledge module is to build an understanding of upholstery design, construction specifications, techniques, materials and production processes associated with covering a prepared upholstery frame

The learning will enable learners to demonstrate an understanding of:

- KM-03-KT01: Specifications for upholstered furniture (10%)
- KM-03-KT02: Upholstery raw materials and consumables types and characteristics (20%)
- KM-03-KT03: Use of chemicals: adhesives and solvents (10%)
- KM-03-KT04: Upholstery tools and equipment (10%)
- KM-03-KT05: Upholstery measurements, measuring tools, techniques and calculations (10%)
- KM-03-KT06: Upholstered furniture manufacturing processes (10%)
- KM-03-KT07: Upholstery covering principles (10%)
- KM-03-KT08: Upholstered furniture covering operations and techniques (20%)

#### 3.2 Guidelines for Topics

##### 3.2.1. KM-03-KT01: Specifications for upholstered furniture (10%)

***Topic elements to be covered include:***

- KT0101 Function of product specifications and standards in the manufacturing process
- KT0102 Types of product specifications including sketches, technical drawings, samples, prototypes, cutting lists and job cards, and their uses
- KT0103 Principles and concepts of interpreting specifications and workplace instructions to determine the type, quality, sizes and quantities of raw materials and consumables for the frame preparation process
- KT0104 Frame and upholstery components construction and parts identification
- KT0105 Compliance and non-compliance
- KT0106 Consequences of prepared frames and covered furniture not meeting specified standards

***Internal Assessment Criteria and Weight***

- IAC0101 Various types of product specifications used in the upholstery industry are compared and differentiated
- IAC0102 Various aspects of basic sketches and engineering drawings such as isometric, oblique and orthographic views and projections, sectional views, component parts, dimensioning, scaling, line structures and geometry, drawing labelling, curves and radiuses are identified and each function explained

- IAC0103 Aspects included in industry and workplace product specification concepts such as raw material standards, drawing standards, engineering symbols, abbreviations and conventions are identified
- IAC0104 The concepts of compliance and non-compliance is explained
- IAC0105 The consequences for the upholstery process of prepared and covered frames not meeting the specified product standard are evaluated

**(Weight 10%)**

### **3.2.2. KM-03-KT02: Upholstery raw materials and consumables types and characteristics (20%)**

***Topic elements to be covered include:***

- KT0201 Furniture raw materials with reference to natural and manmade fabrics and finishings
- KT0202 Location of raw materials and consumables
- KT0203 Main upholstery material types (woven plain, woven patterned, printed cretonne, pile, knitted jersey, coated fabrics and animal skins)
- KT0204 Types, sizes, quantity and quality of consumables needed for cover fitting, finishing and trimming
- KT0205 Density, thickness and types of foam required for the foaming up process
- KT0206 Types of padding for covering coil springs
- KT0207 Consumables required for the foaming up process, including adhesives and solvents, profile jigs and templates
- KT0208 Using profile jigs and templates
- KT0209 Fabrics used for covering webbing, springs, foam and padding including calico, hessian, polypropylene Dacron and flock
- KT0210 Types and gauges of various springs needed for the knocker-on process, including coil springs and zig-zag springs
- KT0211 Types, sizes, quantity and quality of consumables including clips, nails, staples, edge rolls, twine and cord needed for the springing up process
- KT0212 Types of webbing needed for the knocker on process, including manmade elastic and rubber webbing, and those made from natural fibers like jute webbing and hessian.
- KT0213 Labels, codes and the coding system and traceability
- KT0214 Principles and concepts of safe materials handling and storage methods

***Internal Assessment Criteria and Weight***

- IAC0201 The use of specifications and workplace instructions to determine the type, quality, sizes and quantities of raw materials and consumables for the frame preparation process is reasoned
- IAC0202 Raw materials used in furniture making are listed and the characteristics of each are defined

- IAC0203 Consumables used in covering processes, including gimps, piping, skirting, tack strips, decorative single, continuous and fake nails, needles, staples, tacks, twine, thread, metal tack strips, adhesive, staples and tacks are identified and the length / quantity are calculated
- IAC0204 Typical defects and faults encountered when working with covering raw materials and consumables are described and the reporting and rectification process are analysed
- IAC0205 Various types of frames and their raw materials and type of foundation materials to be used for each component are identified
- IAC0206 Types and gauges of various springs needed for the knocker-on process are identified including coil springs and zig-zag springs
- IAC0207 Types, sizes, quantity and quality of consumables such as clips, nails, staples, edge rolls, twine and cord needed for the springing up process are identified
- IAC0208 Differences between the types of webbing needed for the knocker on process, such as manmade elastic and rubber webbing, and natural fibres like jute webbing are evaluated
- IAC0209 Types, sizes, quantity and quality of consumables such as clips, tacks, and staples needed for the webbing up process are identified
- IAC0210 Methods for identifying density and thickness of various types of foam required for the foaming up process are described
- IAC0211 Consumables required for the foaming up process are listed
- IAC0212 Raw materials required for the padding and covering of coil springs are listed
- IAC0213 Fabrics used for covering webbing, springs, foam and padding including calico, hessian (burlap), polypropylene, Dacron, cambric and flock are listed
- IAC0214 Principles and concepts of safe materials handling and storage methods are reasoned

**(Weight 20%)**

### **3.2.3. KM-03-KT03: Use of chemicals: adhesives and solvents (10%)**

***Topic elements to be covered include:***

- KT0301 Chemical types, characteristics, properties and purpose
- KT0302 Adhesives and solvents, characteristics and uses, flammable and hazardous, safe handling and storage
- KT0303 Application equipment, tools and dispensers
- KT0304 Measuring and mixing techniques and procedures
- KT0305 Preparation and application techniques
- KT0306 Safety hazards and risks

***Internal Assessment Criteria and Weight***

- IAC0301 The various types of chemicals used in upholstery processes are named
- IAC0302 Characteristics and properties of the chemicals used in upholstery processes are described

- IAC0303 The purpose of each of these chemicals used in the process is explained
- IAC0304 Various types of solvents used in upholstery processes are listed
- IAC0305 Characteristics and properties of these solvents are explained
- IAC0306 The purpose of each solvent used in the process is explained
- IAC0307 The application techniques and sequence used for chemicals and solvents are described
- IAC0308 Safety procedures, hazards and risks associated with handling of chemicals and solvents are described
- IAC0309 Standard operating procedures dealing with spillages, waste and effluent are explained
- IAC0310 Types, usage and care of personal protective equipment used in textile wet product preparation processes are described

***(Weight 10%)***

#### **3.2.4. KM-03-KT04: Upholstery tools and equipment (10%)**

***Topic elements to be covered include:***

- KT0401 Upholstery hand tools for the furniture covering processes: operation, components and parts, uses, safe storage and handling
- KT0402 Pneumatic tools, settings and operation of, components and parts, relationship between parts, uses, safe storage and handling, supply systems for the furniture covering processes
- KT0403 Upholstery electric portable power tools for the furniture covering processes: settings and operation of, components and parts, uses, safe storage and handling
- KT0404 Upholstery covering equipment
- KT0405 Personal protective equipment and materials handling equipment
- KT0406 Tools and equipment maintenance, fault finding and standard operating procedures
- KT0407 Safety measures and mechanisms

***Internal Assessment Criteria and Weight***

- IAC0401 Hand tools used by the cover fitter are identified and respective purposes are explained
- IAC0402 Parts of hand tools are identified the maintenance procedures for each tool are described
- IAC0403 The consequences of not handling, cleaning and maintaining hand tools correctly are assessed
- IAC0404 Pneumatic power tools used by the cover fitter are identified and respective purpose explained
- IAC0405 Parts and safety mechanisms of pneumatic power tools are identified and maintenance procedures for each tool is explained
- IAC0406 Consequences of not handling, cleaning and maintaining pneumatic power tools correctly are assessed

- IAC0407 Electric power tools used by the cover fitter are identified and respective purposes described
- IAC0408 Parts and safety mechanisms of electric power tools are identified and maintenance procedures for each tool is explained
- IAC0409 Consequences of not handling, cleaning and maintaining electric power tools correctly are assessed
- IAC0410 The selection and loading staples, nails, bits and other consumables into the relevant power tool are reasoned

**(Weight 10%)**

### **3.2.5. KM-03-KT05: Upholstery measurements, measuring tools, techniques and calculations (10%)**

***Topic elements to be covered include:***

- KT0501 Principles of accurate measurements during the frame preparation process
- KT0502 Units of measurement and measuring tools and equipment required for the frame preparation process
- KT0503 Measuring techniques
- KT0504 Calculations and angles
- KT0505 Calculating allowances
- KT0506 Problem solving

***Internal Assessment Criteria and Weight***

- IAC0501 Various units, conversions and terminology for measurements, including quantity, deflection, and compressed air volume and pressure are explained and applied
- IAC0502 Calculations required during the upholstery process are explained and applied
- IAC0503 Measuring tools such as steel tape measure, cloth tape measure, squares, steel rules, vernier calliper, templates and patterns, and pressure gauges and their parts are identified and their functions analysed
- IAC0504 Calculations involving dimensions, spacing, quantities, volume, and air pressure using consistent units and conversions and appropriate mathematical operation are completed, recorded and checked
- IAC0505 Consequences of inaccurate measurements on the upholstery process and the output of the department are assessed

**(Weight 10%)**

### **3.2.6. KM-03-KT06: Upholstered furniture manufacturing processes (10%)**

***Topic elements to be covered include:***

- KT0601 Upholstered furniture manufacturing process from raw frame to finished product

- KT0602 Process flow and productivity
- KT0603 Operations in the process flow: knocker on operations, foaming up operations, padding sprung foundations and frames and covering operations
- KT0604 Routing sheets
- KT0605 Cutting lists
- KT0606 Product specifications
- KT0607 Finishing aids

***Internal Assessment Criteria and Weight***

- IAC0601 Workshop processes of producing upholstered items from raw frame to finished product and the implications of design and construction faults on the final product are analysed
- IAC0602 The process of furniture manufacture is briefly outlined
- IAC0603 The operations in furniture manufacture such as : knocking-on operations, foaming-up operations, padding and sprung foundations and frames and covering operations are reviewed
- IAC0604 The role of the routing sheet is described
- IAC0605 Job card information such as component sizes and details, shoulder-to-shoulder size and chemicals to use is explained
- IAC0606 Product specifications are understood and their impact on the manufacturing process is discussed in terms of the process flow and methods that will be used

***(Weight 10%)***

**3.2.7. KM-03-KT07: Upholstery covering principles (10%)**

***Topic elements to be covered include:***

- KT0701 Stretch, tension and deflection of fabric
- KT0702 Spacing of tacks, nails and staples
- KT0703 Uniformity of a pair of arms and wings, pleating and folding and buttoning
- KT0704 Positioning of the cover and alignments
- KT0705 Pattern matching (fabric)
- KT0706 Principles and concepts of preparing and stacking covered frames for the next step in the production process

***Internal Assessment Criteria and Weight***

- IAC0701 Covering principles are identified and the effect thereof on quality end-product is analysed

***(Weight 10%)***

### **3.2.8. KM-03-KT08: Upholstered furniture covering operations and techniques (20%)**

#### ***Topic elements to be covered include:***

- KT0801 Correct sequence and procedure
- KT0802 Slip stitching with circular needle and piping slip stitching
- KT0803 Buttoning
- KT0804 Tufting
- KT0805 Tacking, stapling, nailing
- KT0806 Pleating and folding fabric
- KT0807 Pulling, tensioning and stretching
- KT0808 Preventing tack ties
- KT0809 Shaping “ edges and corners by using hand skills
- KT0810 Measuring “ centralizing the cover, spacing of buttons and studs, front borders of chairs
- KT0811 Attaching decorative trimmings
- KT0812 Cutting in of covers
- KT0813 Foam marking

#### ***Internal Assessment Criteria and Weight***

- IAC0801 Upholstery covering techniques are defined and the application thereof is described
- IAC0802 Using the correct terminology, explain the difference in the sequence of fitting covers to a drop-on and a drop-in dining chair seat
- IAC0803 Using the correct terminology, explain the difference in the sequence of fitting covers to a fully covered and a show wood chair
- IAC0804 Using the correct terminology, explain the difference in the sequence of fitting covers to various prepared frames, including a round pouffe with padded sides, fully upholstered sofa, dining room chair with upholstered back, and an arm chair with a loose seat cushion
- IAC0805 Explain the principles and concepts of stretching techniques when using hand tools, power tools, and tacking strips to attach covers to the frame
- IAC0806 Explain the principles and concepts of blind stitching and blind tacking when attaching covers to the frame
- IAC0807 Identify covering faults in covering materials, consumables and techniques and explain the causes and how to rectify and prevent them
- IAC0808 Explain the principles and concepts of measuring, cutting and attaching the specified fabric to cover the foam and paddings
- IAC0809 Identify the principles of following workplace procedures to handle, stack and store completed furniture for the next procedure and explain the types and consequences of damage to the product

**(Weight 20%)**

### **3.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

*Legal Requirements:*

- OHS compliant

### **3.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- 

[Is this the test question module or learning guide module](#)

## 4. 683401000-KM-04, Advanced Upholstery Furniture Technology, NQF Level 3, Credits 2

### 4.1 Purpose of the Knowledge Modules

The main focus of the learning in this knowledge module is to build an understanding of the

The learning will enable learners to demonstrate an understanding of:

- KM-04-KT01: Historical and technological factors influencing furniture manufacturing processes (10%)
- KM-04-KT02: Furniture types, styles, and construction (15%)
- KM-04-KT03: Equipment and tools used in advanced upholstery of furniture (15%)
- KM-04-KT04: Health and safety in the advanced upholstery department (15%)
- KM-04-KT05: Concepts and principles of measuring and calculations used in the furniture upholstery processes (15%)
- KM-04-KT06: Engineering drawings (15%)
- KM-04-KT07: Samples, prototypes and customer specifications (5%)
- KM-04-KT08: Efficiencies: output, scores and targets (5%)
- KM-04-KT09: Inspection and disposal of finished upholstery products (5%)

### 4.2 Guidelines for Topics

#### 4.2.1. KM-04-KT01: Historical and technological factors influencing furniture manufacturing processes (10%)

***Topic elements to be covered include:***

- KT0101 Types, styles and uses of furniture including upholstered furniture
- KT0102 The main historical factors and eras that influenced the designs of different types of furniture
- KT0103 The industrial revolution and the development of new technologies and furniture making and upholstery materials
- KT0104 The impact of factories on the human resources and their skills

***Internal Assessment Criteria and Weight***

- IAC0101 Describe the main historical factors and eras, such as the voyages of discovery, royalty in Europe, both world wars, the development of craftsmen and designers and their designs
- IAC0102 Describe the impact of the industrial revolution its influence on the development of new materials and technology
- IAC0103 Identify the differences between mass production and upholstery services provided by a small business
- IAC0104 Describe how the establishment of factories historically influenced the lives of the people working in the factories and the skills they needed

**(Weight 10%)**

#### **4.2.2. KM-04-KT02: Furniture types, styles, and construction (15%)**

***Topic elements to be covered include:***

- KT0201 Types and styles of furniture, including upholstery, and their uses
- KT0202 Concepts of ergonomic design and standard dimensions of upholstered furniture
- KT0203 Main furniture construction principles (stability, squareness, ergonomics, measurements, conversions, etc.)
- KT0204 Furniture manufacturing processes flow including materials, parts identification, machining, joints and assembly, frame preparing, upholstery, using the correct terminology
- KT0205 Furniture manufacturing process from raw wood to finished product
- KT0206 Concepts of furniture construction including frame construction, construction of padding and upholstery components
- KT0207 Impact of design and construction faults
- KT0208 Problem solving

***Internal Assessment Criteria and Weight***

- IAC0201 Define the terminology and abbreviations used in the furniture industry
- IAC0202 Identify the parts of various advanced furniture and their construction, using industry terminology
- IAC0203 Describe the mass production process of making furniture from raw wood to finished product with reference to the various departments and their contribution to the final product
- IAC0204 Describe the production process of making upholstered furniture as a small business owner
- IAC0205 The main furniture construction principles are identified and the impact on product quality is reasoned

**(Weight 15%)**

#### **4.2.3. KM-04-KT03: Equipment and tools used in advanced upholstery of furniture (15%)**

***Topic elements to be covered include:***

- KT0301 Types and uses of hand tools
- KT0302 Types and uses of power tools
- KT0303 Types and uses of pneumatic tools
- KT0304 How to use the tools correctly and safely
- KT0305 Settings including pressure settings

- KT0306 Maintenance of different tools (sharpening, lubrication, tension, pressure, etc.)
- KT0307 Correct grease is used on the tools
- KT0308 Correct size staples and nails are used on the machine
- KT0309 Storage of tools
- KT0310 Reading labels and MSDS
- KT0311 Manufacturer specifications and instruction
- KT0312 Lockout devices and safety guards

***Internal Assessment Criteria and Weight***

- IAC0301 Tools are sharpened and stored correctly
- IAC0302 Tools are used according to manufacture instruction
- IAC0303 Caution is exercised while moving and working with tools
- IAC0304 Correct pressure is set on the machine
- IAC0305 Safety pins on the tools are not broken
- IAC0306 Labels on the blade are observed to correspond with the machine specifications

***(Weight 15%)***

**4.2.4. KM-04-KT04: Health and safety in the advanced upholstery department (15%)**

***Topic elements to be covered include:***

- KT0401 BCOE Act
- KT0402 OHS Act
- KT0403 General hazards in the workshop
- KT0404 Fire extinguishers and uses
- KT0405 Evacuation plans and signage in the workshop
- KT0406 Demarcation lines
- KT0407 Safe working procedures in the various machining operations
- KT0408 Machine safety (isolate the machine)
- KT0409 Personal safety (PPC and PPE)
- KT0410 Hazards and incidents
- KT0411 Lock-out devices and procedure

***Internal Assessment Criteria and Weight***

- IAC0401 Routines are carried out safely and in accordance with work requirements

- IAC0402 Any faults identified with equipment are reported to the relevant person.
- IAC0403 Work area is kept free from hazards
- IAC0404 Fire extinguishers are identified and are easily accessible; labels on the fire extinguishers are clear and not tampered with.
- IAC0405 Evacuation plan is studied and understood
- IAC0406 Demarcation lines are adhered to, stacking is done in appropriate places.
- IAC0407 All machines are fitted with safety devices, all foreign objects on the machines are removed.
- IAC0408 Isolator and emergency buttons are tested to be in a good working condition.
- IAC0409 Lock-out devices are available for all the machines
- IAC0410 Relevant personal protective equipment is used in the workshop
- IAC0411 Incident and injuries are reported to the relevant personnel

***(Weight 15%)***

#### **4.2.5. KM-04-KT05: Concepts and principles of measuring and calculations used in the furniture upholstery processes (15%)**

***Topic elements to be covered include:***

- KT0501 Taking accurate measures
- KT0502 Units of measurement
- KT0503 Conversions
- KT0504 Formulae and calculations
- KT0505 Angles and curves
- KT0506 Standard sizes
- KT0507 Allowances and tolerances
- KT0508 Measuring instruments: Tape measure, Vernier, callipers, square
- KT0509 Calibrations
- KT0510 Accuracy and faults

***Internal Assessment Criteria and Weight***

- IAC0501 The application of various formulae in furniture upholstery is explained
- IAC0502 The importance of accuracy on the quality of the work piece is justified
- IAC0503 The effect of inaccuracy and faults are explained
- IAC0504 Measuring equipment are identified and selected for the job

- IAC0505 Correct measuring units are used
- IAC0506 Measuring equipment are used accordingly to get correct sizes
- IAC0507 The importance of the good quality of measuring tapes, Vernier callipers etc. is justified

**(Weight 15%)**

#### **4.2.6. KM-04-KT06: Engineering drawings (15%)**

***Topic elements to be covered include:***

- KT0601 Read and interpret furniture specifications
- KT0602 Sketches and engineering drawings
- KT0603 Layout of drawings
- KT0604 Legends and symbols
- KT0605 Dimensions and labelling
- KT0606 Isometric views
- KT0607 Line types
- KT0608 Hidden details
- KT0609 Solid lines
- KT0610 Projections
- KT0611 To scale drawing
- KT0612 Cutting lists

***Internal Assessment Criteria and Weight***

- IAC0601 Engineering drawings correctly interpreted, taking into account line structures and dimensions.
- IAC0602 All drawing projections are observed
- IAC0603 Scale of drawing is according to specification
- IAC0604 Hidden details are understood and information is applied to the work pieces
- IAC0605 Drawing labels are understood and according to specification, showing all details, chamfers, diameters, radiuses and depths

**(Weight 15%)**

#### **4.2.7. KM-04-KT07: Samples, prototypes and customer specifications (5%)**

***Topic elements to be covered include:***

- KT0701 Definition of product specifications, samples, prototypes and customer specifications

- KT0702 Content of specification sheets
- KT0703 Interpretation of product specifications, sample or prototype
- KT0704 Uses product specifications, sample or prototype
- KT0705 Types of product specifications, sample or prototype

***Internal Assessment Criteria and Weight***

- IAC0701 Understand the product specifications, sample or prototype, lay plan, standard operating procedures and production programme
- IAC0702 The concept of product specifications, sample or prototype is described
- IAC0703 The purpose product specifications, sample or prototype is explained
- IAC0704 The importance of product specifications, sample or prototype in the production process is analysed
- IAC0705 The various aspects of the product specifications, sample or prototype such as description, measurements, materials, technical drawings, etc.) are identified and defined
- IAC0706 Methods of interpretation of product specifications, sample or prototype is reasoned
- IAC0707 Types of product specifications, sample or prototype are listed

***(Weight 5%)***

**4.2.8. KM-04-KT08: Efficiencies: output, scores and targets (5%)**

***Topic elements to be covered include:***

- KT0801 Targets and productivity
- KT0802 Productivity principles and practices
- KT0803 Organizing self and own targets and own time
- KT0804 Recording score and daily output

***Internal Assessment Criteria and Weight***

- IAC0801 The purpose and application of targets are analysed
- IAC0802 Reasons for non-conformance to targets are analysed
- IAC0803 The calculation of individual efficiencies are described
- IAC0804 The processes involved in monitoring and recording daily targets is explained and described
- IAC0805 Techniques to reduce wastage e.g. end losses, remnants, splicing, shading are assessed

***(Weight 5%)***

**4.2.9. KM-04-KT09: Inspection and disposal of finished upholstery products (5%)**

***Topic elements to be covered include:***

- KT0901 Inspection principles
- KT0902 Techniques of disposing according to product type
- KT0903 Quality in manufacturing processes and products

***Internal Assessment Criteria and Weight***

- IAC0901 Inspection principles and practices are defined and the function thereof is explained
- IAC0902 The purpose of final product inspection is described
- IAC0903 Product non-conformance is defined and reasons for the occurrence of non-conformance are analysed
- IAC0904 The importance of reporting non-conformance is justified
- IAC0905 A range of in-company disposal techniques are described and the function thereof is explained

***(Weight 5%)***

**4.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience

*Legal Requirements:*

- OHS compliant

**4.4 Exemptions**

## **5. 683401000-KM-05, Upholstery Pattern and Template Making Principles, Methods and Equipment, NQF Level 3, Credits 5**

### **5.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the important principles and the application thereof in the pattern and template making process

The learning will enable learners to demonstrate an understanding of:

- KM-05-KT01: Overview of pattern and template making for upholstered furniture manufacturing (20%)
- KM-05-KT02: Cutting patterns and templates (5%)
- KM-05-KT03: Pattern and template making principles and technical knowledge (25%)
- KM-05-KT04: Design specifications for patterns and templates (5%)
- KM-05-KT05: Technical drawings, sketches and samples used in the furniture industry (15%)
- KM-05-KT06: Principles of quality and the function of patterns and templates (10%)
- KM-05-KT07: Marking, handling and storing patterns and templates (20%)

### **5.2 Guidelines for Topics**

#### **5.2.1. KM-05-KT01: Overview of pattern and template making for upholstered furniture manufacturing (20%)**

***Topic elements to be covered include:***

- KT0101 Terminology and definitions
- KT0102 Types of patterns and templates
- KT0103 Engineering drawings and interpretation
- KT0104 Function and application of templates and patterns in manufacturing of upholstered furniture
- KT0105 Tools, equipment and materials used in pattern and template making
- KT0106 Raw materials for pattern and template making

***Internal Assessment Criteria and Weight***

- IAC0101 Identify and explain the characteristics and applications of the raw materials used to make patterns and templates
- IAC0102 Functions and uses of templates and patterns are defined

***(Weight 20%)***

#### **5.2.2. KM-05-KT02: Cutting patterns and templates (5%)**

***Topic elements to be covered include:***

- KT0201 Types: for one offs; for multiple use; short term use; long term use
- KT0202 Materials: paper; card; hardboard; plywood; plastic

***Internal Assessment Criteria and Weight***

- IAC0201 Types of cutting patterns and templates are identified and compared
- IAC0202 Material used for pattern and template making are identified and functions are described

***(Weight 5%)***

**5.2.3. KM-05-KT03: Pattern and template making principles and technical knowledge (25%)**

***Topic elements to be covered include:***

- KT0301 Different dimensions (2D and 3D)
- KT0302 3D visualization principles
- KT0303 Perspective
- KT0304 Manipulation principles
- KT0305 Balance and alignment
- KT0306 Symmetry and balance
- KT0307 Measuring and calculations applied in patternmaking
- KT0308 Markings and the matching thereof
- KT0309 Allowances
- KT0310 Upholstery pattern and template making methods and techniques

***Internal Assessment Criteria and Weight***

- IAC0301 Various patternmaking techniques and the application thereof are identified and defined

***(Weight 25%)***

**5.2.4. KM-05-KT04: Design specifications for patterns and templates (5%)**

***Topic elements to be covered include:***

- KT0401 Furniture styles and design features
- KT0402 Manufacturing designs and specifications
- KT0403 Principles of interpreting design specifications for different types and styles of furniture

***Internal Assessment Criteria and Weight***

- IAC0401 Explain the various manufacturing designs, patterns, templates, and drawings used within the upholstery environment

- IAC0402 Differentiate between designs, patterns, templates and drawings, making use of examples
- IAC0403 Identify and explain other features, such as edge rolls, deep buttoning, seats with coil springs, profiled foam seats, and T-cushions, to be added into the design of the patterns and templates
- IAC0404 Interpret the design of the pattern and template according to the component to be manufactured, and explain the consequences of imbalanced or misaligned patterns and templates
- IAC0405 Identify key design characteristics to be taken into consideration when designing patterns and templates

**(Weight 5%)**

#### **5.2.5. KM-05-KT05: Technical drawings, sketches and samples used in the furniture industry (15%)**

***Topic elements to be covered include:***

- KT0501 Types and uses of technical drawings and sketches used in the furniture industry
- KT0502 Interpreting and understanding technical drawing and sketches
- KT0503 Deriving construction features from a technical 2D sketch
- KT0504 Drawing accuracy
- KT0505 Special construction methods or trim/finishing details of furniture
- KT0506 Considering fabric characteristics and performance, and trims and finishings in relation to the design

***Internal Assessment Criteria and Weight***

- IAC0501 Methods for interpreting technical drawings and sketches and deriving construction features are identified and discussed
- IAC0502 Functions and application of technical drawings and sketches are defined
- IAC0503 Requirements for technical drawings, sketches and templates are listed and justified

**(Weight 15%)**

#### **5.2.6. KM-05-KT06: Principles of quality and the function of patterns and templates (10%)**

***Topic elements to be covered include:***

- KT0601 Definition as applicable to patterns and templates for upholstered furniture
- KT0602 National and international standards
- KT0603 Product specifications and deviations
- KT0604 Conformance and non-conformance
- KT0605 Faults and defects: causes and prevention

### ***Internal Assessment Criteria and Weight***

- IAC0601 Identify the quality requirements according to specifications and approved processes
- IAC0602 Explain the concepts of conformance, defective and non-conformance as they apply within the upholstery pattern and template making environment
- IAC0603 Explain ways in which non-conforming components can be identified and discuss how this can be rectified
- IAC0604 Discuss the impact of non-conformance on the employee, organisation and customers
- IAC0605 The principle of quality and deviations from specifications are analysed
- IAC0606 Faults and defects with possible causes are identified and ways to prevent those are evaluated
- IAC0607 Discuss and explain how a pattern maker should identify and handle possible defects in the design specifications or pattern or drawing
- IAC0608 Given a scenario, inspect products to identify and explain possible defects caused by a lack of templates and non-conforming templates and patterns
- IAC0609 Explain the consequences of using defective or incorrect material for the pattern and templates.

***(Weight 10%)***

### **5.2.7. KM-05-KT07: Marking, handling and storing patterns and templates (20%)**

#### ***Topic elements to be covered include:***

- KT0701 Marking and storing patterns and templates
- KT0702 Labelling patterns
- KT0703 Recording of style detail
- KT0704 Recording systems and tracking devices
- KT0705 Markings
- KT0706 Directional cutting indicators

### ***Internal Assessment Criteria and Weight***

- IAC0701 Describe and explain the techniques for marking, handling and storing patterns and templates
- IAC0702 The importance of accurate record keeping is justified and the implications of incorrect information in the footwear pattern engineering process is analysed
- IAC0703 The function of record keeping systems in pattern engineering is explained
- IAC0704 Types of information to be recorded are identified and discussed
- IAC0705 The use of markings and their respective meanings are identified and explained

**(Weight 20%)**

### **5.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience
- 

*Legal Requirements:*

- OHS compliant

### **5.4 Exemptions**

## **6. 683401000-KM-06, Cutting Lay Requirements for Upholstery Fabrics and Materials, NQF Level 3, Credits 3**

### **6.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of tbc

The learning will enable learners to demonstrate an understanding of:

- KM-06-KT01: Properties and characteristics of fabrics, leather and other raw materials used for advanced upholstery (15%)
- KM-06-KT02: Cutting lays (15%)
- KM-06-KT03: Laying up principles (15%)
- KM-06-KT04: Lay planning (15%)
- KM-06-KT05: Process of building up the lay / lay-up methodology (25%)
- KM-06-KT06: Quality of the lay (15%)

### **6.2 Guidelines for Topics**

#### **6.2.1. KM-06-KT01: Properties and characteristics of fabrics, leather and other raw materials used for advanced upholstery (15%)**

***Topic elements to be covered include:***

- KT0101 Types of fabrics used for advanced upholstery
- KT0102 Manufacturing processes of fabrics, leather and materials
- KT0103 Properties and characteristics of fabrics, leather and materials
- KT0104 Testing of fabrics and leather
- KT0105 Fabric and leather quality (flaws and defects)
- KT0106 Labelling of the fabrics and leather
- KT0107 Manual handling of fabric and leather
- KT0108 Handling and storage of fabric and leather
- KT0109 Advanced upholstery end-products

#### ***Internal Assessment Criteria and Weight***

- IAC0101 Visual and mechanical ways of identifying fabrics and leather (e.g. burn test, solubility testing) are described
- IAC0102 Various types of fabrics (natural and synthetics) used in advanced upholstery are identified
- IAC0103 The properties and characteristics of the various fabrics and materials and leather such as comfort, appearance, flame resistance, absorbency, fabric pile and grain lines, stretch, durability, creases and wrinkles, colours and shades, colour and colour variations are described

- IAC0104 Manufacturing processes of fabrics and leather (woven, knits, non-woven, cords, piping) are defined
- IAC0105 Fabric faults are identified and the effect thereof on the end-product is analysed
- IAC0106 Types of flaws and damages such as shading and batching and the effect of flaws and defects on fabric quality is reasoned
- IAC0107 The tagging of flaws and defects on roles of cloth is explained with reference to the allowed number of tags and rejects
- IAC0108 Factors determining the handling of fabrics, leather and materials are identified and explained
- IAC0109 Testing of fabrics and leather such as the shrinkage test and colour fastness test and why it is performed is explained
- IAC0110 The labelling of the fabrics reflecting information on meters, quality, cut number, cloth number and indicating the particular cut is justified
- IAC0111 The importance of fabric and leather quality in the manufacturing process is analysed
- IAC0112 Problems and faults associated with fabrics and leather are identified and possible ways to respond to it is evaluated
- IAC0113 The correct methods of manual handling of fabric with reference to checks and stripes, wrong and right side of the material, patterns and repeat patterns to ensure the quality of the cut upholstery components are described
- IAC0114 The correct handling and storage requirements and practices which will prevent deterioration is justified
- IAC0115 The correct storage methods (storage orientation, humidity, temperature, light intensity) of fabrics are justified
- IAC0116 Problems related to storage (stock-loss, shrinkage, failures, waste) are identified
- IAC0117 Safety precautionary measures related to storage are argued

**(Weight 15%)**

### **6.2.2. KM-06-KT02: Cutting lays (15%)**

***Topic elements to be covered include:***

- KT0201 Types
- KT0202 Cutting lays: to scale, full size
- KT0203 Cutting lay options: single lay; multi-lay
- KT0204 Cutting lay information : fabric width and length; cutting patterns and templates required; quantities; single lay; multi-lay; specific cutting details
- KT0205 Lay planning
- KT0206 Quality of the lay

### ***Internal Assessment Criteria and Weight***

- IAC0201 Understanding the sample, marker, work instructions, standard operating procedures and production programme, lay plan
- IAC0202 Cutting lay options and how to determine cost effective resources use

***(Weight 15%)***

### **6.2.3. KM-06-KT03: Laying up principles (15%)**

#### ***Topic elements to be covered include:***

- KT0301 Inter-marking principles and fabric utilization
- KT0302 Principles of shrinkage, tension, crease free, ply movement
- KT0303 Styles, types, sizes and rating
- KT0304 Meeting lay plan requirements
- KT0305 Style specifications
- KT0306 Various types of lays
- KT0307 Fabric type and colour (identification using batch numbers)

### ***Internal Assessment Criteria and Weight***

- IAC0301 The application and importance of inter-marking principles are analysed with reference to the effect on production efficiency
- IAC0302 Principles of shrinkage, tension, crease free, ply movement are analysed in terms of lay efficiency and quality
- IAC0303 Aspects having an effect on the quality and efficiency of the lay such as types, sizes and styles specifications are analysed and described
- IAC0304 The effect of fabric type and colour on the lay is analysed and solutions are offered

***(Weight 15%)***

### **6.2.4. KM-06-KT04: Lay planning (15%)**

#### ***Topic elements to be covered include:***

- KT0401 Specifications and work ticket
- KT0402 Identification labels
- KT0403 Information on piece ticket
- KT0404 Lay plan or cut sheet
- KT0405 Understanding the sample, marker, work instructions, standard operating procedures and production programme, lay plan

### ***Internal Assessment Criteria and Weight***

- IAC0401 The information on the work ticket or job card is accurately interpreted and the functions described in line with the responsibilities of job role
- IAC0402 The sample, marker, work instructions, standard operating procedures and production programme, lay plan is accurately interpreted and the functions are described
- IAC0403 Work targets are identified and interpreted and any special instructions are identified
- IAC0404 The importance of a work area free from hazards are justified

***(Weight 15%)***

### **6.2.5. KM-06-KT05: Process of building up the lay / lay-up methodology (25%)**

#### ***Topic elements to be covered include:***

- KT0501 Preparing the table for the lay
- KT0502 Securing the lay
- KT0503 End cutting
- KT0504 Accurate placing of the patterns and templates
- KT0505 Splices and use of paper
- KT0506 Identification of fabric faults and defects
- KT0507 Identification of laying-up faults
- KT0508 Fabric laying procedure and stretching techniques
- KT0509 Considering the marker specifications
- KT0510 Moving and handling the lay

### ***Internal Assessment Criteria and Weight***

- IAC0501 Important aspects to consider when preparing the table for the lay are identified and reasoned
- IAC0502 The importance of building an accurate and correct lay applying laying-up principles are argued and the effect on the quality on the end products is justified
- IAC0503 Methods of securing the lay are identified
- IAC0504 Important aspects to consider when securing the lay are reasoned
- IAC0505 End cutting methods are defined and described according to the reasons for use
- IAC0506 Fabric folding procedures are described with reference to implications for quality
- IAC0507 The correct terminology and definitions such as splicing, end-bits, off-cuts, bowing, etc. are given indicating the function of each

- IAC0508 Measuring units and metric system are understood and the application in the laying-up process is described

**(Weight 25%)**

#### **6.2.6. KM-06-KT06: Quality of the lay (15%)**

***Topic elements to be covered include:***

- KT0601 End-allowances
- KT0602 Edge alignment
- KT0603 Fabric tension
- KT0604 Direction of the fabric
- KT0605 Distortion of the lay
- KT0606 Alignment of checks and stripes
- KT0607 Fabric patterns and repeat patterns

***Internal Assessment Criteria and Weight***

- IAC0601 Factors impacting on the quality of the lay such as end-allowances, edge alignment, fabric tension, direction, distortion and alignment of checks and stripes, patterns and repeat patterns are identified and correct procedures are described
- IAC0602 The importance of performing visual inspection procedures to ensure the fabric is free from basic fabric defects are justified
- IAC0603 Laying up allowance is defined and its significance is reasoned
- IAC0604 Application of specified length is described
- IAC0605 The importance of understanding the marker requirements is justified
- IAC0606 The significance of the shading is understood and identified in terms of the quality of the end product

**(Weight 15%)**

### **6.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience

*Legal Requirements:*

- OHS compliant

**6.4 Exemptions**

## **7. 683401000-KM-07, Advanced Covering Techniques for Complex and Exposed Frames, NQF Level 3, Credits 4**

### **7.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of Fit advanced covers to prepared complex and exposed upholstery frames applying advanced covering techniques, visual pleating and hand stitching and stapling / tacking, gluing, buttoning, and channeling techniques

The learning will enable learners to demonstrate an understanding of:

- KM-07-KT01: Advanced cover fitting of upholstered furniture (20%)
- KM-07-KT02: Profiles and visual appearance of complex upholstery furniture (15%)
- KM-07-KT03: Complex and exposed frames for upholstering (15%)
- KM-07-KT04: Upholstery technology related to advanced covering of upholstery (10%)
- KM-07-KT05: Trims and finishings used for advanced covering of upholstery (5%)
- KM-07-KT06: Tools and equipment used for advanced covering of upholstery (10%)
- KM-07-KT07: Advanced covering techniques for complex upholstered furniture (25%)

### **7.2 Guidelines for Topics**

#### **7.2.1. KM-07-KT01: Advanced cover fitting of upholstered furniture (20%)**

***Topic elements to be covered include:***

- KT0101 Definitions and terminology
- KT0102 Technical specifications
- KT0103 Conforming to design standards and quality
- KT0104 Quality, defects and faults (identification, causes and rectification)
- KT0105 Solving problems
- KT0106 Time keeping, effectiveness and efficiency
- KT0107 Waste minimisation

#### ***Internal Assessment Criteria and Weight***

- IAC0101 Advanced cove fitting specifications are correctly interpreted in terms of sample; material type; fabric patterns, sizes and dimensions
- IAC0102 Functions and applications of advanced cover fitting are discussed
- IAC0103 Activities are analysed to identify opportunities to minimize waste and improve production time

***(Weight 20%)***

### **7.2.2. KM-07-KT02: Profiles and visual appearance of complex upholstery furniture (15%)**

***Topic elements to be covered include:***

- KT0201 Types and styles of complex upholstery furniture
- KT0202 Advanced upholstered furniture composition and construction
- KT0203 Furniture design and design requirements
- KT0204 Visual appearance of complex upholstery furniture
- KT0205 Upholstery covering components of complex furniture

***Internal Assessment Criteria and Weight***

- IAC0201 Complex upholstery furniture is analysed for composition and construction
- IAC0202 The importance of appearance of advanced upholstery and how it can be improved is analysed
- IAC0203 Upholstery covering components of complex furniture are identified and the covering sequence is described

***(Weight 15%)***

### **7.2.3. KM-07-KT03: Complex and exposed frames for upholstering (15%)**

***Topic elements to be covered include:***

- KT0301 Types
- KT0302 Uses
- KT0303 Definitions and terminology used in advanced covering
- KT0304 Prepared fabric covering components
- KT0305 Types and application of advanced covering
- KT0306 Specification requirements

***Internal Assessment Criteria and Weight***

- IAC0301 Various types of complex and exposed frames are identified and functions are explained
- IAC0302 Various types and application of advanced covering of complex upholstery is described

***(Weight 15%)***

### **7.2.4. KM-07-KT04: Upholstery technology related to advanced covering of upholstery (10%)**

***Topic elements to be covered include:***

- KT0401 Textiles for advanced covering
- KT0402 Textile design (patterns and stripes)

- KT0403 Leather
- KT0404 Consumables
- KT0405 Quality and defects

***Internal Assessment Criteria and Weight***

- IAC0401 The types, characteristics and properties of textiles and leather are outlined and discussed in term of their purposes, applications and constraints placed on advanced upholstery
- IAC0402 A range of textiles and leather features are analysed and evaluated in terms of opportunities and constraints pertaining to advanced upholstery furniture
- IAC0403 Aspects which can influence the quality of advanced upholstery furniture is evaluated
- IAC0404 The identification of distortions and colour/pattern variations and corrective actions are explained

***(Weight 10%)***

**7.2.5. KM-07-KT05: Trims and finishings used for advanced covering of upholstery (5%)**

***Topic elements to be covered include:***

- KT0501 Finishing methods and techniques
- KT0502 Positioning and appearance
- KT0503 Fitting or securing

***Internal Assessment Criteria and Weight***

- IAC0501 The use of trims and finishings for advanced upholstery furniture is described

***(Weight 5%)***

**7.2.6. KM-07-KT06: Tools and equipment used for advanced covering of upholstery (10%)**

***Topic elements to be covered include:***

- KT0601 Upholstery hand tools
- KT0602 Pneumatic tools
- KT0603 Electric portable power tools
- KT0604 Upholstery covering equipment
- KT0605 Health and safety

***Internal Assessment Criteria and Weight***

- IAC0601 Upholstery hand tools for the furniture covering processes: operation, components and parts, uses, safe storage and handling are explained

- IAC0602 Pneumatic tools, settings and operation of, components and parts, relationship between parts, uses, safe storage and handling, supply systems for the furniture covering processes are explained
- IAC0603 Upholstery electric portable power tools for the furniture covering processes: settings and operation of, components and parts, uses, safe storage and handling are explained
- IAC0604 Upholstery covering equipment settings and operation of, components and parts, uses, safe storage and handling are explained
- IAC0605 Personal protective equipment and materials handling equipment are explained
- IAC0606 Tools and equipment maintenance, fault finding and standard operating procedures are explained
- IAC0607 Safety measures and mechanisms are explained

**(Weight 10%)**

#### **7.2.7. KM-07-KT07: Advanced covering techniques for complex upholstered furniture (25%)**

***Topic elements to be covered include:***

- KT0701 Measuring
- KT0702 Cutting covering materials
- KT0703 Steps and sequence
- KT0704 Alignment and positioning upholstery materials
- KT0705 Visual pleating
- KT0706 Distortions
- KT0707 Tension, fitting and shaping
- KT0708 Securing upholstery materials – centring and spacing of tacks, staples, etc.

***Internal Assessment Criteria and Weight***

- IAC0701 Advanced covering techniques for complex upholstered furniture are identified, described according to steps and sequence and analysed for efficiency
- IAC0702 Advanced covering principles for complex upholstered furniture are identified, described analysed in terms of quality

**(Weight 25%)**

### **7.3 Provider Programme Accreditation Criteria**

***Physical Requirements:***

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience

*Legal Requirements:*

- OHS compliant

**7.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process

## **8. 683401000-KM-08, Advanced Complex Covers for Upholstery, NQF Level 3, Credits 4**

### **8.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of Produce advanced covers to prepared complex and exposed upholstery frames applying advanced covering techniques, visual pleating and hand stitching and stapling / tacking, gluing, buttoning, and channeling techniques

The learning will enable learners to demonstrate an understanding of:

- KM-08-KT01: Advanced complex covers for complex upholstery (10%)
- KM-08-KT02: Faults and problem solving related to advanced, complex covers (15%)
- KM-08-KT03: Raw materials for advanced and complex covers (25%)
- KM-08-KT04: Construction of advanced and complex covers (20%)
- KM-08-KT05: Assembly and sewing process for advanced and complex covers (30%)

### **8.2 Guidelines for Topics**

#### **8.2.1. KM-08-KT01: Advanced complex covers for complex upholstery (10%)**

***Topic elements to be covered include:***

- KT0101 Types
- KT0102 Uses
- KT0103 Design requirements and technical specifications

***Internal Assessment Criteria and Weight***

- IAC0101 Various types of complex covers are identified and functions are explained in terms of design and technical requirements

***(Weight 10%)***

#### **8.2.2. KM-08-KT02: Faults and problem solving related to advanced, complex covers (15%)**

***Topic elements to be covered include:***

- KT0201 Flaws, distortions and colour/pattern variations in the fabric
- KT0202 Inaccurate measurements
- KT0203 Misalignments
- KT0204 Slipping, fraying, inaccuracies, poor seam quality and equipment faults

***Internal Assessment Criteria and Weight***

- IAC0201 Typical faults which may occur during the production of advanced complex covers are identified and prevention and rectification is discussed

***(Weight 15%)***

### **8.2.3. KM-08-KT03: Raw materials for advanced and complex covers (25%)**

#### ***Topic elements to be covered include:***

- KT0301 Leather
- KT0302 Patterned or striped fabric
- KT0303 Fabric pile direction
- KT0304 Other materials
- KT0305 Distortions and colour/pattern variations
- KT0306 Material characteristics and handling requirements

#### ***Internal Assessment Criteria and Weight***

- IAC0301 The types, characteristics and properties of textiles and leather are outlined and discussed in term of their purposes, applications and constraints placed on advanced and complex cover making
- IAC0302 A range of textiles and leather features are analysed and evaluated in terms of opportunities and constraints pertaining to advanced and complex cover making
- IAC0303 Aspects which can influence the quality of advanced and complex cover making is evaluated
- IAC0304 The identification of distortions and colour/pattern variations and corrective actions are explained

***(Weight 25%)***

### **8.2.4. KM-08-KT04: Construction of advanced and complex covers (20%)**

#### ***Topic elements to be covered include:***

- KT0401 Components
- KT0402 Number, size and shape of components
- KT0403 Dimensions and measurements
- KT0404 Use of markers, patterns or templates
- KT0405 Trims and finishings

#### ***Internal Assessment Criteria and Weight***

- IAC0401 The construction of advanced and complex covers are identified, described according to steps and sequence and analysed for efficiency
- IAC0402 Principles for advanced and complex covers are identified, described analysed in terms of quality

***(Weight 20%)***

### **8.2.5. KM-08-KT05: Assembly and sewing process for advanced and complex covers (30%)**

#### ***Topic elements to be covered include:***

- KT0501 Sequence of attaching cover components
- KT0502 Material cutting tolerances and accuracy
- KT0503 Shaping tolerances and accuracy
- KT0504 Component marking tolerances and accuracy
- KT0505 Hand sewing techniques such as slip stitch, ladder stitch and hemming stitch
- KT0506 Machine sewing techniques such as flat, /French and flat fell seams
- KT0507 Gluing, tacking and stapling
- KT0508 Closing methods

#### ***Internal Assessment Criteria and Weight***

- IAC0501 Assembly and sewing process for advanced and complex covers are identified, described according to steps and sequence and analysed for efficiency
- IAC0502 Advanced covering principles for advanced and complex covers are identified, described analysed in terms of quality

***(Weight 30%)***

### **8.3 Provider Programme Accreditation Criteria**

#### ***Physical Requirements:***

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

#### ***Human Resource Requirements:***

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience

#### ***Legal Requirements:***

- OHS compliant

### **8.4 Exemptions**

## **9. 683401000-KM-09, Complex Shaped Cushions and Padded Items, NQF Level 3, Credits 2**

### **9.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of Produce advanced covers to prepared complex and exposed upholstery frames applying advanced covering techniques, visual pleating and hand stitching and stapling / tacking, gluing, buttoning, and channeling techniques

The learning will enable learners to demonstrate an understanding of:

- KM-09-KT01: Complex shaped cushions and padded items (10%)
- KM-09-KT02: Faults and problem solving related to complex shaped cushions and padded items (20%)
- KM-09-KT03: Raw materials for complex shaped cushions and padded items (20%)
- KM-09-KT04: Construction of complex shaped cushions and padded items (20%)
- KM-09-KT05: Cutting, assembly and sewing processes for complex shaped cushions and padded items (30%)

### **9.2 Guidelines for Topics**

#### **9.2.1. KM-09-KT01: Complex shaped cushions and padded items (10%)**

***Topic elements to be covered include:***

- KT0101 Types
- KT0102 Uses
- KT0103 Design requirements and technical specifications

***Internal Assessment Criteria and Weight***

- IAC0101 Various types of complex shaped cushions and padded items are identified and functions are explained in terms of design and technical requirements

***(Weight 10%)***

#### **9.2.2. KM-09-KT02: Faults and problem solving related to complex shaped cushions and padded items (20%)**

***Topic elements to be covered include:***

- KT0201 Flaws, distortions and colour/pattern variations in the fabric
- KT0202 Inaccurate measurements
- KT0203 Mis-alignments
- KT0204 Slipping, fraying, inaccuracies, poor seam quality and equipment faults

***Internal Assessment Criteria and Weight***

- IAC0201 Typical faults which may occur during the production of complex shaped cushions and padded items are identified and prevention and rectification is discussed

***(Weight 20%)***

### **9.2.3. KM-09-KT03: Raw materials for complex shaped cushions and padded items (20%)**

***Topic elements to be covered include:***

- KT0301 Patterned or striped fabric
- KT0302 Fabric pile direction
- KT0303 Distortions and colour/pattern variations
- KT0304 Material characteristics and handling requirements
- KT0305 Linings and fillings

***Internal Assessment Criteria and Weight***

- IAC0301 The types, characteristics and properties of textiles and leather are outlined and discussed in term of their purposes, applications and constraints placed on complex shaped cushions and padded items
- IAC0302 A range of textiles and leather features are analysed and evaluated in terms of opportunities and constraints pertaining to complex shaped cushions and padded items
- IAC0303 Aspects which can influence the quality of complex shaped cushions and padded items is evaluated
- IAC0304 The identification of distortions and colour/pattern variations and corrective actions are explained

***(Weight 20%)***

### **9.2.4. KM-09-KT04: Construction of complex shaped cushions and padded items (20%)**

***Topic elements to be covered include:***

- KT0401 Components
- KT0402 Number, size and shape of components
- KT0403 Dimensions and measurements
- KT0404 Use of markers, patterns or templates
- KT0405 Trims and finishings

***Internal Assessment Criteria and Weight***

- IAC0401 The construction of complex shaped cushions and padded items are identified, described according to steps and sequence and analysed for efficiency

- IAC0402 Principles for complex shaped cushions and padded items are identified, described analysed in terms of quality

**(Weight 20%)**

### **9.2.5. KM-09-KT05: Cutting, assembly and sewing processes for complex shaped cushions and padded items (30%)**

**Topic elements to be covered include:**

- KT0501 Sequence of attaching cover components
- KT0502 Material cutting tolerances and accuracy
- KT0503 Placing and alignment for material cutting
- KT0504 Marking of components
- KT0505 Shaping tolerances and accuracy
- KT0506 Component marking tolerances and accuracy
- KT0507 Sewing methods
- KT0508 Application of trims and decorative finishes
- KT0509 Closing methods “ types and uses

**Internal Assessment Criteria and Weight**

- IAC0501 Assembly and sewing process for complex shaped cushions and padded items are identified, described according to steps and sequence and analysed for efficiency
- IAC0502 Advanced covering principles for complex shaped cushions and padded items are identified, described analysed in terms of quality

**(Weight 30%)**

### **9.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience

*Legal Requirements:*

- OHS compliant

### **9.4 Exemptions**

## 10. 683401000-KM-10, Deep Buttoning of Upholstered Furniture, NQF Level 3, Credits 5

### 10.1 Purpose of the Knowledge Modules

The main focus of the learning in this knowledge module is to build an understanding of the

The learning will enable learners to demonstrate an understanding of:

- KM-10-KT01: Deep buttoning and diamond buttoning (15%)
- KM-10-KT02: Preparation for buttoning and deep buttoning processes (10%)
- KM-10-KT03: Buttoning and deep buttoning principles and methods (35%)
- KM-10-KT04: Raw materials and equipment used in various types of buttoning (25%)
- KM-10-KT05: Buttoning and deep buttoning quality (15%)

### 10.2 Guidelines for Topics

#### 10.2.1. KM-10-KT01: Deep buttoning and diamond buttoning (15%)

**Topic elements to be covered include:**

- KT0101 Definition and terminology
- KT0102 Define the terminology used when producing upholstered furniture components with buttoning or tufting
- KT0103 Types and application of buttoning
- KT0104 Specification requirements

**Internal Assessment Criteria and Weight**

- IAC0101 Deep buttoning and diamond buttoning specification is correctly interpreted in terms of sample; material type; button type; button size
- IAC0102 Functions and applications of deep buttoning such as armchair or settees, headboards, box pouffes, office or reception seating are discussed

**(Weight 15%)**

#### 10.2.2. KM-10-KT02: Preparation for buttoning and deep buttoning processes (10%)

**Topic elements to be covered include:**

- KT0201 Principles of constructing templates for box, square and deep diamond buttoned seat backs, arms and seats
- KT0202 Concepts and principles of drawing up cutting and lay plans for square, diamond and box patterns and button covers and base covers
- KT0203 Types of templates that need to be constructed for box, square and deep diamond buttoned seat backs, arms and seats

### ***Internal Assessment Criteria and Weight***

- IAC0201 Interpret specifications, calculate allowances and draw up cutting and lay plans for square, diamond and box patterns and button covers and base covers
- IAC0202 Describe the types of templates that need to be constructed for box, square and deep diamond buttoned seat backs, arms and seats
- IAC0203 Explain the sequence in which the diamond dimension of the template is transferred to the foam, and the correct allowance around the frame
- IAC0204 Describe the various ways in which the foam can be prepared for diamond buttoning.

***(Weight 10%)***

### **10.2.3. KM-10-KT03: Buttoning and deep buttoning principles and methods (35%)**

#### ***Topic elements to be covered include:***

- KT0301 Range of buttoning processes, methods and techniques
- KT0302 Button preparation methods and attaching techniques
- KT0303 Principles of diamond, square, box, and deep diamond buttoning and tufting.
- KT0304 Types of knots used when deep buttoning
- KT0305 Concepts and principles of buttoning plans for square, diamond and box patterns
- KT0306 Principles of the sequence in which the diamond dimension of the template is transferred to the foam, and the correct allowance around the frame
- KT0307 Principles and concepts of diamond, square, box and deep diamond buttoning

### ***Internal Assessment Criteria and Weight***

- IAC0301 Identify and explain the difference between diamond, square, box, and deep diamond buttoning and tufting.
- IAC0302 Identify the types of knots used when deep buttoning, and explain the reasons for using different knots

***(Weight 35%)***

### **10.2.4. KM-10-KT04: Raw materials and equipment used in various types of buttoning (25%)**

#### ***Topic elements to be covered include:***

- KT0401 Raw materials and equipment, including needles, twine, foam, drill, and different types of buttons and their component parts
- KT0402 Identify the hand tools and their functions
- KT0403 The parts of the button press
- KT0404 Tools and equipment used for a variety of buttoning processes

- KT0405 Buttoning material types and their uses
- KT0406 Concepts and principles of plans to determine the amount of fabric and allowances required for the base cover and for the button covers

***Internal Assessment Criteria and Weight***

- IAC0401 Identify the raw materials and equipment, including needles, twine, foam, drill, and different types of buttons and their component parts
- IAC0402 Identify the parts and explain the relationship between the parts of the button press

***(Weight 25%)***

**10.2.5. KM-10-KT05: Buttoning and deep buttoning quality (15%)**

***Topic elements to be covered include:***

- KT0501 Buttoning faults and rectification
- KT0502 Quality issues and problems
- KT0503 Quality faults and operational issues that can be identified during the buttoning process
- KT0504 Deep buttoning faults and rectification

***Internal Assessment Criteria and Weight***

- IAC0501 Describe quality faults that can be identified during the process, including problems with resources, raw materials and design.
- IAC0502 Identification and rectification of deep buttoning faults and how to correct these

***(Weight 15%)***

**10.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience or NQF 2 58227 with 2 years of experience

*Legal Requirements:*

- OHS compliant

**10.4 Exemptions**

## **11. 683401000-KM-11, Upholstered Furniture and Prototype Making Principles, NQF Level 4, Credits 13**

### **11.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the underlying principles to the upholsterer trade and the manufacturing and reengineering of upholstery prototypes and doing repairs

The learning will enable learners to demonstrate an understanding of:

- KM-11-KT01: Furniture and upholstered furniture (20%)
- KM-11-KT02: Upholstered furniture manufacturing processes (30%)
- KM-11-KT03: Standards, quality and science (50%)

### **11.2 Guidelines for Topics**

#### **11.2.1. KM-11-KT01: Furniture and upholstered furniture (20%)**

##### ***Topic elements to be covered include:***

- KT0101 Origin of furniture
- KT0102 Furniture types and styles
- KT0103 Uses and functionality
- KT0104 Major factors that influenced change in furniture design and manufacturing processes
- KT0105 Traditional and modern upholstered furniture materials and technologies

##### ***Internal Assessment Criteria and Weight***

- IAC0101 Types of furniture are described with reference to their function and the main materials they are constructed from, including examples of solid wood furniture, furniture made from composite board products, joinery products, domestic, and office, commercial and outdoor furniture.
- IAC0102 The major socio-economic developments that influenced furniture design in the 19th and mid-20th centuries (1800 – 1941), with reference to the: growth of the middle classes in Europe and America, Arts and Crafts Movement, impact of the Victorian Era and the Industrial Revolution on the furniture designer-maker, the period before World War I and the Art Nouveau, Bauhaus, and Art Deco movements, and new technologies like dowels, fibreboard and plywood and standard board sizes introduced between the world wars (1918 – 1938) are listed and described.
- IAC0103 The rise of the Age of Modernism (1942 – present day) and explain how socio-economic and psycho-physical needs of consumers and factory workers are met by technological innovations such as computer aided design (CAD), and computer aided manufacturing (CAM) with computer numerically controlled (CNC) machines to speed up production, standardise quality, and remove repetitive movements that cause harm to workers is described.
- IAC0104 Identify influential furniture designers and trends, including but not limited to: British (Tudor, Thomas Chippendale, Art Nouveau), French (Louis XIV, Art Deco, Le Corbusier, Thonet), Italian (Gio Ponti), Scandinavian (Gustavian), German (Bauhaus), American (Campaign furniture, Charles and Ray Eames, Quaker), African are listed and their respective influences are compared

- IAC0105 Traditional and modern raw materials used to construct upholstered furniture foundations (coir, hessian webbing, straw, horse hair, helical springs, no-sag / zig zag springs, foam, riempie), and covers (natural, synthetic) are compared.

**(Weight 20%)**

### **11.2.2. KM-11-KT02: Upholstered furniture manufacturing processes (30%)**

**Topic elements to be covered include:**

- KT0201 Principles and concepts of the upholstered furniture value chain
- KT0202 General principles (i.e. product viability and sustainability)
- KT0203 Concepts of upholstered furniture design construction design and components
- KT0204 Definitions and terminology used in the process
- KT0205 Upholstered furniture manufacturing process and production flow
- KT0206 Process flow charts
- KT0207 Manufacturing process problems, constraints and their implications

**Internal Assessment Criteria and Weight**

- IAC0201 The upholstered furniture value chain is described and sketched
- IAC0202 Industry accepted terms used in upholstered furniture manufacturing are listed and defined
- IAC0203 Names and abbreviations of parts and components of upholstered furniture frames, foundations and covers are identified and defined, including show wood, fully upholstered, simple frame, complex frame and motion furniture.
- IAC0204 The manufacturing processes for at least one example each of show wood, simple frame, fully upholstered, complex frame and motion furniture are distinguished by means of a flow diagram
- IAC0205 Batch manufacturing, mass manufacturing and customised one-off manufacturing processes are compared
- IAC0206 Types of problems and constraints in the value chain are identified, and the impact each will have on the manufacturing process is assessed

**(Weight 30%)**

### **11.2.3. KM-11-KT03: Standards, quality and science (50%)**

**Topic elements to be covered include:**

- KT0301 Principles and concepts of science and standards associated with health, safety and ergonomics
- KT0302 International and national standard setting bodies
- KT0303 Principles and concepts of scientific testing

- KT0304 Concepts of tolerances and making allowances when pattern making
- KT0305 Principles of standard dimensions
- KT0306 Principles of industry and workplace quality specifications
- KT0307 Process of controlling and assuring quality specifications

***Internal Assessment Criteria and Weight***

- IAC0301 Principles and concepts of using scientific research to set laws, standards and guidelines associated with health, safety and ergonomics for upholstered furniture are described
- IAC0302 The application of international, national, industry-specific and workplace-specific standards in the work place is explained
- IAC0303 A minimum of two scientific tests each for upholstery webbing, springs, foam, adhesives, power tools and their consumables, synthetic fabric, hardware and finished products are identified and discussed
- IAC0304 Tolerances for raw materials are identified and how to allow for it when setting quality standards for new products is explained
- IAC0305 Principles of standard dimensions for furniture and upholstered furniture are explained and illustrated with sketches
- IAC0306 Differences between quality specifications, quality control and quality assurance are differentiated
- IAC0307 Work place health, safety and environmental conditions that can negatively affect the production process and the quality of materials and the final product are identified
- IAC0308 Implications of poor quality processes in the workplace with reference to internal customers and processes, and external customers are analysed

***(Weight 50%)***

**11.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

*Legal Requirements:*

- OHS compliant

**11.4 Exemptions**

## **12. 683401000-KM-12, Raw Materials, Consumables, Tools and Equipment Used in Manufacturing of Upholstered Furniture Prototypes, NQF Level 4, Credits 8**

### **12.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the raw materials, consumables, tools and equipment used in the manufacturing of upholstery prototypes, bespoke upholstery furniture and bulk production of upholstery furniture

The learning will enable learners to demonstrate an understanding of:

- KM-12-KT01: Raw materials and consumables for upholstered furniture prototypes: Frame preparation (25%)
- KM-12-KT02: Raw materials and consumables for upholstered furniture prototypes: Upholstery covers (25%)
- KM-12-KT03: Chemicals used in manufacturing of upholstery furniture (15%)
- KM-12-KT04: Hand and power tools and consumables used in upholstery prototype manufacturing (35%)

### **12.2 Guidelines for Topics**

#### **12.2.1. KM-12-KT01: Raw materials and consumables for upholstered furniture prototypes: Frame preparation (25%)**

***Topic elements to be covered include:***

- KT0101 Types, variations and uses of springs, webbing and alternative materials and consumables for modern frame preparation
- KT0102 Specifications, characteristics and properties of different types of upholstery foam
- KT0103 Principles of the composition and manufacturing of foam
- KT0104 Raw material flaws and defects and their causes and impact on quality
- KT0105 Safe handling, care and storage requirements
- KT0106 Waste management

***Internal Assessment Criteria and Weight***

- IAC0101 Raw materials types, variations and functions used in the frame making process is evaluated with reference to characteristics and properties
- IAC0102 Raw material flaws and defects and their causes and impact on quality is analysed
- IAC0103 Waste management principles are explained

***(Weight 25%)***

#### **12.2.2. KM-12-KT02: Raw materials and consumables for upholstered furniture prototypes: Upholstery covers (25%)**

***Topic elements to be covered include:***

- KT0201 Types and uses of natural and man-made cover materials and fabrics
- KT0202 Characteristics and properties of natural and man-made cover materials and fabrics
- KT0203 Specific requirements for cutting and stitching patterned or striped fabric
- KT0204 Specific requirement for the cutting and stitching of leather
- KT0205 Flaws and defects and their causes and impact on quality
- KT0206 Safe handling, care and storage requirements
- KT0207 Waste management

***Internal Assessment Criteria and Weight***

- IAC0201 Raw materials types, variations and functions used in the cover making process is evaluated with reference to characteristics and properties
- IAC0202 Raw material flaws and defects and their causes and impact on quality is analysed
- IAC0203 Waste management principles are explained

***(Weight 25%)***

**12.2.3. KM-12-KT03: Chemicals used in manufacturing of upholstery furniture (15%)**

***Topic elements to be covered include:***

- KT0301 Types of adhesives, solvents and chemicals
- KT0302 Characteristics, properties and material safety data sheets (MSDS) for adhesives and chemicals
- KT0303 Composition, structure, and properties of substances and of the chemical processes and transformations that they undergo.
- KT0304 Uses of chemicals and their interactions, danger signs, production techniques, and disposal methods
- KT0305 Occupational health and safety, hazardous chemicals and personal protective equipment
- KT0306 Incidents and accidents
- KT0307 Safe handling and storage requirements and implications of not complying
- KT0308 Waste management

***Internal Assessment Criteria and Weight***

- IAC0301 Principles and concepts of safe handling, storage, and management of hazardous substances, including non-flammable adhesives and solvents, fabric treated with non-flammable products, foam, MDF, airborne fumes, dust, and compressed air.
- IAC0302 Identification of hazardous substances in the upholstery prototyping process (non-flammable adhesives and solvents, fabric treated with non-flammable products, polyurethane foam,

latex, MDF, airborne fumes, dust, compressed air) are explained, and the mitigation of risks is elaborated

**(Weight 15%)**

#### **12.2.4. KM-12-KT04: Hand and power tools and consumables used in upholstery prototype manufacturing (35%)**

**Topic elements to be covered include:**

- KT0401 Occupational health, safety and personal protective equipment
- KT0402 Types, functions and safe handling of hand tools used for prototyping
- KT0403 Types, functions and safe handling of power tools used for prototyping
- KT0404 Parts identification, attachments, and standard setting and operating procedures for power tools
- KT0405 Types, functions, uses, variations, flaws and defects of consumables used with hand and power tools when prototyping
- KT0406 Tool cleaning and maintenance, fault finding and storage
- KT0407 Implications of not following the manufacturer's and workplace safe handling, care and storage requirements

**Internal Assessment Criteria and Weight**

- IAC0401 Hand tools required for upholstery prototype making process are identified and respective parts and functions are described
- IAC0402 Power tools upholstery prototype making process are identified and respective parts, attachments and functions are described
- IAC0403 Implications of not following the manufacturer's and workplace safe handling, care and storage requirements are analysed
- IAC0404 Tools and equipment used to produce fully upholstered furniture frame components, including the panel saw, band saw, radial arm saw, jig saw, multi-borer (optional), drill press, portable powered drill and screwdriver, screws, adhesives and dowels, wood rasp, sanding paper and clamps are listed and described in terms of functions
- IAC0405 Tools, equipment and consumables needed to produce show wood furniture frame components, including the cross cut / radial arm saw, rip saw, surface planer, thickness planer, band saw, spindle moulder, drill press, profile sanding machines, portable powered drill and screwdriver, screws, adhesives and dowels and clamps are listed and described in terms of functions

**(Weight 35%)**

### **12.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

*Legal Requirements:*

- OHS compliant

**12.4 Exemptions**

## **13. 683401000-KM-13, Manufacturing Principles and Processes for Upholstered Furniture Prototype Manufacturing and Reengineering, NQF Level 4, Credits 17**

### **13.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the manufacturing principles, methods and processes for upholstered furniture prototype manufacturing and reengineering used in the manufacturing of upholstery prototypes, bespoke upholstery furniture and bulk production of upholstery furniture

The learning will enable learners to demonstrate an understanding of:

- KM-13-KT01: Principles of manufacturing upholstered furniture prototypes (10%)
- KM-13-KT02: Prototype component construction: Frame construction (20%)
- KM-13-KT03: Prototype component construction: Modern seat construction (20%)
- KM-13-KT04: Prototype component construction: Traditional seat construction (20%)
- KM-13-KT05: Testing, evaluation and finalisation of upholstery prototypes (15%)
- KM-13-KT06: Product reengineering (15%)

### **13.2 Guidelines for Topics**

#### **13.2.1. KM-13-KT01: Principles of manufacturing upholstered furniture prototypes (10%)**

***Topic elements to be covered include:***

- KT0101 Terminology and definitions
- KT0102 Principles and concepts of prototype manufacturing
- KT0103 Methods of prototype modelling
- KT0104 Specifications and design concepts, including 2D and 3D technical drawings, renderings, sketches, samples, cutting and sewing plans, and written work instructions
- KT0105 Prototyping process, procedures and role players and techniques
- KT0106 Definition and purpose of dry-run / mock-up assembly
- KT0107 Standards set out by prototyping with reference to foams, fabrics and frames
- KT0108 Sequence of prototyping manufacturing
- KT0109 Accuracy, detail and faults

***Internal Assessment Criteria and Weight***

- IAC0101 Principles of manufacturing upholstered prototypes are discussed referring to correct definitions and using correct terminology
- IAC0102 Requirements for and function of specifications, designs, drawings, cutting and sewing plans, and written work instructions are identified and elaborated
- IAC0103 Standards applicable to the manufacturing of upholstery prototypes are discussed

- IAC0104 Implications of product faults not identified through the prototype and pattern making process are analysed

**(Weight 10%)**

### **13.2.2. KM-13-KT02: Prototype component construction: Frame construction (20%)**

***Topic elements to be covered include:***

- KT0201 Terminology, definitions and abbreviations of upholstered furniture frame components and parts
- KT0202 Raw materials used to make frames for simple, complex, fully upholstered and show wood furniture
- KT0203 Types and functions of machines used to make frames
- KT0204 Principles and concepts of joints and joint construction in upholstered furniture frames
- KT0205 Principles and concepts of upholstered furniture frame construction with reference to cutting lists and tolerances, routing sheets, material selection and fault finding, quality requirements and materials handling
- KT0206 Personal protective equipment and hazards and unsafe acts in the frame making area
- KT0207 Principles and concepts of making furniture frames for mechanical or powered movement attachments (reclining, lifting, heating or vibrating mechanisms)

***Internal Assessment Criteria and Weight***

- IAC0201 Parts and components of furniture frames are defined using industry accepted terminology and abbreviations
- IAC0202 Raw materials used for manufacturing of upholstery frames are identified and described with reference to respective characteristics and properties including hard woods (oak, blackwood), soft woods (pine), composite (particle) board, medium density fibre board, coated boards (melamine), veneered boards, plywood, and hard board
- IAC0203 Personal protective equipment and hazards and unsafe acts in the frame making area are analysed
- IAC0204 Materials and processes used to prepare, stain and coat solid wood components to achieve the required finish are listed and uses explained
- IAC0205 Joints commonly used in upholstered furniture frames in respect of show wood dining and armchairs, fully upholstered furniture and ottomans are evaluated in terms of function and durability
- IAC0206 Construction of frames for mechanical or powered movement attachments (reclining, lifting, heating or vibrating mechanisms) are evaluated in terms of function and durability
- IAC0207 Faults that can affect the performance of frame, including loose knots, assembly that is not square, wood worm and bacteria, soft wood that is not strong enough to take the strain of the suspension materials, design faults such as the width or thickness of the rails, and poor quality boards are identified, analysed and corrective actions are suggested

**(Weight 20%)**

### **13.2.3. KM-13-KT03: Prototype component construction: Modern seat construction (20%)**

#### ***Topic elements to be covered include:***

- KT0301 Principles of constructing shaped seats using modern springs and twine / cord tying and knotting techniques
- KT0302 Differentiate between densities of foam used to construct components for upholstered furniture seats, arms, backs
- KT0303 Principles of selecting and layering different densities of foam to construct components for complex upholstered furniture seats, arms, backs including wing back chairs
- KT0304 Safety and correct handling of hand and powered cutting tools to prepare and cut foam
- KT0305 Personal protective equipment and safe preparation and spray gun setting processes for applying adhesive to foam
- KT0306 Principles of applying adhesives to foam using manual and spraying techniques
- KT0307 Principles of manual foam pulling techniques to construct and shape layers of foam to form upholstered furniture components

#### ***Internal Assessment Criteria and Weight***

- IAC0301 Parts and components of modern seats are defined using industry accepted terminology and abbreviations
- IAC0302 Raw materials used for manufacturing of modern seats are identified and described with reference to respective characteristics and properties
- IAC0303 Principles of modern seat construction for prototypes are described with reference to handling, cutting and manual foam pulling techniques

***(Weight 20%)***

### **13.2.4. KM-13-KT04: Prototype component construction: Traditional seat construction (20%)**

#### ***Topic elements to be covered include:***

- KT0401 Terminology, definitions and abbreviations
- KT0402 Principles and concepts of traditional frame preparation, raw materials and consumables
- KT0403 Hand tools and power tools used for traditional upholstered furniture foundations
- KT0404 Principles and concepts of arranging and attaching webbing and coil springs, and tying springs to produce seats of different shapes and firmness
- KT0405 Principles of inserting and arranging padding around and over the springs to produce the desired seat shape
- KT0406 Principles of sprung edges and edge rolls

#### ***Internal Assessment Criteria and Weight***

- IAC0401 Parts and components for traditional seat construction are defined using industry accepted terminology and abbreviations
- IAC0402 Raw materials used for manufacturing of traditional seats are identified and described with reference to respective characteristics and properties
- IAC0403 Methods of positioning and interweaving webbing and the arranging, attaching and stuffing of coil springs to produce seats of different shapes and firmness are described and analysed for effectiveness
- IAC0404 Various types and functions of knots and knotting and tying off techniques used when working with coil sprung foundations are described and analysed for effectiveness
- IAC0405 Function of edge rolls and sprung edges are described and analysed for effectiveness

**(Weight 20%)**

### **13.2.5. KM-13-KT05: Testing, evaluation and finalisation of upholstery prototypes (15%)**

***Topic elements to be covered include:***

- KT0501 Significance of prototyping for troubleshooting potential problems prior to production
- KT0502 Principles and methods of testing, evaluating and modifying prototypes
- KT0503 Implications of faults not identified through the prototype process in production, sale and use of the product
- KT0504 Importance of engaging with prospective users and producers of the production model
- KT0505 Principles and concepts of calculating and evaluating resource and capacity costs and capabilities
- KT0506 Principles of adjusting, adapting, or re-engineering prototypes

***Internal Assessment Criteria and Weight***

- IAC0501 The significance of prototyping for troubleshooting potential problems prior to production is analysed and evaluated
- IAC0502 Implications of faults not identified through the prototype process in production, sale and use of the product is reasoned

**(Weight 15%)**

### **13.2.6. KM-13-KT06: Product reengineering (15%)**

***Topic elements to be covered include:***

- KT0601 Definitions and terminology used when re-engineering upholstered furniture
- KT0602 Principles and concepts of re-engineering, re-prototyping and re-designing upholstered furniture prototypes
- KT0603 Factors influencing the decision to re-engineer prototypes

- KT0604 Fault finding and root cause analysis of the process, design or materials faults
- KT0605 Record keeping

#### ***Internal Assessment Criteria and Weight***

- IAC0601 Distinguish between and explain the concepts of re-engineering, re-prototyping and re-designing upholstered furniture prototypes
- IAC0602 Describe and compare the cost of re-engineering prototypes with the cost of not doing so, and explain the impact on productivity levels
- IAC0603 Describe manufacturing process faults, including resource availability and capacity, organizational constraints such as health and safety considerations, and technical and time constraints that will result in process re-engineering
- IAC0604 Describe the materials performance faults that could result in re-prototyping
- IAC0605 List the product design faults including function and ergonomic design considerations, that require re-designing
- IAC0606 Define the concept of root cause analysis and explain how to apply it to identify prototype process, design and material faults
- IAC0607 Explain the function and importance of record keeping and regular team meetings to review work plans to report on progress, delays, quality issues and assembly methods

***(Weight 15%)***

### **13.3 Provider Programme Accreditation Criteria**

#### *Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

#### *Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

#### *Legal Requirements:*

- OHS compliant

### **13.4 Exemptions**

## **14. 683401000-KM-14, Cutting and Sewing of Fabric and Material for Upholstered Furniture Prototypes, NQF Level 2, Credits 10**

### **14.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the cover making and covering methods for upholstered furniture prototypes and repairs principles and methods used in the manufacturing of upholstery prototypes, bespoke upholstery furniture and bulk production of upholstery furniture

The learning will enable learners to demonstrate an understanding of:

- KM-14-KT01: Lay and cut upholstery covers (50%)
- KM-14-KT02: Cover making for upholstered prototypes: Sewing of components (50%)

### **14.2 Guidelines for Topics**

#### **14.2.1. KM-14-KT01: Lay and cut upholstery covers (50%)**

***Topic elements to be covered include:***

- KT0101 Cutting patterns and templates: for one offs; for multiple use; short term use; long term use.
- KT0102 Cutting plans
- KT0103 Cutting lays: to scale; full size.
- KT0104 Fabric types and characteristics: patterned; stripe; repeat pattern; stretch; pile
- KT0105 Cutting lay options : single lay; multi-lay; fabric widths and lengths; cutting table; width and lengths; warp and weft requirements
- KT0106 Cutting lay information: fabric width and length; cutting patterns and templates required; quantities; single lay; multi-lay; specific cutting details
- KT0107 Cutting: methods tools and equipment

#### ***Internal Assessment Criteria and Weight***

- IAC0101 Principles of maths and geometry to sketch the cutting plan, taking into consideration the characteristics and properties of the fabric are applied
- IAC0102 Principles of preparing, measuring, laying and securing fabric on the cutting table for cutting are defined
- IAC0103 Principles of positioning and marking out patterns for single and multi-lay cutting are discussed
- IAC0104 Safe and correct handling of hand and powered cutting tools are analysed
- IAC0105 Terminology and abbreviations for naming and marking cut cover components are described

***(Weight 50%)***

#### **14.2.2. KM-14-KT02: Cover making for upholstered prototypes: Sewing of components (50%)**

##### ***Topic elements to be covered include:***

- KT0201 Upholstery cut components and parts
- KT0202 Sewing machines types, functions and capabilities
- KT0203 Different types and styles of stitching
- KT0204 Sewing machine parts and attachments identification and their uses
- KT0205 Flaws and defects of consumables and sewing (raw material faults, process faults and product faults)
- KT0206 Quilting methods
- KT0207 Sewing work station housekeeping

##### ***Internal Assessment Criteria and Weight***

- IAC0201 Types of machines including lock stitching, over locking and multi-needle industrial sewing machines are identified and functions are explained
- IAC0202 Different types and styles of stitching are identified and functions are explained
- IAC0203 Sewing machine parts and attachments and their uses are identified and functions are explained
- IAC0204 Flaws and defects of consumables and sewing (raw material faults, process faults and product faults) are identified and the effect on the production, sale and use of the product is analysed
- IAC0205 Sewing work station housekeeping is described in terms of safety, ergonomics and contamination of sewn covers

***(Weight 50%)***

#### **14.3 Provider Programme Accreditation Criteria**

##### ***Physical Requirements:***

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

##### ***Human Resource Requirements:***

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

##### ***Legal Requirements:***

- OHS compliant

#### **14.4 Exemptions**

## **15. 683401000-KM-15, Cover Making and Covering Methods for Upholstered Furniture Prototypes and Repairs, NQF Level 4, Credits 15**

### **15.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the cover making and covering methods for upholstered furniture prototypes and repairs principles and methods used in the manufacturing of upholstery prototypes, bespoke upholstery furniture and bulk production of upholstery furniture

The learning will enable learners to demonstrate an understanding of:

- KM-15-KT01: Covering techniques for prototypes (60%)
- KM-15-KT02: Repairs to upholstery furniture (40%)

### **15.2 Guidelines for Topics**

#### **15.2.1. KM-15-KT01: Covering techniques for prototypes (60%)**

***Topic elements to be covered include:***

- KT0101 Types of covers and components
- KT0102 Design requirements
- KT0103 Consumables
- KT0104 Decorative finishing items
- KT0105 Covering sequence
- KT0106 Covering techniques
- KT0107 Stitching techniques
- KT0108 Quality inspection

#### ***Internal Assessment Criteria and Weight***

- IAC0101 Types of upholstery covers are identified and explained
- IAC0102 Cover components are analysed in terms of the design specifications
- IAC0103 Types, dimensions, quantity and quality of consumables and decorative finishing items required are discussed in terms of functions and characteristics
- IAC0104 Methods of covering prepared frame / frame components in the correct order to achieve the desired visual effect are evaluated
- IAC0105 Methods of fitting, aligning, stretching, pulling, shaping, pleating and folding are evaluated in terms of use and effectiveness
- IAC0106 Methods of back tacking, stapling and slip stitching are evaluated in terms of use and effectiveness
- IAC0107 Principles of quality inspections for uniformity of pairs of seat components, covering technique faults, material defects, faults and flaws are evaluated in terms of application and function

**(Weight 60%)**

### **15.2.2. KM-15-KT02: Repairs to upholstery furniture (40%)**

**Topic elements to be covered include:**

- KT0201 Causes of damage and the different types of damage
- KT0202 Repair methods and preparation requirements for different types of repair: disassemble; re-assemble
- KT0203 Repair requirements: major; minor; single; multiple; fabric; to upholstery cover; to foundations; to trimmings; to ancillary fittings
- KT0204 Organisational requirements: repair costs; wastage; re-use of materials
- KT0205 Resources: upholstery materials and fabrics; equipment and tools; operator availability
- KT0206 Materials: fillings; foams; support materials; fixing materials; covers; ancillary fittings; atoning materials; suspensions; trimmings; edgings; linings
- KT0207 Determining repair cost

**Internal Assessment Criteria and Weight**

- IAC0201 Causes and different types of damage are identified
- IAC0202 Repair methods and related repair cost is justified.
- IAC0203 Organisational constraints, quality requirements and repair procedures and policies are justified
- IAC0204 Preparation requirements for different types of repair are analysed

**(Weight 40%)**

### **15.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

*Legal Requirements:*

- OHS compliant

### **15.4 Exemptions**

## **16. 683401000-KM-16, Technical Specifications and Configuration of Upholstery Production Equipment for Manufacturing, NQF Level 4, Credits 10**

### **16.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the principles and methods for developing technical specifications and configuration of upholstery production equipment for manufacturing used in the manufacturing of upholstery prototypes, bespoke upholstery furniture and bulk production of upholstery furniture

The learning will enable learners to demonstrate an understanding of:

- KM-16-KT01: Technical specifications and production requirements for taking upholstery prototype into full production (17%)
- KM-16-KT02: Implications of manufacturing constraints and limitations on production specifications (17%)
- KM-16-KT03: Completing technical drawings, specification sheets and technical packages (17%)
- KM-16-KT04: Machines, tools and equipment used in the manufacturing of upholstery furniture (10%)
- KM-16-KT05: Line balancing: Skills and machines (15%)
- KM-16-KT06: Provide technical advice on upholstery operations in order to assist in solving production problems and progress production operations (10%)
- KM-16-KT07: Prevention and solving of manufacturing problems (14%)

### **16.2 Guidelines for Topics**

#### **16.2.1. KM-16-KT01: Technical specifications and production requirements for taking upholstery prototype into full production (17%)**

##### ***Topic elements to be covered include:***

- KT0101 Understanding design specifications
- KT0102 Interpreting approved prototypes
- KT0103 Principles of identifying and organizing resources to make the prototype
- KT0104 Prototype information
- KT0105 Calculating and evaluating resource capacity and capabilities, process costs, and production capabilities and time management
- KT0106 Principles of considering productivity factors when making upholstered furniture prototypes and patterns

##### ***Internal Assessment Criteria and Weight***

- IAC0101 Information to be considered when compiling technical specifications for the manufacturing of upholstered furniture are listed and the implications thereof are analysed

***(Weight 17%)***

### **16.2.2. KM-16-KT02: Implications of manufacturing constraints and limitations on production specifications (17%)**

#### ***Topic elements to be covered include:***

- KT0201 Internal organisational constraints which may have an effect on producing required design.
- KT0202 Organisational and national standards relevant to the furniture industry.
- KT0203 Costing of work required and how to identify resource requirement implications.
- KT0204 Specification dimensions, tolerances, limits, accuracy required, organisational quality.
- KT0205 The use and limitations of equipment, materials, finish, fittings, limitations and expertise of self and individuals and groups participating.
- KT0206 Production and process methods.
- KT0207 Organisational procedures and practices.
- KT0208 Work flow routing techniques.

#### ***Internal Assessment Criteria and Weight***

- IAC0201 Constraints and limitations in terms of organisational policies, cost factor, national standards, skills and equipment capabilities, production methods are analysed and the effect thereof on the full manufacturing or the upholstered product is evaluated

***(Weight 17%)***

### **16.2.3. KM-16-KT03: Completing technical drawings, specification sheets and technical packages (17%)**

#### ***Topic elements to be covered include:***

- KT0301 Functions and application of specification sheets, technical drawings, templates, patterns, cutting plans and samples
- KT0302 Supporting information required for technical specifications
- KT0303 Techniques for completing specification sheets and technical packages
- KT0304 Requirements for production sketches
- KT0305 Trade drawings
- KT0306 Cutting orders
- KT0307 Pattern and template making details (construction, materials and finishings)
- KT0308 Filing and storage of finished patterns

#### ***Internal Assessment Criteria and Weight***

- IAC0301 The functions and application of specification sheets and technical packages are defined and analysed

- IAC0302 Information to be included in the specification sheets and technical packages are defined and evaluated
- IAC0303 The importance of accuracy of information in the specification sheets and technical packages is reasoned
- IAC0304 The implications of incorrect information in the specification sheets and technical packages are analysed

**(Weight 17%)**

#### **16.2.4. KM-16-KT04: Machines, tools and equipment used in the manufacturing of upholstery furniture (10%)**

***Topic elements to be covered include:***

- KT0401 Types of machines, tools and equipment
- KT0402 Attachments and fittings
- KT0403 Functions and uses
- KT0404 Safety and safety mechanisms
- KT0405 Machine capabilities and capacity
- KT0406 Inspection of equipment to determine condition
- KT0407 Manufacturer specifications and manuals
- KT0408 Faults and malfunctions
- KT0409 Machine settings and adjustments

***Internal Assessment Criteria and Weight***

- IAC0401 Machines, tools and equipment used in the manufacturing of upholstery furniture are listed and the respective functions are identified
- IAC0402 Machine capabilities and capacity are analysed in terms of the production of furniture
- IAC0403 The effect of machine condition on production is reasoned

**(Weight 10%)**

#### **16.2.5. KM-16-KT05: Line balancing: Skills and machines (15%)**

***Topic elements to be covered include:***

- KT0501 Worker skills and competence and availability
- KT0502 Line set up
- KT0503 Ergonomics
- KT0504 Task allocation

- KT0505 Machine capabilities

***Internal Assessment Criteria and Weight***

- IAC0501 Line balancing principles are explained in terms of preventing bottlenecks and efficient use of resources

***(Weight 15%)***

**16.2.6. KM-16-KT06: Provide technical advice on upholstery operations in order to assist in solving production problems and progress production operations (10%)**

***Topic elements to be covered include:***

- KT0601 Technical advice and information to production workers and other departments.
- KT0602 Identification and reporting of potential improvements to production operations.
- KT0603 Providing information and advice on materials, methods and techniques.
- KT0604 Evaluating production problems and identifying opportunities for improvement.
- KT0605 Taking account of health and safety requirements.
- KT0606 Coaching to develop skills required

***Internal Assessment Criteria and Weight***

- IAC0601 Methods for providing information and advice are described
- IAC0602 Methods for identifying opportunities for improvement are described
- IAC0603 Methods for improving skills are described

***(Weight 10%)***

**16.2.7. KM-16-KT07: Prevention and solving of manufacturing problems (14%)**

***Topic elements to be covered include:***

- KT0701 Problems revealed through processes or outcomes.
- KT0702 Causes (equipment, fabric and other material, operator, product design)
- KT0703 Identifying problems at an early stage limiting the consequences of production problems
- KT0704 Short interval monitoring of quality
- KT0705 Investigating and diagnosing the causes of problems.
- KT0706 Fast action to limit effects of problem
- KT0707 Finding, implementing and monitoring solutions to production problems

***Internal Assessment Criteria and Weight***

- IAC0701 Root cause analysis techniques for investigating and diagnosing problems, causes and solutions are analysed

**(Weight 14%)**

### **16.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

*Legal Requirements:*

- OHS compliant

### **16.4 Exemptions**

## **17. 683401000-KM-17, Communication and Interpersonal Relations in the Workplace, NQF Level 4, Credits 7**

### **17.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the communication and interpersonal relations in the Workplace in the upholstery manufacturing department

The learning will enable learners to demonstrate an understanding of:

- KM-17-KT01: Productivity and continuous improvement (25%)
- KM-17-KT02: Basic work study principles and supervision for manufacturing of upholstered furniture (25%)
- KM-17-KT03: Interaction and communication in the workplace (25%)
- KM-17-KT04: Occupational health, safety and environmental compliance (15%)
- KM-17-KT05: Record keeping and administration in the upholstery prototype department (10%)

### **17.2 Guidelines for Topics**

#### **17.2.1. KM-17-KT01: Productivity and continuous improvement (25%)**

***Topic elements to be covered include:***

- KT0101 Concepts and principles of productivity and operations management
- KT0102 Industry productivity terminology and definitions
- KT0103 Managing the 6-Ms of the manufacturing process
- KT0104 Manufacturing and product cost calculations
- KT0105 Production process measurements and industry and workplace performance standards
- KT0106 Skills development
- KT0107 Production and quality targets and continuous improvement

***Internal Assessment Criteria and Weight***

- IAC0101 Concepts of productivity and the process of transforming inputs into services and products for internal and external customers are described.
- IAC0102 Industry productivity terminology and abbreviations are defined
- IAC0103 The 6-Ms of, managing money, materials, people (men), machines and production methods to produce goods and services of the right quality and quantity, at the right time, and at minimum cost for target markets are discussed
- IAC0104 The cost of production in terms of fixed and variable costs is explained
- IAC0105 Purposes of the production process measurement techniques of work study, method study, time study and motion study are defined and explained

- IAC0106 The importance of developing the skills of team members and its impact on productivity is discussed
- IAC0107 The principle of efficient and cost effective (productive) manufacturing processes using basic productivity calculations is described

**(Weight 25%)**

### **17.2.2. KM-17-KT02: Basic work study principles and supervision for manufacturing of upholstered furniture (25%)**

***Topic elements to be covered include:***

- KT0201 Principles and techniques for time management
- KT0202 Principles and methods for work organization, control and management
- KT0203 Supervision and teamwork principles
- KT0204 Basic time and method study principles
- KT0205 The role of time and method study in productivity
- KT0206 Production and process planning and principles
- KT0207 Production line set-up, machine settings and preparation for optimum productivity
- KT0208 Inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of furniture
- KT0209 Target setting and motivation
- KT0210 The parameters within which activities need to be scheduled

***Internal Assessment Criteria and Weight***

- IAC0201 Productivity principles are identified, defined and the application in the workplace is evaluated
- IAC0202 Work organization, control and management principles are identified, defined and the application in the workplace is evaluated
- IAC0203 Supervision and teamwork principles are identified, defined and the application in the workplace is evaluated
- IAC0204 Basic time and method study principles are identified, defined and the application in the workplace is evaluated
- IAC0205 Production and process planning and principles are identified, defined and the application in the workplace is evaluated
- IAC0206 Target setting and motivation principles are identified, defined and the application in the workplace is evaluated

**(Weight 25%)**

### **17.2.3. KM-17-KT03: Interaction and communication in the workplace (25%)**

#### ***Topic elements to be covered include:***

- KT0301 Terminology and concepts of interpersonal communication skills
- KT0302 Verbal and non-verbal methods of communicating job instructions, specifications , processes and procedures in the workplace
- KT0303 Principles of interdepartmental communication in the workplace, and the scope and limits of individual and collective roles, responsibilities and duties of role players in the prototyping process
- KT0304 Causes and results of poor interpersonal and interdepartmental communication and understanding
- KT0305 Preparing for and presenting written, spoken and multi-media presentations during the prototyping and pattern making process
- KT0306 Organogram and reporting structures

#### ***Internal Assessment Criteria and Weight***

- IAC0301 Principles and concepts of communication are defined
- IAC0302 Non-verbal and verbal communication methods used in the process of manufacturing upholstered furniture, including safety signs and symbols, hand written, printed and barcoded instructions and production information, technical process flowcharts, memos, emails, text messages, flashing lights, sketches, practical demonstrations and presentations, engineering drawings and specifications are identified and justified
- IAC0303 Interdepartmental communication and team work in the workplace, and explain the responsibilities and duties of team members, team leaders and other role players and give examples of the outcome of poor communication between them are assessed
- IAC0304 Communication skills needed for effective prototyping and pattern making, including listening, negotiation, conflict resolution, presentation, and feedback skills are identified and defined
- IAC0305 The use electronic technologies to prepare written reports and multimedia presentations are described

***(Weight 25%)***

### **17.2.4. KM-17-KT04: Occupational health, safety and environmental compliance (15%)**

#### ***Topic elements to be covered include:***

- KT0401 Environment and waste
- KT0402 Safety and health
- KT0403 Housekeeping
- KT0404 Principles and concepts of compliance with the Occupational Health and Safety Act and Regulations

#### ***Internal Assessment Criteria and Weight***

- IAC0401 Principles of compliance and non-compliance are defined and described

- IAC0402 Occupational health, safety and environmental regulations and legislation pertaining to upholstery manufacturing are explained
- IAC0403 Principles of waste minimisation is defined
- IAC0404 The function of housekeeping is justified

**(Weight 15%)**

**17.2.5. KM-17-KT05: Record keeping and administration in the upholstery prototype department (10%)**

**Topic elements to be covered include:**

- KT0501 Types and uses of production records
- KT0502 The record keeping system and filing
- KT0503 Principles of accuracy and availability (easy access)
- KT0504 Traceability

**Internal Assessment Criteria and Weight**

- IAC0501 Record keeping principles are defined
- IAC0502 Administration activities in the prototype department is explained

**(Weight 10%)**

**17.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

*Human Resource Requirements:*

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

*Legal Requirements:*

- OHS compliant

**17.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process

- No exemptions, but the module can be achieved in full through a normal RPL process
- No exemptions, but the module can be achieved in full through a normal RPL process

## **18. 683401000-KM-18, Leadership and supervision in the upholstery departments, NQF Level 3, Credits 4**

### **18.1 Purpose of the Knowledge Modules**

The main focus of the learning in this knowledge module is to build an understanding of the supervisory principles applied in the upholstery manufacturing departments

The learning will enable learners to demonstrate an understanding of:

- KM-18-KT01: Supervisory principles (10%)
- KM-18-KT02: Supervision (10%)
- KM-18-KT03: Written, non-verbal and verbal communication (15%)
- KM-18-KT04: Training and coaching (15%)
- KM-18-KT05: Interpersonal relations (15%)
- KM-18-KT06: Basic labour relations (15%)
- KM-18-KT07: Productivity, motivation and performance (10%)
- KM-18-KT08: Basic research principles (10%)

### **18.2 Guidelines for Topics**

#### **18.2.1. KM-18-KT01: Supervisory principles (10%)**

***Topic elements to be covered include:***

- KT0101 Planning, leading, organising and control
- KT0102 Leadership
- KT0103 Team work and group dynamics
- KT0104 Monitor and assess colleagues work

#### ***Internal Assessment Criteria and Weight***

- IAC0101 The concepts and principles of planning, leading, organising and control are described
- IAC0102 Planning, leading, organising and control practices are described
- IAC0103 The importance of planning, leading, organizing and control is discussed
- IAC0104 Leadership is defined to illustrate its importance in the industry
- IAC0105 The characteristics of a leader is listed and discussed to highlight the qualities and behaviours that make good leaders but also qualities and behaviours that good leaders actively avoid
- IAC0106 The principles of leadership is given and reviewed
- IAC0107 The best practices of leadership are stated and their relevance to the industry is explained

- IAC0108 The composition of a team is outlined with special attention given to the team composition most prevalent in the current workplace
- IAC0109 Characteristics of a well-functioning team are listed
- IAC0110 Job maturity of individuals in a team is reviewed to assess the effect on team functionality
- IAC0111 The role of a team in a forestry workplace is delineated
- IAC0112 The dynamics of a well-functioning team is explored
- IAC0113 The influence of different team members is discussed with regards to the effect on team performance
- IAC0114 Methods that encourage team cohesion are depicted
- IAC0115 External and internal factors which impact teamwork is identified

***(Weight 10%)***

### **18.2.2. KM-18-KT02: Supervision (10%)**

***Topic elements to be covered include:***

- KT0201 Supervisory Styles
- KT0202 Role of the Supervisor
- KT0203 Ethics
- KT0204 Acknowledging when to call second opinion

#### ***Internal Assessment Criteria and Weight***

- IAC0201 Different supervisory styles are listed and their impact on team dynamics are explained
- IAC0202 Different supervisory styles are compared and contrasted with respect to their impact on individual team members
- IAC0203 The position of the supervisor in the structure of the workplace is described in terms of roles and duties
- IAC0204 The importance of role clarification, accountability and responsibility is explained to show how it will affect the position and efficacy of the supervisor
- IAC0205 Supervisory techniques and methods are described and contrasted to highlight the advantages and disadvantages of each
- IAC0206 The principles of delegation and authority are defined and their role in supervision is outlined
- IAC0207 The importance of correctly formulating instructions are reviewed in terms of the impact thereof on team members
- IAC0208 The cultural and social pressures on supervisors are identified to show the influence thereof on supervisor
- IAC0209 The role of the code of conduct in the workplace is assessed

- IAC0210 The importance of being honest and truthful even if it means some ramifications is motivated
- IAC0211 The cost of dishonesty to company is explained
- IAC0212 The concepts of nepotism, bribery, theft, corruption, favouritism, honesty, intimidation and instigation, confidentiality, rumour mongering and witch craft and their effects on team members and the workplace are discussed

**(Weight 10%)**

### **18.2.3. KM-18-KT03: Written, non-verbal and verbal communication (15%)**

***Topic elements to be covered include:***

- KT0301 The role of verbal, non-verbal and written communication in supervision
- KT0302 Methods of communication
- KT0303 Information, data, record keeping and reporting
- KT0304 Communication in the workshop
- KT0305 How communication in the workshop affects client impression
- KT0306 Communication with the client

***Internal Assessment Criteria and Weight***

- IAC0301 The basic principles of communication are outlined
- IAC0302 Information is appraised in terms of importance, urgency and priority
- IAC0303 The importance of urgent and timely information sharing is reviewed
- IAC0304 Communication flow in the workplace is evaluated for efficiency and scope
- IAC0305 Reporting structures in the workplace are described
- IAC0306 Barriers to communication are identified and ways of overcoming them are related
- IAC0307 The terminology used to describe communication are clearly defined
- IAC0308 Communication methods and techniques are compared in terms of efficiency, relevancy and appropriateness
- IAC0309 Types and purpose of communication technology such as radios and cell phones are reviewed
- IAC0310 The role and purpose of whistles, sirens, hand signals and flags are listed
- IAC0311 The role and purpose of other forms of communication such as bulletins, newsletters are given
- IAC0312 Types of records are described and related to the data they are most suited to store.
- IAC0313 Types of data encountered in the workplace are reviewed

- IAC0314 Principles of record keeping are delineated
- IAC0315 The importance and the role of recording, reporting and presentation are given
- IAC0316 The importance of timeous reporting of is argued
- IAC0317 Legal requirements related to the keeping and storage of records are outlined in terms of actions necessary for compliancy
- IAC0318 Reporting and report formats are identified
- IAC0319 The steps to ensure data integrity, accuracy, legibility and currency are defined

**(Weight 15%)**

#### **18.2.4. KM-18-KT04: Training and coaching (15%)**

***Topic elements to be covered include:***

- KT0401 Importance of skilled workers in terms of the job requirements
- KT0402 Training and coaching methods and techniques
- KT0403 The purpose of skills needs analysis to determine a coaching or training programme for the individual
- KT0404 The repetitive nature of coaching and training
- KT0405 Role of the supervisor in relation to training and coaching

***Internal Assessment Criteria and Weight***

- IAC0401 The concept of training and coaching is explained
- IAC0402 The role and responsibilities of the supervisor are identified and explained
- IAC0403 Different methods and techniques are explained

**(Weight 15%)**

#### **18.2.5. KM-18-KT05: Interpersonal relations (15%)**

***Topic elements to be covered include:***

- KT0501 Cultural diversity and social pressures
- KT0502 Types of attitudes and the effect thereof on the team cohesion and achievement
- KT0503 The influence of work ethos on team performance and methods to enhance it
- KT0504 The influence of role clarification on team performance and methods to enhance it
- KT0505 The characteristics of the professional interpersonal relationship with the team workers and the effects on the workers motivation
- KT0506 Gauging own performance within the scope of the performance of the team

***Internal Assessment Criteria and Weight***

- IAC0501 Different types of interpersonal relations are identified and explained
- IAC0502 The importance of the team performance and methods are defined
- IAC0503 The role of culture diversity are discussed

***(Weight 15%)***

**18.2.6. KM-18-KT06: Basic labour relations (15%)**

***Topic elements to be covered include:***

- KT0601 Basic understanding of legislation (BCE, OHS) and compliance criteria
- KT0602 Conflict handling methods
- KT0603 Disciplinary procedures
- KT0604 Concept of discipline
- KT0605 The role of discipline and disciplinary measures
- KT0606 Role of labour relations and legislation in the workplace

***Internal Assessment Criteria and Weight***

- IAC0601 Describe the influence of representation in the workplace on team performance and methods to enhance it
- IAC0602 Describe the influence of safety, health, environment and quality, on team performance and methods to enhance it
- IAC0603 Describe principles of Labour relations with examples
- IAC0604 Evaluate grievance procedures

***(Weight 15%)***

**18.2.7. KM-18-KT07: Productivity, motivation and performance (10%)**

***Topic elements to be covered include:***

- KT0701 The importance of productivity to keep sustainable workplace
- KT0702 The importance of motivation
- KT0703 The importance of performance and quality output to grow client base

***Internal Assessment Criteria and Weight***

- IAC0701 Discuss principles of productivity.
- IAC0702 Describe the aspects of productivity (time, people, money, resources, and quality) and how it relates to each other.

- IAC0703 Discuss the importance of standards and targets setting for the workplace and the purpose of daily targets, standards and quality.
- IAC0704 Define performance.
- IAC0705 Explain the implication of not applying a performance measurement system.
- IAC0706 Explain the importance of performance standards and measurement.
- IAC0707 Indicate ways and means to encourage and support performance.
- IAC0708 Discuss principles of motivation.

**(Weight 10%)**

### **18.2.8. KM-18-KT08: Basic research principles (10%)**

***Topic elements to be covered include:***

- KT0801 Basic research methods
- KT0802 Basic research tools
- KT0803 Manufacturer sources
- KT0804 Writing up of findings
- KT0805 Basic data analysis

***Internal Assessment Criteria and Weight***

- IAC0801 Appropriate basic research method is selected and described for sourcing information
- IAC0802 Basic data analysis methods are described

**(Weight 10%)**

### **18.3 Provider Programme Accreditation Criteria**

***Physical Requirements:***

- The provider must have lesson plans and structured learning material or provide learners with access to structured learning material that addresses all the topics in all the knowledge modules.

***Human Resource Requirements:***

- Lecturer/learner ratio of 1:20.
- Qualifications of lecturers: 5 years relevant experience

***Legal Requirements:***

- OHS compliant

### **18.4 Exemptions**

## SECTION 3B: PRACTICAL SKILL MODULE SPECIFICATIONS

### List of Practical Skill Module Specifications

- 683401000-PM-01, Prepare Foundations for Upholstered Frames, NQF Level 2, Credits 20
- 683401000-PM-02, Cover Prepared Upholstered Frames with Fabric and Other Materials, NQF Level 2, Credits 20
- 683401000-PM-03, Perform Advanced Covering Operations for Complex and Exposed Frames, NQF Level 3, Credits 10
- 683401000-PM-04, Perform Deep Buttoning Procedures to Decorate Upholstered Furniture, NQF Level 3, Credits 10
- 683401000-PM-05, Produce Cutting Lay Requirements for Cutting of Upholstered Cover Components, NQF Level 3, Credits 4
- 683401000-PM-06, Produce upholstery patterns and templates for the upholstery frame preparation and cutting departments, NQF Level 3, Credits 16
- 683401000-PM-07, Lay Out, Measure, Cut and Sew Upholstery Materials According to Templates or Specifications and Optimising Material Usage, NQF Level 2, Credits 20
- 683401000-PM-08, Manufacture Upholstery Bespoke Furniture or Prototypes for Bulk Production, NQF Level 4, Credits 30
- 683401000-PM-09, Repair and Re-Upholster Upholstery Furniture, NQF Level 4, Credits 10
- 683401000-PM-10, Inspect Upholstery Furniture During Various Stages of the Manufacturing Process to Ensure Conformance to Quality Standards, NQF Level 4, Credits 15
- 683401000-PM-11, Reengineer Upholstery Furniture Products to Address Development or Manufacturing Defects, NQF Level 4, Credits 15
- 683401000-PM-12, Develop Technical Specifications and Line Setup Requirements for Manufacturing of Upholstery Furniture, NQF Level 4, Credits 15
- 683401000-PM-13, Guide Teams in the Upholstery Manufacturing Departments to Achieve Set Targets and Outputs, NQF Level 3, Credits 4

## 1. 683401000-PM-01, Prepare Foundations for Upholstered Frames, NQF Level 2, Credits 20

### 1.1 Purpose of the Practical Skill Modules

The focus of the learning in this module is on providing the learner an opportunity to Install, arrange and secure springs, webbing and padding to furniture frames and prepare frames for final covering by attaching foam and or padding to the sprung and webbed frame

The learner will be required to:

- PM-01-PS01: Identify and categorise typical upholstered furniture products and accessories according to styles and uses
- PM-01-PS02: Identify various types of furniture frame construction and frame components using the correct terminology
- PM-01-PS03: Identify raw materials for the springing and webbing of frames processes using the correct terminology
- PM-01-PS04: Identify raw materials and consumables for attaching foam and or padding to sprung and webbed frames using the correct terminology
- PM-01-PS05: Identify and safely apply hand tools and equipment used in the upholstery frame preparation process
- PM-01-PS06: Identify and safely operate pneumatic and power tools and equipment used in the upholstery frame preparation process
- PM-01-PS07: Read and interpret material safety data sheets (MSDS) of chemicals (adhesives and solvents) to determine and apply the correct safety, handling and application procedures
- PM-01-PS08: Clean chemical spillages with consideration to occupational health and safety and environmental impact
- PM-01-PS09: Safely start, operate and stop a compressor
- PM-01-PS10: Apply measuring techniques and calculations applicable to frame preparing
- PM-01-PS11: Plan and prepare for attaching foundations to the given frames
- PM-01-PS12: Interweave and fasten strips of webbing to the backs and seats of furniture, using hand tools and fasteners (Webbing up)
- PM-01-PS13: Attach zig zag springs to the seats and backs and arms of furniture frames
- PM-01-PS14: Attach coil springs to the seats and backs and arms of furniture frames
- PM-01-PS15: Identify and inspect frames against specifications and repair and report defects ensuring quality
- PM-01-PS16: Correctly attach foam and or padding to the seats and backs and arms of sprung and webbed frames using the correct tools, adhesives, solvents and raw materials and applying all safety measures
- PM-01-PS17: Identify and inspect padded frames against specifications and repair and report defects ensuring quality

- PM-01-PS18: Apply safety measures (related to tools, power tools, raw material and work area)
- PM-01-PS19: Perform routine cleaning, quality change cleaning and housekeeping of the work area and routine maintenance of tools and equipment
- PM-01-PS20: Record and report frame preparation production information

## **1.2 Guidelines for Practical Skills**

### **1.2.1. PM-01-PS01: Identify and categorise typical upholstered furniture products and accessories according to styles and uses**

#### ***Scope of Practical Skill***

Given a range of samples or photos of different wooden furniture products (styles, types, uses,) and accessories, the learner must be able to:

- PA0101 Identify and categorise the upholstered furniture product according to types, uses and styles
- PA0102 Identify and categorise the upholstered furniture products according to the raw materials used in the manufacturing process
- PA0103 Identify and categorise the accessories according to the uses and furniture design

#### ***Applied Knowledge***

- AK0101 Furniture types, uses, styles and designs

#### ***Internal Assessment Criteria***

- IAC0101 Furniture products are accurately identified according to the various categories
- IAC0102 Accessories identified is relevant to the specified use in the furniture manufacturing process

### **1.2.2. PM-01-PS02: Identify various types of furniture frame construction and frame components using the correct terminology**

#### ***Scope of Practical Skill***

Given examples or pictures of various shapes, styles and types of frames and product specifications the learner must be able to:

- PA0201 Identify and distinguish between different frame constructions according to types and styles
- PA0202 Identify and distinguish the components of upholstered seats
- PA0203 Identify and distinguish between frames according to purpose
- PA0204 Identify and distinguish between the four back styles of furniture frames
- PA0205 Identify seating frames according to the three main types
- PA0206 Identify the wood and board products used in the construction of the frame(s) according to their application
- PA0207 Identify and distinguish between joints and bracings used in the frame construction

- PA0208 Identify and distinguish between the long, short and end grains of wood and their ability to hold staples and nails

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0201 Frame components are correctly identified for fully upholstered and show wood seats
- IAC0202 Seating frames are identified according to their purpose (such as resting and lounging, dining and writing, transport, occasional use)
- IAC0203 Furniture frames are identified according to the four back styles (camel, shell, pillow, curved)
- IAC0204 Seating frames are identified according to the three main types (mono-frame, knock down frame, modular frame)
- IAC0205 Board components and wood used to make furniture frames are identified according to their application (MDF, chip board, soft wood, hard wood)
- IAC0206 Joints and bracings used in frame construction are identified (mortise and tenon joints, dowelled joints, housing and stapled joints, lap joints to lengthen rails, finger joint bracings like cross rails, bracing rails, corner blocks, etc.)
- IAC0207 The long, short and end grains of solid wood frame components are identified

### **1.2.3. PM-01-PS03: Identify raw materials for the springing and webbing of frames processes using the correct terminology**

#### ***Scope of Practical Skill***

Given examples or pictures of raw material such as webbing, various types of springs of various sizes, various shapes and types of frames, and consumables such as clips, nails, staples and cover cloths the learner must be able to:

- PA0301 Read and interpret labels and codes to identify raw materials
- PA0302 Identify and distinguish between types of webbing according to colour, sizes and elasticity by interpreting the codes and manually testing the elasticity
- PA0303 Conduct a visual identification and categorise various types of springs according to gauges, uses and sizes
- PA0304 Identify and distinguish between types, sizes and application of staples, nails and tacks
- PA0305 Identify and distinguish between the various types of clips that can be used to attach springs and webbing to a frame
- PA0306 Conduct a visual identification of various types of cloth used to cover springs and webbing

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0301 Codes and labels are correctly interpreted to identify a range of raw materials used in the process of attaching webbing and springs to a frame

- IAC0302 Various types of webbing are identified and categorised in terms of application
- IAC0303 Various types of springs are identified according to sizes, shapes and application (flat, full arc, semi-arc, zig-zag springs) and tension and compression springs, metal and rubber.
- IAC0304 Various types of consumables used to attach clips, webbing, and springs to frames are identified according to type, size and application
- IAC0305 Various types of clips used to attach springs to frames are identified according to type, size and application
- IAC0306 Various types of cloths are identified and categorised in terms of application

#### **1.2.4. PM-01-PS04: Identify raw materials and consumables for attaching foam and or padding to sprung and webbed frames using the correct terminology**

##### ***Scope of Practical Skill***

Given examples or pictures of raw material such as such as coir, kapok, wadding, man-made fibre (foam) and cover cloths the learner must be able to:

- PA0401 Read and interpret labels and codes to identify raw materials
- PA0402 Identify and distinguish between types of foam according to correct densities, correct sizes, correct shapes or profile, the feel of the foam
- PA0403 Identify and distinguish between types of adhesives and solvents, characteristics and uses, flammable and hazardous, safe handling and storage
- PA0404 Interpret codes and labels of raw materials according to a coding system

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

- IAC0401 Codes and labels are correctly interpreted to identify a range of raw materials used in the process of attaching foam and padding to a sprung frame
- IAC0402 Various types of padding are identified and categorised in terms of application
- IAC0403 Various types of foam are identified according to sizes, shapes and application, density and application
- IAC0404 Various types of solvents and adhesives are identified according to type and application
- IAC0405 Various types of cloths are identified and categorised in terms of application

#### **1.2.5. PM-01-PS05: Identify and safely apply hand tools and equipment used in the upholstery frame preparation process**

##### ***Scope of Practical Skill***

Given PPE and a range of upholstery hand tools and equipment (such as hammers, shears, scissors, strainers, mallets, chisels, tack and staple lifters, trimming knives, rasps, pincers, bolt cutters, wire bender, tensioning hook, springing needles, and spring cutter) used in the frame preparation process the learner must be able to:

- PA0501 Identify, select and apply PPE appropriate to the task
- PA0502 Identify, select and apply hand tools to measure and mark, attach nails, tacks and other consumables to frames
- PA0503 Identify, select and apply hand tools to remove sharp edges from frames
- PA0504 Identify, select and apply hand tools used to strip frames by removing nails, staples, tacks from frames
- PA0505 Identify, select and apply hand tools used to cut and bend springs
- PA0506 Identify, select and apply hand tools used to tension webbing and springs
- PA0507 Identify, select and apply upholstery cutting tools
- PA0508 Identify, select and apply upholstery needles used for blind and slip stitching
- PA0509 Check hand tools and equipment for defects, sharpness and safety and take appropriate steps to rectify problems

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0501 Measuring tools are identified and the purpose explained
- IAC0502 Tools used to remove sharp edges from frames are identified and applied using the correct technique
- IAC0503 Tools used for attaching corner blocks and knocking in nails and tacks are identified and applied using the correct technique
- IAC0504 Tools used for stripping nails and tacks from wooden frames are identified and applied using the correct technique
- IAC0505 Tools used to cut springs and bend the ends are identified and applied using the correct technique
- IAC0506 The tool used to tension webbing is identified and applied using the correct technique
- IAC0507 Tools used to cut upholstery fabrics, twine, thread, webbing and foam are identified and applied using the correct technique
- IAC0508 Upholstery needles used for blind and slip stitching are identified and applied using the correct technique
- IAC0509 Tools are checked to ensure that they are fit for purpose, cleaned and stored appropriately

### **1.2.6. PM-01-PS06: Identify and safely operate pneumatic and power tools and equipment used in the upholstery frame preparation process**

#### ***Scope of Practical Skill***

Given a range of pneumatic and power tools and equipment used in the upholstery frame preparation process the learner must be able to:

- PA0601 Identify machine parts, work aids and attachments and apply all safety measures

- PA0602 Identify and distinguish between the staple guns, nailing guns and drills
- PA0603 Identify and match the nails and staples to the correct power and pneumatic tools
- PA0604 Identify the parts of the tools, disassemble and assemble an air stapler or gun, load the nails and staples into the correct power and pneumatic tools
- PA0605 Identify and check safety devices
- PA0606 Operate the tools according to standard operating procedures
- PA0607 Conduct minor maintenance by cleaning the magazine with a brush or compressed air, lubricate the catch mechanism with appropriate lubricant at specified intervals
- PA0608 Store the tools

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0601 The various power and pneumatic staple guns, nailing guns and drills are identified
- IAC0602 Consumables for the power and pneumatic tools are identify and matched to the correct power and pneumatic tools
- IAC0603 The parts and safety devices of the power tools are identified and checked that they are fit for purpose
- IAC0604 Nails and staples are loaded correctly into the correct power and pneumatic tools
- IAC0605 Tools are tested according to standard operating procedures
- IAC0606 Tools are cleaned and minor maintenance by cleaning the magazines and other moveable parts with a brush or compressed air, lubricating parts like catch mechanisms and checking their power supply lines and mechanisms for worn and broken cords and connections.
- IAC0607 Tools are stored as per requirements

### **1.2.7. PM-01-PS07: Read and interpret material safety data sheets (MSDS) of chemicals (adhesives and solvents) to determine and apply the correct safety, handling and application procedures**

#### ***Scope of Practical Skill***

Given access to the material data safety sheet the learner must be able to:

- PA0701 Identify the hazards associated with the chemicals and solvents to be used
- PA0702 Apply the safety procedures associated with the handling of chemicals and solvents
- PA0703 Apply the storage procedures associated with the various chemicals and solvents
- PA0704 Apply the handling procedures with regard to chemicals and solvents
- PA0705 Use, care and store appropriate personal protective equipment
- PA0706 Identify the various chemicals used as per process and substrate requirements
- PA0707 Apply chemicals in a safe manner ensure sufficient application to ensure good bonding

- PA0708 Store chemicals according to MSDS and OHS requirements

### ***Applied Knowledge***

- AK0701 Hazards associated with chemicals and solvents
- AK0702 Safety procedures and practices related to chemicals and solvents
- AK0703 Procedures related to safe storage of chemicals
- AK0704 Safe chemical and solvent handling procedures
- AK0705 Use, care and storage of personal protective equipment

### ***Internal Assessment Criteria***

- IAC0701 Hazards associated with chemicals and solvents being used are identified
- IAC0702 Safety procedures associated with the handling of chemicals and solvents are explained and applied
- IAC0703 Storage procedures associated with various chemicals and solvents are explained and applied
- IAC0704 Handling procedures of chemicals and solvents are explained and applied
- IAC0705 Appropriate personal protective equipment are used, maintained and stored safely
- IAC0706 Various chemicals are identified and selected according to respective purpose and application

## **1.2.8. PM-01-PS08: Clean chemical spillages with consideration to occupational health and safety and environmental impact**

### ***Scope of Practical Skill***

Given the relevant operational machine for textile wet product preparation process, cleaning tools and equipment the learner must be able to:

- PA0801 Clean chemical solution spillages using correct procedures
- PA0802 Identify the tools and equipment used for cleaning spillages
- PA0803 Explain the consequences of not cleaning chemical solutions spillages
- PA0804 Follow all safety procedures and practices

### ***Applied Knowledge***

- AK0801 Spillage cleaning procedure
- AK0802 Use, care and storage of cleaning tools and equipment
- AK0803 Consequences of not cleaning chemical solution spillages
- AK0804 All safety procedures and practices

### ***Internal Assessment Criteria***

- IAC0801 Chemical spillages are cleaned using correct procedures
- IAC0802 Tools and equipment for spillage cleaning are identified
- IAC0803 All safety procedures and practices are followed

### **1.2.9. PM-01-PS09: Safely start, operate and stop a compressor**

#### ***Scope of Practical Skill***

Given access to and pictures of portable and fixed compressors, the learner must be able to:

- PA0901 Identify the type of compressor
- PA0902 Identify machine parts, work aids and attachments and apply all safety measures
- PA0903 Do pre-start check and procedures in the correct sequence
- PA0904 Identify and check safety devices (lights)
- PA0905 Check that planned maintenance has taken place as scheduled, and that legal certification is up to date
- PA0906 Clean the area around the compressor
- PA0907 Do shut down procedures in the correct sequence
- PA0908 Monitor the oil and air pressure gauges and follow workplace procedures to report problems

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0901 Type of compressor identified and pre-start check and procedures conducted in the correct sequence
- IAC0902 Compressor maintenance records and legal certification checked and required steps taken if there is a problem
- IAC0903 The receiver drain valve is opened to let out water and closed
- IAC0904 Area around the compressor is cleaned
- IAC0905 The compressor and dryer is started up and shut down following the correct sequence
- IAC0906 Oil and air pressure gauges are monitored and workplace procedures are followed to report problems

### **1.2.10. PM-01-PS10: Apply measuring techniques and calculations applicable to frame preparing**

#### ***Scope of Practical Skill***

Given measuring equipment such as a tape measure, various frames, consumables such as foam, webbing and springs and standard sizing charts the learner must be able to:

- PA1001 Identify and distinguish between the tape measures, various lengths of steel rules, squares, protractor, compass, drawing board and pencils
- PA1002 Use a tape measure and other measuring equipment
- PA1003 Accurately apply and calculate measuring units related to webbing and springing of furniture frames
- PA1004 Accurately apply scale
- PA1005 Accurately measure frames and consumables
- PA1006 Measure the length of springs and coils
- PA1007 Measure and mark the rails of the frame (back and / or seat and / or arms)
- PA1008 Measure webbing to the specified lengths in the cutting list, taking into account the allowances required
- PA1009 Measure foam to determine dimensions, size and centre
- PA1010 Calculate allowances

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1001 Drawing equipment and tools are identified and used to produce basic technical drawings that meet industry standards
- IAC1002 Scale is accurately applied and allowances are accurately calculated
- IAC1003 Drawings are complete and accurate

### **1.2.11. PM-01-PS11: Plan and prepare for attaching foundations to the given frames**

#### ***Scope of Practical Skill***

Given a range of drawing, measuring and marking instruments, technical drawings, product specifications, work instructions, samples, prototypes and photos of prototypes, a range of tools and raw materials the learner must be able to:

- PA1101 Read and interpret product specifications, samples, work instructions, drawings, routing sheets and other production documentation
- PA1102 Measure the inside seat dimensions and inside frame dimensions top to bottom and draw up a cutting list for webbing and springs
- PA1103 Ensure availability of sufficient raw materials to ensure efficiency
- PA1104 Prepare the work area for frame preparation operations

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1101 Technical specifications are read and interpreted

- IAC1102 Raw material is available
- IAC1103 Measuring equipment is correctly used and measured dimensions of the various areas of the frame are accurate

### **1.2.12. PM-01-PS12: Interweave and fasten strips of webbing to the backs and seats of furniture, using hand tools and fasteners (Webbing up)**

#### ***Scope of Practical Skill***

Given various types of webbing and frames, consumables, hand and power tools the learner must be able to:

- PA1201 Identify and distinguish between various webbing materials, patterns and their uses according to the design, size and style of the frame back
- PA1202 Interpret the specifications to identify the webbing and webbing pattern for the given frames
- PA1203 Measure and cut the webbing to the specified lengths in the cutting list, taking into account the allowances required
- PA1204 Measure and mark the rails of the frame and tack or staple the jute webbing strips to one side of the frame using a tack hammer or staple gun.
- PA1205 Stretch and tension webbing across frame with webbing stretcher and tack or staple ends to opposite side of frame
- PA1206 Do the same from the opposite rails and interlace the webbing where they intersect
- PA1207 Trim webbing overlap with hand shears.
- PA1208 Measure and mark the rails of the frame and tack, nail or staple the clips for the rubber / elastic webbing using a nail or staple gun.
- PA1209 Stretch webbing across frame with webbing stretcher and attach webbing to clips. Webbing must be tensioned to allow for specified deflection
- PA1210 Do the same from the opposite rails and interlace the webbing where they intersect

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1201 Instructions and specifications interpreted and tools, consumables, materials and work station prepared for safe work practices
- IAC1202 Correct type and quantity of webbing cut to the required lengths
- IAC1203 Webbing attached, interwoven using the specified pattern, stretched across the frame, and attached using the correct tools and consumables.
- IAC1204 Webbing tension meets specified amount of stretch. Frame is checked to ensure that webbing is not too tight and distorting the seat rails
- IAC1205 Workplace routines followed to clean work station and store tools when webbing operations completed

### **1.2.13. PM-01-PS13: Attach zig zag springs to the seats and backs and arms of furniture frames**

#### ***Scope of Practical Skill***

Given zig zag springs, frames, consumables, hand and power tools and work instructions the learner must be able to:

- PA1301 Interpret work instructions to determine the required arc height and shape of the seat and back, whether the springs are for seats or backs, and the quantity, type, gauge and size of spring
- PA1302 Determine the required length of the spring is determined by measuring the inside frame length and deducting 25mm, which is the cut length for an average seat strength.
- PA1303 Measure the length of the spring by balancing one end of the spring on a metre rule and flattening it out until the distance between the two extreme outside ends can be taken. . Springs should not be measured with a tape measure around a curved spring.
- PA1304 A rough alternative is to count the number of knuckles of the zig zag springs and cut to required length
- PA1305 Curl the ends using a spring curler
- PA1306 Measure and mark the rails of the frame (back and / or seat and / or arms) and tack, nail or staple the clips for the springs using a nail or staple gun. The direction of springing is usually from top to bottom for backs and from back to front for seats, side to side for irregular shapes.
- PA1307 Space the e-clips evenly, between 100mm and 125mm centre to centre, with clips fixed at these centres. Attach e-clips to the frame using safe operating procedures with a staple gun or nail gun
- PA1308 Clip the springs together to stabilise the foundation
- PA1309 Crimp wire around the springs to stabilise the foundation
- PA1310 Use twine and knot the springs together to stabilised the foundation

#### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

- IAC1301 Tools, consumables, materials and work station prepared for safe work practices according to the cutting list and work plan
- IAC1302 Correct sequence of tasks are applied
- IAC1303 Correct gauge and quantity of zig zag springs cut to the required lengths, and edges curled
- IAC1304 Clips and zig zag springs attached securely to frame component using the correct tools and consumables.
- IAC1305 Spring tension and arc height meets specification for the seat height and construction
- IAC1306 Mistakes, material defects, and consumables and tool defects are identified
- IAC1307 Springs cut too long causing the foundation to sag are identified and rectified
- IAC1308 Springs cut too short causing too much tension for the frame and pull it apart are identified and rectified

- IAC1309 Springs not securely attached causing the e-clips come loose are identified and rectified
- IAC1310 Workplace routines followed to clean work station and store tools when operations completed

#### **1.2.14. PM-01-PS14: Attach coil springs to the seats and backs and arms of furniture frames**

##### ***Scope of Practical Skill***

Given coil springs, frames, consumables, hand and power tools and work instructions the learner must be able to:

- PA1401 Interpret work instructions to determine the required height and shape of the seat and back, whether the springs are for seats or backs, and the quantity, type, gauge and size of spring
- PA1402 Prepare and attach webbing to the frame to meet the design requirements.
- PA1403 Position the coil springs on the jute webbing and check that the webbing is correctly spaced so that the springs do not touch, the ends all face the same direction, and the sharp ends are bent to prevent damage to the stuffing
- PA1404 Position and interlace the coil springs onto the webbing using a clove hitch to form a locking loop.
- PA1405 Use the Clinch-It tool to clinch-staple the coil springs to the webbing.
- PA1406 Sew the coil springs to the jute webbing using a curved needle and nylon mattress twine.
- PA1407 Hammer two tacks halfway in and 12,5mm apart at both ends of every vertical and horizontal row of springs using the magnetic tack hammer
- PA1408 Double over spring twine and stretch it across row of springs from one pair of tacks to the other.
- PA1409 Add 100mm of twine for every spring in each vertical and horizontal row
- PA1410 Measure and cut twine for every vertical and horizontal row of springs.
- PA1411 With the twine still doubled over, place the middle loop in between a pair of tacks on the back side of the frame. Make a loop over each tack, pull the ends of twine tightly toward the springs, and hammer down the tacks. Repeat this for all pairs of tacks on the back and one side of the frame.
- PA1412 Tack the twine to the frame securely.
- PA1413 Fasten border wire to springs, using metal clips or by twisting crimp wire around border wire and top of spring.
- PA1414 Conduct a quality check and record mistakes, material defects, any weakness in the foundation constructed by the springs, and consumables and tool defects

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

- IAC1401 Tools, consumables, materials and work station prepared for safe work practices according to the cutting list and work plan

- IAC1402 Correct sequence of tasks are applied
- IAC1403 Correct gauge, size, quantity and quality of springs selected
- IAC1404 Springs centred over their central axes and attached securely to webbing using the correct tools and consumables.
- IAC1405 Springs are tensioned to ensure the springs only compress 25 – 50mm with strong pressure
- IAC1406 The sprung foundation height meets the specification for the seat height and construction.
- IAC1407 When you pull the edge wire down to the height of the springs it is lined up with the front of the frame
- IAC1408 Workplace routines followed to clean work station and store tools when operations completed
- IAC1409 Sprung frame ready for covering, padding and final covering.

### **1.2.15. PM-01-PS15: Identify and inspect frames against specifications and repair and report defects ensuring quality**

#### ***Scope of Practical Skill***

Given a range (various types and styles) of frames before and after webbing and springing and product specifications, work instructions and plans the learner must be able to:

- PA1501 Inspect a range (various types and styles) of frames for compliance with the product specifications, and identify all defects (such as knots in the frame rails, strength of joints and rails, corner blocks in place, sharp edges)
- PA1502 Follow work place procedures and instructions to identify and report specified defects
- PA1503 Use a rasp to remove sharp edges from the frame that will damage the webbing, foam and covers
- PA1504 Inspect prepared frames for correct stretch, tension and deflection of webbing and springs
- PA1505 Inspect prepared frames for correct spacing of tacks, nails and staples, spacing of webbing
- PA1506 Inspect prepared frames for correct sizes of nails and staples and correct positioning of the staples, nails, tacks

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1501 Frames received are inspected according to product specifications and defects identified and recorded
- IAC1502 Workplace instructions and procedures are followed to report specified defects
- IAC1503 Rasp is used to remove sharp edges from the frame
- IAC1504 Frames comply with product and workplace process specifications

**1.2.16. PM-01-PS16: Correctly attach foam and or padding to the seats and backs and arms of sprung and webbed frames using the correct tools, adhesives, solvents and raw materials and applying all safety measures**

***Scope of Practical Skill***

Given various types of foam and padding, consumables, hand and power tools, adhesives and solvents the learner must be able to:

- PA1601 Select, inspect and prepare correct tools and consumables for respective techniques
- PA1602 Select foam according to the thickness, density and size of foam
- PA1603 Stand in the correct position and apply correct posture when performing the frame preparing techniques
- PA1604 Apply techniques to bond foam to foam using correct amount of glue for good bonding
- PA1605 Apply techniques to bond foam to other substances using correct amount of adhesives for good bonding
- PA1606 Apply techniques to shape padded area according to design or style
- PA1607 Apply correct sequence of tasks according to the design

***Applied Knowledge***

***Internal Assessment Criteria***

- IAC1601 Tools, consumables, materials and work station prepared for safe work practices according to the cutting list and work plan
- IAC1602 Frames received and other raw materials are inspected according to product specifications and defects identified and recorded
- IAC1603 Workplace instructions and procedures are followed to report specified defects
- IAC1604 Correct sequence of tasks are applied
- IAC1605 Adhesives and solvents are prepared and used according to MSDS specifications and safety measures are applied ensuring a secure bond
- IAC1606 Foam and or padding is correctly attached to the seats, backs and arms of sprung and webbed frames
- IAC1607 Padded area is shaped according to the design or style

**1.2.17. PM-01-PS17: Identify and inspect padded frames against specifications and repair and report defects ensuring quality**

***Scope of Practical Skill***

Given a range (various types and styles) of frames before and after foam and padding attached and product specifications, work instructions and plans the learner must be able to:

- PA1701 Inspect sprung and webbed frames for faults and defects such as bad joints, bad knots in the wood, staple sticking out on the frame

- PA1702 Inspect foam for correct densities, correct sizes, correct shapes or profile, the feel of the foam, good bonding
- PA1703 Inspect prepared frames for quality such as correct positioning and appearance of the padding and foam, measuring the middle and centralized, according to the divisions of the couch

***Applied Knowledge***

***Internal Assessment Criteria***

- IAC1701 Padded frames received are inspected according to product specifications and defects identified and recorded
- IAC1702 Workplace instructions and procedures are followed to report specified defects
- IAC1703 Frames comply with product and workplace process specifications

**1.2.18. PM-01-PS18: Apply safety measures (related to tools, power tools, raw material and work area)**

***Scope of Practical Skill***

Given frames, consumables, hand and power tools, PPE, access to a work area and work instructions the learner must be able to:

- PA1801 Apply ergonomic principles when lifting and handling heavy objects
- PA1802 Apply ergonomic principles by standing in the correct position and apply correct posture when operating tools and performing webbing and springing operations
- PA1803 Inspect the work area for compliance with health, safety and environmental regulations and report all hazards or risks
- PA1804 Select and correctly use (PPC and PPE)
- PA1805 Report any incident or accident

***Applied Knowledge***

***Internal Assessment Criteria***

- IAC1801 Safety measures (related to tools, power tools, raw material and work area) are applied in compliance with safety regulations

**1.2.19. PM-01-PS19: Perform routine cleaning, quality change cleaning and housekeeping of the work area and routine maintenance of tools and equipment**

***Scope of Practical Skill***

Given access to the work area and workbenches the learner must be able to:

- PA1901 Conduct a general cleaning of the work area to ensure safety and efficiency
- PA1902 Clean the tools or equipment to remove dust, dirt and other contaminants
- PA1903 Sharpen or replace blunted edges and perform minor maintenance

- PA1904 Perform dust extraction procedures where necessary
- PA1905 Perform basic routine maintenance of tools and equipment and handle and store correctly
- PA1906 Check that the tools and equipment is in working condition once the procedures are completed

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1901 Different types of waste in the workshop is managed and disposed safely and according to company policies and regulation
- IAC1902 Tools and equipment are clean and in good and safe working condition at all times
- IAC1903 Dust is removed regularly to avoid accumulation and the creation of fire hazards
- IAC1904 Waste is minimized during the operations and offcuts that can be reused are marked and neatly stored
- IAC1905 Tools and equipment are clean and in good working condition

### **1.2.20. PM-01-PS20: Record and report frame preparation production information**

#### ***Scope of Practical Skill***

Given access to production log book, product specification and writing material, the learner must be able to:

- PA2001 Identify the type of information to be recorded in the production document.
- PA2002 Record legibly the hourly production, down time, quality faults, and production history
- PA2003 Record any production related problems experienced during the shift
- PA2004 Accurately record waste
- PA2005 Accurately record defects and faults (raw material and prepared frames)
- PA2006 Accurately record production and achieving targets

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC2001 The relevant information during the production shift is recorded and reported via the correct reporting channels
- IAC2002 Production problems experienced during shift are recorded correctly, neatly and legibly

### **1.3 Provider Programme Accreditation Criteria**

#### ***Physical Requirements:***

- All tools, machinery, consumables, equipment, specified in the scope statement

#### ***Human Resource Requirements:***

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

*Legal Requirements:*

- OHASA compliant

**1.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **2. 683401000-PM-02, Cover Prepared Upholstered Frames with Fabric and Other Materials, NQF Level 2, Credits 20**

### **2.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Fit and attach prepared covers and loose material panels onto prepared upholstery frames using staples, tacks and/or glue

The learner will be required to:

- PM-02-PS01: Identify different styles, types and designs of upholstered furniture
- PM-02-PS02: Identify various types of furniture frame construction and frame components using the correct terminology
- PM-02-PS03: Read and interpret specifications for upholstery covers
- PM-02-PS04: Identify raw materials required for cover fitting operations using the correct terminology
- PM-02-PS05: Determine the ancillary materials required for cover fitting
- PM-02-PS06: Determine the consumables required for cover fitting
- PM-02-PS07: Identify, prepare and safely apply hand tools and equipment for fitting covers to frames
- PM-02-PS08: Identify, prepare and safely operate pneumatic tools for fitting covers to frames
- PM-02-PS09: Start and stop a compressor and connect pneumatic tools while following safe standard operating procedures
- PM-02-PS10: Apply measuring techniques and calculations applicable to frame covering
- PM-02-PS11: Plan and prepare for covering of prepared frames
- PM-02-PS12: Cover a range of drop-on and drop-in seats of various shapes and sizes
- PM-02-PS13: Cover wedge shaped box arm seat frames, with and without corner pleats
- PM-02-PS14: Fit covers to prepared frames using visible and concealed finishing techniques
- PM-02-PS15: Fit covers to prepared frames using relief cuts to relieve tension on the fabric and to achieve the specified finish
- PM-02-PS16: Identify and inspect covered frames against specifications and repair and report defects ensuring quality
- PM-02-PS17: Apply health and safety, housekeeping, ergonomics and productive processes when fitting covers to upholstery frames
- PM-02-PS18: Perform routine cleaning, quality change cleaning and housekeeping of the work area
- PM-02-PS19: Record and report frame covering production information

### **2.2 Guidelines for Practical Skills**

#### **2.2.1. PM-02-PS01: Identify different styles, types and designs of upholstered furniture**

##### ***Scope of Practical Skill***

Given a range of samples, prototypes and photographs of different styles, types and designs of upholstered furniture, including full seats, loose cushioned seats, full back seats, loose cushioned back seats, club arm seats and scroll arm seats the learner must be able to:

- PA0101 Identify and categorise the upholstered furniture product according to types, uses and styles
- PA0102 Identify and categorise the upholstered furniture products according to the raw materials used in the manufacturing process
- PA0103 Identify and categorise the accessories according to the uses and furniture design
- PA0104 Identify the main groups of upholstered seats
- PA0105 Identify the main groups of upholstered backs
- PA0106 Identify the main groups of upholstered arms

### ***Applied Knowledge***

- AK0101 Upholstered furniture types, designs and styles

### ***Internal Assessment Criteria***

- IAC0101 Photographs, samples and prototypes of upholstered furniture are correctly categorized according to the two main groups of upholstered seats
- IAC0102 Photographs, samples and prototypes of upholstered furniture are correctly categorized according to the two main groups of upholstered backs
- IAC0103 Photographs, samples and prototypes of upholstered furniture are correctly categorized according to the two main groups of upholstered arms

## **2.2.2. PM-02-PS02: Identify various types of furniture frame construction and frame components using the correct terminology**

### ***Scope of Practical Skill***

Given examples or pictures of various shapes, styles and types of frames and product specifications the learner must be able to:

- PA0201 Identify and distinguish between different frame constructions according to types and styles
- PA0202 Identify and distinguish the components of upholstered seats
- PA0203 Identify and distinguish between frames according to purpose
- PA0204 Identify and distinguish between the four back styles of furniture frames
- PA0205 Identify seating frames according to the three main types
- PA0206 Identify the wood and board products used in the construction of the frame(s) according to their application
- PA0207 Identify and distinguish between joints and bracings used in the frame construction
- PA0208 Identify and distinguish between the long, short and end grains of wood and their ability to hold staples and nails

## ***Applied Knowledge***

### ***Internal Assessment Criteria***

- IAC0201 Frame components are correctly identified for fully upholstered and show wood seats
- IAC0202 Seating frames are identified according to their purpose (such as resting and lounging, dining and writing, transport, occasional use)
- IAC0203 Furniture frames are identified according to the four back styles (camel, shell, pillow, curved)
- IAC0204 Seating frames are identified according to the three main types (mono-frame, knock down frame, modular frame)
- IAC0205 Board components and wood used to make furniture frames are identified according to their application (MDF, chip board, soft wood, hard wood)
- IAC0206 Joints and bracings used in frame construction are identified (mortise and tenon joints, dowelled joints, housing and stapled joints, lap joints to lengthen rails, finger joint bracings like cross rails, bracing rails, corner blocks, etc.)
- IAC0207 The long, short and end grains of solid wood frame components are identified

### **2.2.3. PM-02-PS03: Read and interpret specifications for upholstery covers**

#### ***Scope of Practical Skill***

Given a range of written specifications including technical drawings, cutting plans and job cards, and a variety of samples and prototypes of upholstered furniture, including dining room seats, arm chairs, sofas, corner units, ottomans and foot stools, and a variety of types of prepared covers of the seven main upholstery material types (woven plain, woven patterned, printed cretonne, pile, knitted jersey, coated fabrics and animal skins), and a cloth tape measure, the learner must be able to:

- PA0301 Identify the main components of furniture frames using industry standard terminology
- PA0302 Identify the main components of covers for furniture frames using industry standard terminology
- PA0303 Identify the type of cover material
- PA0304 Identify the dimensions of the cover components
- PA0305 Identify the final size and allowances for the cover components
- PA0306 Identify the characteristics of fabrics that influence cover fitting
- PA0307 Identify the characteristics of cover design that influence cover construction
- PA0308 Identify the construction process of each of the main groups of furniture
- PA0309 Identify the components of each construction

#### ***Applied Knowledge***

- AK0301 Specification reading techniques using industry terminology and abbreviations
- AK0302 Measuring techniques

- AK0303 Cover material types
- AK0304 Fabric technology and design aesthetics

#### ***Internal Assessment Criteria***

- IAC0301 Main components of furniture frames are identified and labelled: back, front, legs, rails, arms, corner blocks, joints, seat, wing, show wood
- IAC0302 Design information for cover components for furniture is identified from the specifications: inside wing (IW), outside wing (OW), inside arms (IA), outside arms (OA), seat back (SB), seat front, (SF), inside back (IB), outside back (OB), front border (FB), facia (F), cushion back (CB), cushion front (CF), piping (P)
- IAC0303 Dimensions, including allowances, of cover components are correctly interpreted (length first followed by the width) and recorded in millimetres
- IAC0304 Cover materials are classified according to the main types of upholstery cover materials (woven plain, woven patterned, printed cretonne, pile, knitted jersey, coated fabrics and animal skins)
- IAC0305 Pile direction is correctly identified
- IAC0306 Pattern repeats are correctly identified
- IAC0307 Repeat patterns are matched taking into consideration highly visible areas first, and in the right order (inside backs, seat cushions, fronts of seats and then inside arms)

#### **2.2.4. PM-02-PS04: Identify raw materials required for cover fitting operations using the correct terminology**

##### ***Scope of Practical Skill***

Given a range of specifications including technical drawings, written instructions, a range of samples and prototypes of upholstered furniture, prepared furniture frames including dining room seats, arm chairs, sofas, corner units, ottomans and foot stools, and prepared covers for the frames, the learner must be able to:

- PA0401 Interpret specifications and identify the specified prepared frames
- PA0402 Interpret specifications and identify the specified prepared cover components for the frames
- PA0403 Identify the specified bottom covers for the frames

##### ***Applied Knowledge***

- AK0401 Numeracy and measuring skills
- AK0402 Material selection and fault and defect identification
- AK0403 Raw material specifications and components for cover fitting

#### ***Internal Assessment Criteria***

- IAC0401 All the required raw materials are available and comply with specification
- IAC0402 Prepared frames inspected and faults and defects identified (wrong frame type supplied, prepared foundation design, shape and firmness faults)

- IAC0403 Prepared covers inspected and faults and defects identified, including type of covers supplied, quantity of covers, fabric type, sizes and seam allowances, fabric flaws, sewing faults, ties not attached or incorrectly attached, correct pattern matching, rail roading, and pile direction
- IAC0404 Covers turned inside out and checked that the components are marked using the correct abbreviations and symbols and positioning on the frame
- IAC0405 Specified frames are all available and meet the specifications
- IAC0406 All specified prepared cover components are available and meet the specifications
- IAC0407 All specified bottom covers are available and meet the specifications

### **2.2.5. PM-02-PS05: Determine the ancillary materials required for cover fitting**

#### ***Scope of Practical Skill***

Given a range of specifications including technical drawings, written instructions, a range of samples and prototypes of upholstered furniture, prepared furniture frames and prepared covers for the frames, and ancillary items including gimps, piping, skirting, braids, valances, studs, and fake nails, the learner must be able to:

- PA0501 Interpret specifications and identify the specified ancillary materials
- PA0502 Inspect and select the specified ancillary materials

#### ***Applied Knowledge***

- AK0501 Material selection and fault and defect identification

#### ***Internal Assessment Criteria***

- IAC0501 All specified ancillary materials available

### **2.2.6. PM-02-PS06: Determine the consumables required for cover fitting**

#### ***Scope of Practical Skill***

Given a range of specifications including technical drawings, written instructions, a range of samples and prototypes of upholstered furniture, prepared furniture frames, prepared covers for the frames and consumables including staples, blind stitching needles, twine, thread, tacks and cardboard and metal tack strips the learner must be able to:

- PA0601 Interpret specifications and identify the quantity, type and dimensions of consumables including staples, blind stitching needles, twine, thread, tacks and cardboard and metal tack strips

#### ***Applied Knowledge***

- AK0601 Numeracy and measuring skills
- AK0602 Consumable selection and fault and defect identification

#### ***Internal Assessment Criteria***

- IAC0601 All required consumables are fit for purpose

- IAC0602 All required consumables available

### **2.2.7. PM-02-PS07: Identify, prepare and safely apply hand tools and equipment for fitting covers to frames**

#### ***Scope of Practical Skill***

Given a range of specifications including technical drawings, written instructions, a range of samples and prototypes of upholstered furniture, prepared furniture frames and prepared covers for the frames, and a range of upholstery hand tools and equipment including tape measures, marking chalk, magnetic tack hammer, shears, scissors, tack and staple lifters, and trimming knives, the learner must be able to:

- PA0701 Interpret specifications and identify the hand tools required to cover the prepared frames
- PA0702 Identify the needles used for blind stitching
- PA0703 Check hand tools and equipment for defects, sharpness, and safety, and take appropriate steps to rectify problems

#### ***Applied Knowledge***

- AK0701 Tacking and covering techniques
- AK0702 Sewing techniques
- AK0703 Faults and maintenance

#### ***Internal Assessment Criteria***

- IAC0701 Hand tools used for attaching specified covers to frames are available
- IAC0702 Needles used for blind stitching are available
- IAC0703 Hand tools and equipment used for covering are checked and tested for defects, sharpness and safety and appropriate steps taken to rectify problems

### **2.2.8. PM-02-PS08: Identify, prepare and safely operate pneumatic tools for fitting covers to frames**

#### ***Scope of Practical Skill***

Given a range of specifications including technical drawings, written instructions, a range of samples and prototypes of upholstered furniture, prepared furniture frames and prepared covers for the frames, and pneumatic staple guns and nail (tacking) guns, the learner must be able to:

- PA0801 Interpret specifications and identify the size and type of pneumatic tools required
- PA0802 Identify and match the nails and staples to the correct pneumatic tools
- PA0803 Identify the parts of the tools, disassemble and assemble an air stapler and air gun, load the nails and staples into the correct power and pneumatic tools
- PA0804 Identify and check safety devices
- PA0805 Operate the tools according to standard operating procedures

- PA0806 Conduct minor maintenance by cleaning the magazine with a brush or compressed air, lubricate the catch mechanism with a drop of oil at specified intervals
- PA0807 Store the tools

### ***Applied Knowledge***

- AK0801 Compressed air and optimum air pressure required for various pneumatic tools
- AK0802 Consumables
- AK0803 Pneumatic tool maintenance

### ***Internal Assessment Criteria***

- IAC0801 The power and pneumatic staple and nailing guns are identified, checked, and tested to be fit for purpose
- IAC0802 Consumables for the power and pneumatic tools are identified, matched with and loaded into the correct power and pneumatic tools
- IAC0803 Tools are cleaned and minor maintenance conducted by cleaning the magazines and other moveable parts with a brush or compressed air, lubricating parts and catch mechanisms and checking their power supply lines and mechanisms for worn and broken airlines and connections.
- IAC0804 Tools are stored as per requirements

## **2.2.9. PM-02-PS09: Start and stop a compressor and connect pneumatic tools while following safe standard operating procedures**

### ***Scope of Practical Skill***

Given access to, and pictures of, various types of portable and fixed compressors, air lines and pneumatic tools the learner must be able to:

- PA0901 Identify the two main types of compressor
- PA0902 Check that planned maintenance has taken place as scheduled, and that legal certification is up to date
- PA0903 Identify and check safety devices and do pre-start checks and procedures in the correct sequence
- PA0904 Monitor the oil and air pressure gauges and follow procedures to report problems
- PA0905 Connect air lines to the compressor or air outlet and connect and operate pneumatic tools at the required air pressure
- PA0906 Do shut down procedures in the correct sequence and clean the area around the compressor

### ***Applied Knowledge***

- AK0901 Types of compressors and their uses
- AK0902 Compliance with the Occupational Health and Safety Act Regulations for vessels under pressure

- AK0903 Standard safe operating procedures

#### ***Internal Assessment Criteria***

- IAC0901 Types of compressor identified
- IAC0902 Compressor maintenance records and legal certification checked and required steps taken if there is a problem
- IAC0903 Start up, monitor the oil and air pressure gauges, and shut down the compressor and dryer following the correct sequence

### **2.2.10. PM-02-PS10: Apply measuring techniques and calculations applicable to frame covering**

#### ***Scope of Practical Skill***

Given measuring equipment such as a tape measure, various frames, consumables such as foam, webbing and springs and standard sizing charts the learner must be able to:

- PA1001 Identify and distinguish between the tape measures, various lengths of steel rules, squares, protractor, compass, drawing board and pencils
- PA1002 Use a tape measure and other measuring equipment
- PA1003 Accurately apply and calculate measuring units related to covering of furniture frames
- PA1004 Accurately apply scale
- PA1005 Accurately measure frames and consumables
- PA1006 Measure and mark covers according to the frame (back and / or seat and / or arms)
- PA1007 Measure and mark to centralizing the cover, spacing of buttons and studs, front borders of chairs
- PA1008 Calculate allowances

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1001 Drawing equipment and tools are identified and used to produce basic technical drawings that meet the industry standard
- IAC1002 Scale is accurately applied and allowances are accurately calculated
- IAC1003 Drawings are complete and accurate

### **2.2.11. PM-02-PS11: Plan and prepare for covering of prepared frames**

#### ***Scope of Practical Skill***

Given a range of drawing, measuring and marking instruments, technical drawings, product specifications, work instructions, samples, prototypes and photos of prototypes the learner must be able to:

- PA1101 Read and interpret product specifications, samples, work instructions, drawings, routing sheets and other production documentation
- PA1102 Interpret the information in the specifications into a detailed work plan and cutting list
- PA1103 Measure the inside seat dimensions and inside frame dimensions top to bottom and draw up a cutting list for webbing and springs
- PA1104 Ensure availability of sufficient raw materials to ensure efficiency
- PA1105 Prepare the work area for frame preparation operations
- PA1106 Read and understand the production cards
- PA1107 Set the machine
- PA1108 Conduct pre-start-up checks (operator will sign)

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1101 Technical specifications are read and interpreted
- IAC1102 Raw material is available
- IAC1103 Measuring equipment is correctly used and measured dimensions of the various areas of the frame are accurate

## **2.2.12. PM-02-PS12: Cover a range of drop-on and drop-in seats of various shapes and sizes**

### ***Scope of Practical Skill***

Given a range of prepared frames with square, round, and clover leaf shaped seats, a variety of prepared covers with plain, striped, vinyl, patterned tapestry, floral, and checked fabric, and a staple gun and consumables the learner must be able to:

- PA1201 Identify and match the covers to the frames
- PA1202 Use a staple gun to temporarily attach shaped covers with plain, striped, vinyl, patterned, and checked patterns to square, round and clover shaped drop on and drop in seat frames
- PA1203 Use the correct hand straining techniques to ensure that the main thread lines from left to right, and back to front, are straight.
- PA1204 Strain the covers on square seats to the sides and corners and, when correctly positioned, add tension and staple home
- PA1205 Strain the covers on round seats from the centre of the circle so that the tension is equally matched in all directions. Staple the cover onto the frame
- PA1206 Make relief cuts so that the strains to each side of the clover shape donâ€™t drag the threads over from the opposite leaf
- PA1207 Attach bottom cloth neatly so that all staples, fabric edges, and threads are hidden.

### ***Applied Knowledge***

- AK1201 Covering techniques for drop on and drop in seats
- AK1202 Tacking and straining techniques
- AK1203 Fault finding techniques

***Internal Assessment Criteria***

- IAC1201 Cover components attached in the correct sequence for the design specification
- IAC1202 Thread lines of the fabric of the cover components are kept straight and evenly tensioned.
- IAC1203 Cover is stretched and strained over the frame using the magnetic tack hammer and tacks, pins, staple gun and staples, needles and thread to firmly secure the cover to the prepared frame
- IAC1204 Fabric tension is suitable and smooth, patterns match, pile runs in the correct direction, and there is no distortion of the seats.

**2.2.13. PM-02-PS13: Cover wedge shaped box arm seat frames, with and without corner pleats**

***Scope of Practical Skill***

Given specifications, a range of prepared wedge shaped box arm seat frames and prepared vinyl and checked fabric, and a staple gun and consumables the learner must be able to:

- PA1301 Identify and match the fabric covers to the specified frames
- PA1302 Apply a vinyl fabric to a wedge shaped seat with no corner pleats, and a checked fabric to a wedge shaped seat with equal single corner pleats
- PA1303 Position the checked fabric so that the pattern starts two thirds of the way up the back of the seat to allow for visual distortion when looking down on the seat.
- PA1304 Use a staple gun to temporarily attach the covers in the correct sequence: inside arms, inside back, seat, front border, facings, outside arms, outside back and finally bottom cover cloth
- PA1305 Use the correct hand straining techniques to ensure that the main thread lines from left to right, and back to front, are straight.
- PA1306 Strain the covers to the sides and corners and, when correctly positioned, add tension and staple home.

***Applied Knowledge***

- AK1301 Covering techniques
- AK1302 Tacking and straining techniques
- AK1303 Fault finding techniques
- AK1304 Covering techniques for wedge shaped seats

***Internal Assessment Criteria***

- IAC1301 Cover components attached in the correct sequence for the design specification
- IAC1302 Thread lines of the fabric of the cover components are kept straight and evenly tensioned.

- IAC1303 Cover is stretched and strained over the frame using the pneumatic staple gun and magnetic tack hammer.
- IAC1304 Fabric tension is suitable and smooth, patterns match, pile runs in the correct direction, and there is no distortion of the seats.
- IAC1305 Cover components attached in the correct sequence for the design specification

#### **2.2.14. PM-02-PS14: Fit covers to prepared frames using visible and concealed finishing techniques**

##### ***Scope of Practical Skill***

Given a range of specifications including technical drawings, written instructions, a range of samples and prototypes of upholstered furniture, prepared furniture frames and prepared covers for the frames, and ancillary items including gimps, piping, skirting, braids, valances, studs, and fake nails the learner must be able to:

- PA1401 Interpret the specifications and identify the preferred finishing methods (visible or concealed)
- PA1402 Fit covers to the frame using concealed finishing methods (slip stitching, blind tacking and cardboard back tacking, pli-grip and cross trim) so that all staples and cut edges of fabric are hidden, and the bottom cloth hides it underneath the upholstered item
- PA1403 Fit covers to the frame using visible finishing methods including gimp If panels attached where they can be seen e.g. OB or OA, the stapling is disguised / covered by using visible or concealed methods of finishing: gimp pins, spaced studs, close studding, studs with banding, continuous studding strip, gimp / braid, double piping
- PA1404 Attach gimp pins, upholstery studs, banding strips, continuous studding strips, vinyl banding strips braid to a variety of turned under straight edges of various types of vinyl and fabric panels
- PA1405 Attach gimp pins, upholstery studs, banding strips, continuous studding strips, vinyl banding strips braid to a variety of contoured shapes to cover a staple line of various types of vinyl and fabric panels

##### ***Applied Knowledge***

- AK1401 Cover fitting techniques
- AK1402 Aesthetics

##### ***Internal Assessment Criteria***

- IAC1401 The most suitable finishing methods are identified to attach various types of fabric to various panels of an armchair
- IAC1402 Covered upholstered items meet specification and are pleasing to the eye

#### **2.2.15. PM-02-PS15: Fit covers to prepared frames using relief cuts to relieve tension on the fabric and to achieve the specified finish**

##### ***Scope of Practical Skill***

Given a range of specifications including technical drawings, written instructions, a range of samples and prototypes of upholstered furniture, prepared furniture frames, prepared covers for the frames, the learner must be able to:

- PA1501 Apply fabric to the inside arm panel on a scroll arm shape using relief cuts to meet specified finish
- PA1502 Apply patterned fabric to an upholstered child's chair using relief cuts to meet specified finish
- PA1503 Apply fabric to an upholstered footstool using relief cuts around the legs

#### ***Applied Knowledge***

- AK1501 Fault finding and quality control

#### ***Internal Assessment Criteria***

- IAC1501 Covered upholstered items meet specification and achieve suitable fabric tension, even pleats on the arm radius curve, and finish without drags or wrinkles on straight edges

### **2.2.16. PM-02-PS16: Identify and inspect covered frames against specifications and repair and report defects ensuring quality**

#### ***Scope of Practical Skill***

Given a range (various types and styles) of frames before and after covering and product specifications, work instructions and plans the learner must be able to:

- PA1601 Inspect sprung and webbed frames for faults and defects such as bad joints, bad knots in the wood, staple sticking out on the frame
- PA1602 Inspect foam for correct densities, correct sizes, correct shapes or profile, the feel of the foam, good bonding
- PA1603 Inspect prepared frames for quality such as correct positioning and appearance of the padding and foam, measuring the middle and centralized, according to the divisions of the couch
- PA1604 Inspect the covered frame for quality such as stretch, tension and deflection of fabric, spacing of tacks, nails and staples, uniformity of a pair of arms and wings, pleating and folding and buttoning, positioning of the cover and alignments, pattern matching
- PA1605 Inspect covered frame ensuring buttoning is correct and pulled to the correct depth
- PA1606 Inspect covered frame ensuring correct shaping edges and corners and even tension of fabric

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1601 Frames received are meticulously inspected according to product specifications and defects identified and recorded
- IAC1602 Workplace instructions and procedures are followed to report specified defects
- IAC1603 Rasp is used to remove sharp edges from the frame

- IAC1604 Frames comply with product and workplace process specifications

### **2.2.17. PM-02-PS17: Apply health and safety, housekeeping, ergonomics and productive processes when fitting covers to upholstery frames**

#### ***Scope of Practical Skill***

Given a variety of examples of workplace health and safety policies and procedures, photographs and examples of safety signs and symbols, personal protective equipment including ear muffs, ear plugs, respirators, dust masks, goggles and gloves, first aid boxes, fire extinguishers, overhead sprinkler systems, fire hose reels, emergency alarms, health and safety hazards, manual materials handling systems, unsafe acts and cleaning equipment, the learner must be able to:

- PA1701 Identify aisles and the location of stacking areas, electricity isolation switches
- PA1702 Identify emergency exits and gathering places
- PA1703 Identify safety equipment in the workplace – first aid boxes, emergency alarm, fire extinguishers, hose reels
- PA1704 Identify and report hazards and unsafe acts to first aider, fire officer, and SHE representatives
- PA1705 Select and use the appropriate personal protective equipment correctly
- PA1706 Position raw materials, consumables, tools and equipment at the work station in a way that requires minimal repetitive movements, and unnecessary stretching, lifting, bending and reaching

#### ***Applied Knowledge***

- AK1701 Occupational Health and Safety Act and its Regulations
- AK1702 Ergonomics, good housekeeping and productivity

#### ***Internal Assessment Criteria***

- IAC1701 Emergency signs, symbols, safety equipment, safety personnel and procedures identified and obeyed
- IAC1702 Hazards and unsafe acts identified and reported
- IAC1703 Appropriate personal protective equipment used correctly at all times
- IAC1704 Materials handled and positioned in a manner that demonstrates understanding of good housekeeping, workplace ergonomics and productivity

### **2.2.18. PM-02-PS18: Perform routine cleaning, quality change cleaning and housekeeping of the work area**

#### ***Scope of Practical Skill***

Given access to the work area and workbenches the learner must be able to:

- PA1801 Conduct a general cleaning of the work area to ensure safety and efficiency
- PA1802 Clean the tools or equipment to remove dust, dirt and other contaminants

- PA1803 Sharpen or replace blunted edges and perform minor maintenance
- PA1804 Perform dust extraction procedures where necessary
- PA1805 Perform basic routine maintenance of tools and equipment and handle and store correctly
- PA1806 Check that the tools and equipment is in working condition once the procedures are completed

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1801 Different waste in the workshop is managed and disposed safely and according to company policies and regulation.
- IAC1802 Tools and equipment are clean and in good and safe working condition at all times
- IAC1803 Dust is removed regularly to avoid accumulation and the creation of fire hazards
- IAC1804 Waste is minimized during the operations and offcuts that can be reused are marked and neatly stored

### **2.2.19. PM-02-PS19: Record and report frame covering production information**

#### ***Scope of Practical Skill***

Given access to production log book, product specification and writing material, the learner must be able to:

- PA1901 Identify the type of information to be recorded in the production document.
- PA1902 Record legibly the hourly production, down time, quality faults, and production history
- PA1903 Record any production related problems experienced during the shift
- PA1904 Accurately record waste
- PA1905 Accurately record defects and faults (raw material and covered frames)
- PA1906 Accurately record production and achieving targets

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC1901 The relevant information during the production shift is recorded and reported via the correct reporting channels
- IAC1902 Production problems experienced during shift are recorded correctly, neatly and legibly

### **2.3 Provider Programme Accreditation Criteria**

#### ***Physical Requirements:***

- All tools, machinery, consumables, equipment, specified in the scope statement

#### ***Human Resource Requirements:***

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

*Legal Requirements:*

- OHASA compliant

**2.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

### **3. 683401000-PM-03, Perform Advanced Covering Operations for Complex and Exposed Frames, NQF Level 3, Credits 10**

#### **3.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Fit advanced covers to prepared complex and exposed upholstery frames applying advanced covering techniques, visual pleating and hand stitching and stapling / tacking, gluing, buttoning, and channelling techniques

The learner will be required to:

- PM-03-PS01: Fit prepared fabric covers to prepared complex frames and exposed frames applying normal and pleating covering techniques
- PM-03-PS02: Prepare, sew and finish advanced loose covers
- PM-03-PS03: Produce complex shaped cushions and padded items including a T-cushion

#### **3.2 Guidelines for Practical Skills**

##### **3.2.1. PM-03-PS01: Fit prepared fabric covers to prepared complex frames and exposed frames applying normal and pleating covering techniques**

###### ***Scope of Practical Skill***

Given upholstery hand tools such as tack hammer; staple gun; staple remover; upholstery shears; wheel or mini fabric cutter, appropriate sewing needles; upholstery shears; trimming knife; staple gun; staple remover; tack hammer, equipment and staple gun, cut components and complex and exposed frames the learner must be able to:

- PA0101 Select tools and equipment appropriate to the task and apply safely
- PA0102 Select and inspect prepared (sprung and pre-padded) frame ensuring dimensions of fabric components meet specifications for defects in padding and any defects are rectified
- PA0103 Identify, select and inspect various cut components and indicate appropriate sections of the frame
- PA0104 Fit and secure cover components (inside and outside) in the correct sequence to the frame using an appropriate sewing or stapling procedure ensuring smooth finish, no twists in fabric, tops in correct position, no puckering on corners or edges, surplus fabric removed
- PA0105 Insert pleats and tucks ensuring they are evenly spaced, pleats and tucks folded down and along grain
- PA0106 Apply correct tension to fabric ensuring that visual appearance of the work piece conforms to specifications
- PA0107 Inspect covered frame for faults such as marks; incorrect alignment; incorrect tension or incorrect positioning with the covering, all fixed components are secure, components are accurately centred and evenly spaced and material is cut and shaped to conform to the specified design profiles, visual appearance, (including alignment of patterns, pleating and spacing of tacks, staples etc.) and take corrective action
- PA0108 Legs, glides, or castors are fitted in accordance with job specifications
- PA0109 Handle and move upholstered item delicately and store in designated area

## ***Applied Knowledge***

### ***Internal Assessment Criteria***

- IAC0101 Selected fabric components are accurately positioned onto prepared frame
- IAC0102 Covering components are cut to fit prepared frame to be covered
- IAC0103 Cover is firmly and accurately secured onto frame
- IAC0104 Components are attached in correct sequence
- IAC0105 Seams are neat and sewn according to specification
- IAC0106 Stapling is performed accurately and safely
- IAC0107 Bottom cloth is firmly and accurately secured
- IAC0108 Visual appearance of covered item conforms to specification and organisational requirements
- IAC0109 Any problems such as marks; incorrect alignment; incorrect tension or incorrect positioning with the covering is rectified or reported to the relevant person
- IAC0110 Upholstered item is placed in a designated location according to organisational requirements
- IAC0111 The operations are performed safely and within the time allocated

### **3.2.2. PM-03-PS02: Prepare, sew and finish advanced loose covers**

#### ***Scope of Practical Skill***

Given upholstery hand tools such as tack hammer; staple gun; staple remover; upholstery shears; wheel or mini fabric cutter, appropriate sewing needles; upholstery shears; trimming knife; staple gun; staple remover; tack hammer, equipment and staple gun, cut components and complex and exposed frames the learner must be able to:

- PA0201 Plan the cutting of the fabric so as to minimise waste and take account of the design characteristics and handling implications of the fabric to be used
- PA0202 Measure and mark out the components accurately, clearly and to within acceptable tolerance limits for the fabric being used
- PA0203 Ensure fabric placement and alignment is appropriate for the type and number of components required and the fabric characteristics (patterns, stripes, pile)
- PA0204 Accurately place all materials and components in their correct position, making sure that components are correctly orientated and aligned to meet fabric, pattern and design requirements
- PA0205 Cut components and panels
- PA0206 Use sewing methods which are appropriate to the type of component and attach the components in an efficient sequence, securely and to the required shape and finish

- PA0207 Attach lining component, fasteners and finishing materials such as edgings, trimmings and linings and for the covering of buttons, including braid, piping, fringe, polished wood borders, castors, bun feet etc.
- PA0208 Check and confirm that there are no loose threads on the finished loose cover and that the visual appearance of the loose cover meets the specification
- PA0209 Accurately position and securely attach closures, trimmings or decorative finishes using methods which will give the required durability and appearance
- PA0210 Inspect finished product to confirm quality and take corrective action to address faults or defects such as flaws, distortions and colour/pattern variations in the fabric, inaccurate measurements and mis-alignments, slipping, fraying, inaccuracies, poor seam quality and equipment faults

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0201 All materials and components are correctly orientated and aligned to meet fabric, pattern and design requirements
- IAC0202 Seams are neat and sewn according to specification
- IAC0203 Visual appearance of sewn loose covers conforms to specification and organisational requirements
- IAC0204 Any problems such as marks; incorrect alignment; incorrect tension or incorrect positioning with the covering is rectified or reported to the relevant person
- IAC0205 Sewn loose covers are placed in a designated location according to organisational requirements
- IAC0206 The operations are performed safely and within the time allocated

### **3.2.3. PM-03-PS03: Produce complex shaped cushions and padded items including a T-cushion**

#### ***Scope of Practical Skill***

Given upholstery hand tools such as tack hammer; staple gun; staple remover; upholstery shears; wheel or mini fabric cutter, appropriate sewing needles; upholstery shears; trimming knife; staple gun; staple remover; tack hammer, equipment and staple gun, cut components and complex and exposed frames the learner must be able to:

- PA0301 Plan the cutting of the fabric so as to minimise waste and take account of the design characteristics and handling implications of the fabric to be used
- PA0302 Measure and mark out the components accurately, clearly and to within acceptable tolerance limits for the fabric being used
- PA0303 Ensure fabric placement and alignment is appropriate for the type and number of components required and the fabric characteristics
- PA0304 Accurately place all materials and components in their correct position, making sure that components are correctly orientated and aligned to meet fabric, pattern and design requirements
- PA0305 Cut panels and components

- PA0306 Use sewing methods which are appropriate to the type of component and attach the components in an efficient sequence, securely and to the required shape and finish
- PA0307 Check and confirm that there are no loose threads on the finished complex shaped cushions and padded items and that the visual appearance of the complex shaped cushions and padded items meets the specification
- PA0308 Accurately position and securely attach closures, trimmings or decorative finishes using methods which will give the required durability and appearance
- PA0309 Inspect finished product to confirm quality and take corrective action to address faults or defects such as flaws, distortions and colour/pattern variations in the fabric, inaccurate measurements and mis-alignments, slipping, fraying, inaccuracies, poor seam quality and equipment faults

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0301 Fabric is cut so as to minimise waste and take account of the design characteristics and handling implications of the fabric to be used
- IAC0302 All materials and components are correctly orientated and aligned to meet fabric, pattern and design requirements
- IAC0303 Seams are neat and sewn according to specification
- IAC0304 Visual appearance of complex shaped cushions conforms to specification and organisational requirements
- IAC0305 Any problems such as marks; incorrect alignment; incorrect tension or incorrect positioning with the covering is rectified or reported to the relevant person
- IAC0306 Sewn complex shaped cushions are placed in a designated location according to organisational requirements
- IAC0307 The operations are performed safely and within the time allocated

### **3.3 Provider Programme Accreditation Criteria**

#### *Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

#### *Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

#### *Legal Requirements:*

- OHASA compliant

### **3.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **4. 683401000-PM-04, Perform Deep Buttoning Procedures to Decorate Upholstered Furniture, NQF Level 3, Credits 10**

### **4.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Select tools, equipment and materials for assembling buttons and carry out deep buttoning in a safe and productive manner

The learner will be required to:

- PM-04-PS01: Read and interpret the work specification and sample and prepare for assembling of buttons and performing a deep buttoning procedures
- PM-04-PS02: Use equipment and tools for assembling buttons and performing deep buttoning techniques correctly and safely
- PM-04-PS03: Assemble buttons appropriate to the work piece and diagram
- PM-04-PS04: Perform deep buttoning of a work piece

### **4.2 Guidelines for Practical Skills**

#### **4.2.1. PM-04-PS01: Read and interpret the work specification and sample and prepare for assembling of buttons and performing a deep buttoning procedures**

##### ***Scope of Practical Skill***

Given a work specification with information such as fabric type; button type; button size for assembling of buttons and performing a deep buttoning procedures the learner must be able to:

- PA0101 Read and interpret specifications
- PA0102 Analyse the sample
- PA0103 Clarify any ambiguity
- PA0104 Identify the fabric type, button type, button size and positioning and shape of the deep buttoning
- PA0105 Prepare the workstation ensuring good working conditions (tidy, clean and safe)

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

- IAC0101 The specification is checked and confirmed to be clear, complete and understood
- IAC0102 Any queries regarding the instructions are clarified with the relevant person
- IAC0103 All specifications are correctly interpreted correctly
- IAC0104 Preparation is carried out safely and within the time allocated

#### **4.2.2. PM-04-PS02: Use equipment and tools for assembling buttons and performing deep buttoning techniques correctly and safely**

### ***Scope of Practical Skill***

Given equipment, tools such as upholstery shears; button machine; fabric punch; hammer; measuring tools and consumables the learner must be able to:

- PA0201 Select equipment, tools and materials for the task conforming to the requirements of the job specification
- PA0202 Inspect and set up tools and equipment prior to use ensuring good condition
- PA0203 Operate tools and equipment in a safe manner
- PA0204 Care for and store buttoning tools and equipment ensuring
- PA0205 Select and inspect raw material and consumables for assembling buttons and performing deep buttoning techniques

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0201 Correct tools and equipment for the job are selected and set out.
- IAC0202 Equipment and tools are confirmed to be operational and in required condition for safe and effective use.
- IAC0203 Materials are selected according to specifications requirements.
- IAC0204 Materials not up to quality specifications are identified, reported to the relevant person and replaced

### **4.2.3. PM-04-PS03: Assemble buttons appropriate to the work piece and diagram**

#### ***Scope of Practical Skill***

Given equipment and consumables such as fabric; string; button moulds the learner must be able to:

- PA0301 Identify and select the correct button moulds (size, shape and number)
- PA0302 Punch button covering fabric accurately and cleanly
- PA0303 Assemble buttons
- PA0304 Inspect assembled buttons for conformance with specifications ensuring no faults or defects
- PA0305 Adhere to time limitations for completing the operation

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0301 Materials and components are prepared according to specification
- IAC0302 Button covering fabric is accurately and cleanly punched
- IAC0303 Correct button moulds are selected and covered according to specification requirements
- IAC0304 Equipment and tools for button making are used safely and correctly

- IAC0305 Assembled buttons are checked with specification and confirmed to be ready for use
- IAC0306 Workstation is kept clean, tidy and safe
- IAC0307 Operations are performed safely and within the time allocated

#### **4.2.4. PM-04-PS04: Perform deep buttoning of a work piece**

##### ***Scope of Practical Skill***

Given work piece such as armchair, settee, headboard, box pouffe, office or reception seating and buttons the learner must be able to:

- PA0401 Accurately mark out the placement of the buttons according to specifications and diagram
- PA0402 Accurately position and fit the buttons ensuring visual balance and cover shape
- PA0403 Identify faults and defects such as incorrect positioning; incorrect alignment; incorrect tension; incorrect shape and take corrective action
- PA0404 Adhere to time limitations for completing the operation

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

- IAC0401 Work piece is accurately marked out for buttons
- IAC0402 Buttons conform to specification.
- IAC0403 Buttons are accurately positioned, fitted and securely attached
- IAC0404 Buttons are visually balanced and cover shape conforms to specification requirements
- IAC0405 Deep buttoning faults are identified, reported to the relevant person and rectified
- IAC0406 Non-rectifiable faults are discarded and replaced according to organisational practices
- IAC0407 Correct tools and equipment are used safely and correctly
- IAC0408 Deep buttoning operations are performed safely and within the time allocated

#### **4.3 Provider Programme Accreditation Criteria**

##### ***Physical Requirements:***

- All tools, machinery, consumables, equipment, specified in the scope statement

##### ***Human Resource Requirements:***

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

*Legal Requirements:*

- OHASA compliant

#### **4.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **5. 683401000-PM-05, Produce Cutting Lay Requirements for Cutting of Upholstered Cover Components, NQF Level 3, Credits 4**

### **5.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Produce cutting lay requirements (marker or cutting plan) for layout of templates and patterns for railroad or standard upholstery fabric with and without pile

The learner will be required to:

- PM-05-PS01: Produce a cutting plan or marker for layout of templates or patterns on upholstery fabric
- PM-05-PS02: Prepare workstation to develop a lay for cutting for at least five different types of material or products (at least one of which should be patterned)
- PM-05-PS03: Develop a lay in accordance with work specifications

### **5.2 Guidelines for Practical Skills**

#### **5.2.1. PM-05-PS01: Produce a cutting plan or marker for layout of templates or patterns on upholstery fabric**

##### ***Scope of Practical Skill***

Given work specification, patterns and templates and various types of fabric, markers, ruler, straight edges, cutting tools, templates, weights and/or skewers the learner must be able to:

- PA0101 Required fabrics, number of items to be cut and required equipment are identified
- PA0102 Fabric sizes to be cut are identified from work order plus any required allowance
- PA0103 Suitable work area is selected, prepared and cleaned of any contaminants
- PA0104 Work sequence is planned

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

- IAC0101 Job specifications are correctly interpreted and patterns or templates are checked ensuring correctness and that all components are present
- IAC0102 Width and direction of fabric are determined
- IAC0103 Templates are laid out to create cutting plan ensuring optimal use of fabric, allowance for seams, top of templates in line with fabric direction
- IAC0104 Cutting plan is recorded and stored ensuring panels labelled, template tops marked, dimensions, matching points if required

#### **5.2.2. PM-05-PS02: Prepare workstation to develop a lay for cutting for at least five different types of material or products (at least one of which should be patterned)**

##### ***Scope of Practical Skill***

Given work specification, patterns and templates and various types of fabric, tape measure, table, the learner must be able to:

- PA0201 Suitable scissors, cutting machines, knives and/or blades are selected and checked prior to use for appropriate sharpness, set, operation and safe condition
- PA0202 Fabrics are selected in accordance with work order and laid out smooth and square
- PA0203 Fabrics are inspected for flaws and appropriate finish
- PA0204 Nap/pile direction, pattern matches and face of the materials are identified
- PA0205 Tools and equipment are checked for operation
- PA0206 Fabric is measured and marked, including registration points, in accordance with workplace practices

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0201 Materials used and any special marking out requirements are identified
- IAC0202 Fabrics and materials are selected and carefully inspected for flaws and appropriate finish
- IAC0203 Important features of the fabric such as nap/pile direction, pattern matches and face of the materials are identified and applied in producing the lay

### **5.2.3. PM-05-PS03: Develop a lay in accordance with work specifications**

#### ***Scope of Practical Skill***

Given work specification, patterns and templates and various types of fabric, tape measure, table, the learner must be able to:

- PA0301 Top lay is rolled out in accordance with work instructions
- PA0302 Template is placed on fabric to ensure layout of cutting plan meets job specifications, minimise waste, pile direction, fabric defects
- PA0303 Fabric meterage is calculated in accordance with number of lays, and fabric availability checked.
- PA0304 Marker is used to mark out the fabric and label fabric panels ensuring clear line, line up with template, tolerances
- PA0305 Remaining layers are rolled out, cut to length, and stacked on top of each other flat, even salvages
- PA0306 Top lay is placed on top of remaining layers and weighted or pinned to minimise movement during cutting ensuring flat, even salvages.
- PA0307 Fabric usage is recorded while marking out fabric in accordance with worksite policies and procedures.

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0301 A cutting plan is developed applying accurate measuring procedures and marking out upholstery fabric quantities
- IAC0302 Waste is minimised by applying interlocking principles
- IAC0303 Consistent quality lays are produced for at least five different types of material or products (at least one of which should be patterned)

### **5.3 Provider Programme Accreditation Criteria**

#### *Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

#### *Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

#### *Legal Requirements:*

- OHASA compliant

### **5.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **6. 683401000-PM-06, Produce upholstery patterns and templates for the upholstery frame preparation and cutting departments, NQF Level 3, Credits 16**

### **6.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Make and produce master or generic patterns and templates (set or singular) upholstery patterns and templates from sketches, customer descriptions or blueprints which matches all quality standards and calculate material and determine manufacturing process

The learner will be required to:

- PM-06-PS01: Measure a range of furniture frames to identify information for upholstery patterns and templates using measuring equipment and tools to determine the correct dimensions
- PM-06-PS02: Study and interpret sketches, customer descriptions or blueprints to collect information for upholstery patterns and cutting templates
- PM-06-PS03: Produce cutting templates and match with standards
- PM-06-PS04: Produce templates and patterns that meet specifications
- PM-06-PS05: Fit (mock), test and adjust cutting patterns and templates to ensure conformance to standards and requirements
- PM-06-PS06: Repair, modify and maintain cutting patterns and templates

### **6.2 Guidelines for Practical Skills**

#### **6.2.1. PM-06-PS01: Measure a range of furniture frames to identify information for upholstery patterns and templates using measuring equipment and tools to determine the correct dimensions**

##### ***Scope of Practical Skill***

Given examples of various types of furniture frames before and after upholstery, and measuring exercise projects with circles of different depths and diameters, and measuring tools including a Vernier calliper, scale rule, cloth tape measure, retractable steel tape measure and steel ruler and materials such as paper; card; hardboard; plywood; plastic the learner must be able to:

- PA0101 Select appropriate measuring and drawing equipment and tools and apply to produce accurate lines, shapes, curves, corners and angles
- PA0102 Inspect measuring tools and equipment and confirm to be in the appropriate condition for safe and effective use
- PA0103 Take accurate measurements of all furniture and component dimensions using correct measuring techniques
- PA0104 Apply mathematical skills to make the necessary calculations such as taking measurements, determining and producing angles, curves and corners
- PA0105 Identify all aspects where allowances are needed and calculate and add allowances such as sewing, tacking and stapling
- PA0106 Take and keep accurate record of all measurements

##### ***Applied Knowledge***

### ***Internal Assessment Criteria***

- IAC0101 A range of furniture frames are accurately measured using the correct measuring equipment and techniques and the dimensions are correctly determined
- IAC0102 Formulae are correctly applied and calculations are accurately performed taking allowances into consideration
- IAC0103 Angles, curves and corners are accurately reproduced
- IAC0104 All records are current and accurate

### **6.2.2. PM-06-PS02: Study and interpret sketches, customer descriptions or blueprints to collect information for upholstery patterns and cutting templates**

#### ***Scope of Practical Skill***

Given examples of various types of furniture frames sketches, customer descriptions or blueprints the learner must be able to:

- PA0201 Interpret specifications and determine cutting patterns and template requirements
- PA0202 Differentiate between cutting patterns and templates for one offs; for multiple use; short term use; long term use

#### ***Applied Knowledge***

### ***Internal Assessment Criteria***

- IAC0201 Sketches, prototypes, customer descriptions or blueprints are analysed and construction and components are correctly identified

### **6.2.3. PM-06-PS03: Produce cutting templates and match with standards**

#### ***Scope of Practical Skill***

Given a range of cutting plans and consumables such as full sized cardboard , tracing paper, craft paper, hard board and plywood, measuring and drawing equipment, and upholstery hand and power tools including a jig saw, band saw and sanding paper the learner must be able to:

- PA0301 Apply accepted standard tolerances appropriate to the production method
- PA0302 Tools and equipment required for cutting pattern and template making are selected and applied
- PA0303 Select appropriate materials for making of cutting patterns and templates
- PA0304 Accurately copy shapes and forms and transfer information to cutting pattern and template materials
- PA0305 Determine direction of templates
- PA0306 Determine the number of templates with reference to the quantity of templates needed
- PA0307 Draw details on outlined parts to indicate where parts are to be joined, as well as the positions of detail, trims and other features, using computers or drafting instruments

- PA0308 Mark out the template designs and patterns that meet specification, using the correct tools and raw materials for templates for specifying the shape of seats for the frame preparers
- PA0309 Mark out the templates and patterns that meet specification, using the correct tools and raw materials
- PA0310 Templates for shape of seats for the frame preparers are produced
- PA0311 Patterns for different sizes, cut-outs, shapes and angles of fabric and leather are produced
- PA0312 Templates for multi-lay cutting are produced

***Applied Knowledge***

***Internal Assessment Criteria***

- IAC0301 Cutting patterns and templates produced allow for secure attachment and accurate calibrations and sizing for their production purpose
- IAC0302 Cutting patterns and templates are produced safely and within the time allocated

**6.2.4. PM-06-PS04: Produce templates and patterns that meet specifications**

***Scope of Practical Skill***

Given a range of marked up templates and patterns, cutting plans and raw materials including full sized cardboard , tracing paper, craft paper, hard board and plywood, measuring and drawing equipment, and upholstery hand and power tools including a jig saw, band saw and sanding paper the learner must be able to:

- PA0401 Select and safely use the correct power tools and hand tools and cut the template and pattern components to specification
- PA0402 Lightly sand sharp edges on plywood and board templates that can damage cover materials
- PA0403 Check templates and patterns for defects, correct measurement, and quality
- PA0404 Mark templates and patterns with all relevant information, such as name of product and part, sequence lay-out on fabric, top/bottom or front/ back, pile direction

***Applied Knowledge***

***Internal Assessment Criteria***

- IAC0401 Templates and patterns are produced that meet specifications
- IAC0402 Patterns and template are accurately marked with all indicators
- IAC0403 Cutting patterns and templates produced are maintained in appropriate condition for use
- IAC0404 Cutting patterns and templates are correctly labelled and stored in a designated location

**6.2.5. PM-06-PS05: Fit (mock), test and adjust cutting patterns and templates to ensure conformance to standards and requirements**

***Scope of Practical Skill***

Given sketches, customer descriptions or blueprints and patterns and templates with faults and defects the learner must be able to:

- PA0501 Inspect templates and compare with standard
- PA0502 Fit and test (mock) on appropriate furniture to determine accurate fit
- PA0503 Observe the differences between the template and the standard whereby identifying faults and shortcomings
- PA0504 Make necessary adjustments to the patterns and templates to ensure the accuracy of the template
- PA0505 Keep accurate records ensuring correct detail and identification of the patterns

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0501 Cutting patterns and templates are correctly inspected to observe deviations from the standard
- IAC0502 All faults and defects are identified
- IAC0503 Adjustments are applied ensuring accuracy of the template

## **6.2.6. PM-06-PS06: Repair, modify and maintain cutting patterns and templates**

### ***Scope of Practical Skill***

Given sketches, customer descriptions or blueprints and worn and damaged patterns and templates the learner must be able to:

- PA0601 Inspect templates to identify worn sections and damage
- PA0602 Compare templates with standard to identify deviations from the standard
- PA0603 Observe the differences between the template and the standard whereby identifying deviations, damage and shortcomings
- PA0604 Make necessary repairs and modifications to the patterns and templates to ensure the accuracy of the template according to standard
- PA0605 Keep accurate records ensuring correct detail and identification of the patterns

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

- IAC0601 Cutting patterns and templates which can be repaired or modified for use are repaired and modified as required for production
- IAC0602 A sound understanding of determining feasibility of repairs and modifications
- IAC0603 A sound understanding of labelling and storing patterns and templates are demonstrated

### **6.3 Provider Programme Accreditation Criteria**

#### *Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

#### *Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

#### *Legal Requirements:*

- OHASA compliant

### **6.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **7. 683401000-PM-07, Lay Out, Measure, Cut and Sew Upholstery Materials According to Templates or Specifications and Optimising Material Usage, NQF Level 2, Credits 20**

### **7.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Measure, cut and sew covering materials, using patterns and measuring and cutting instruments, following sketches and design specifications ensuring limiting of wastage by applying correct laying-out techniques and optimize the piece of fabric/material being cut to limit wastage

The learner will be required to:

- PM-07-PS01: Prepare a single and multi-ply lay for cutting of upholstery components
- PM-07-PS02: Prepare for cutting of upholstery components
- PM-07-PS03: Prepare the work area for cutting operations
- PM-07-PS04: Perform cutting machine control exercises on paper or fabric (off cuts) with and without the blade
- PM-07-PS05: Perform cutting exercises using single ply fabric and manual and powered cutting equipment such as a circular knife, band knife or upright knife
- PM-07-PS06: Inspect and set the machine according to the type and quality of the fabric and the height of the lay prior to cutting

### **7.2 Guidelines for Practical Skills**

#### **7.2.1. PM-07-PS01: Prepare a single and multi-ply lay for cutting of upholstery components**

##### ***Scope of Practical Skill***

Given access to a laying-up table, tools and equipment and templates (paper; cardboard; hardboard; plywood; plastics), fabric/material or paper the learner must be able to:

- PA0101 Interpret cutting plan or specifications to identify the components according to furniture style and total plies and verify the cutting requirement against the sample
- PA0102 Identify the fabric/material and batches according to the serial numbers of the labels
- PA0103 Check the cutting plan ensuring all components are included according to specifications
- PA0104 Count the components according to the type of lay and furniture design

##### ***Applied Knowledge***

- AK0101 Upholstery furniture construction and parts

##### ***Internal Assessment Criteria***

- IAC0101 A single and multi-ply lay is produced and meet the requirements of the cutting plan

#### **7.2.2. PM-07-PS02: Prepare for cutting of upholstery components**

##### ***Scope of Practical Skill***

Given a prepared lay, access to a cutting workstation and equipment the learner must be able to:

- PA0201 Interpret quality and quantity specifications
- PA0202 Check the lay for compliance to the product specifications or sample (quantity) (total plies in the lay)
- PA0203 Check the lay for compliance to the product specifications or sample (the right fabric, right number of components according to furniture style) to determine quality before cutting
- PA0204 Identify potential problems and rectify them in preparation for cutting
- PA0205 Identify fabric faults
- PA0206 Check that the cutting plan fit on the lay and fabric width is not too narrow/wide and material is wasted

#### ***Applied Knowledge***

- AK0201 Lay and cutting plan requirements
- AK0202 Fabric/material types and characteristics

#### ***Internal Assessment Criteria***

- IAC0201 Quality checking techniques are applied to establish whether the components comply with customer specifications
- IAC0202 Quality and quantity checking techniques are applied to identify potential problems and identify corrective procedure
- IAC0203 Insufficient fabric; incorrect fabric; incorrect templates; incorrect lay; incorrect alignment are identified and corrected

### **7.2.3. PM-07-PS03: Prepare the work area for cutting operations**

#### ***Scope of Practical Skill***

Given access to a cutting work area and cleaning equipment, cutting equipment the learner must be able to:

- PA0301 Clean the working area and make sure there are no oil, dust, fly from the previous lay or water spillages which could result in contamination and quality problems
- PA0302 Inspect the lay for compliance with the specifications and cutting plan (plies, stretch, tension, vertical or horizontal stripes, direction or the pile, edges are lined up correctly, end allowances, etc.)
- PA0303 Identify all work aids and making sure all the work aids are available
- PA0304 Prepare the lay for cutting by securing the lay using appropriate fasteners (clamps, pins or weights)

#### ***Applied Knowledge***

- AK0301 Quality and safety requirements

#### ***Internal Assessment Criteria***

- IAC0301 Workstation is clean and tidy and free from foreign objects which might cause risk or contamination to product

#### **7.2.4. PM-07-PS04: Perform cutting machine control exercises on paper or fabric (off cuts) with and without the blade**

##### ***Scope of Practical Skill***

Given cutting machine, paper and fabric/material the learner must be able to:

- PA0401 Apply correct posture (sitting/standing, chair height, feet, arms and hands)
- PA0402 Set the machine
- PA0403 Remove and insert the blade
- PA0404 Control machine speed
- PA0405 Control the machine using the correct hand and arm movements
- PA0406 Use the machine to cut straight lines, curved lines, corners, circles, semi-circles etc.
- PA0407 Handle and feed the paper/fabric according to the machine speed
- PA0408 Comply with health and safety (on-off switch) procedures

##### ***Applied Knowledge***

- AK0401 Machine manual specifications
- AK0402 Machine speed control techniques
- AK0403 Fabric handling and feeding techniques using hand control
- AK0404 Hand-foot-eye coordination techniques

##### ***Internal Assessment Criteria***

- IAC0401 The speed of the machine is controlled using hand-foot-eye coordination techniques and all machine devices related to the control of the speed of the machine
- IAC0402 The feeding of the fabric (or paper) is controlled to achieve required cut to the required quality standard

#### **7.2.5. PM-07-PS05: Perform cutting exercises using single ply fabric and manual and powered cutting equipment such as a circular knife, band knife or upright knife**

##### ***Scope of Practical Skill***

Given a variety of swatches (fabric/material) and shapes, qualities and textures, and cutting machine the learner must be able to:

- PA0501 Use the machine controls to stop and start the machine
- PA0502 Control a cutting machine and fabric to cut at different speeds/bursts until machine control is achieved doing straight lines, curved lines, corners, etc.

- PA0503 Feed, handle and control the fabric according to machine speed to achieve consistent cut quality
- PA0504 Cut accurately according to the cutting lines to maintain the size and shape of the line
- PA0505 Position hands correctly in order to guide with one hand and control with the other hand
- PA0506 Comply with health and safety practices and use PPE where applicable
- PA0507 Cut notches

#### ***Applied Knowledge***

- AK0501 Machine speed control techniques
- AK0502 Fabric handling and feeding techniques using hand control
- AK0503 Hand-foot-eye coordination techniques

#### ***Internal Assessment Criteria***

- IAC0501 Machine speed and material feed is consistent
- IAC0502 Fabric is aligned and positioned using hands to feed and control fabric flow
- IAC0503 Safety compliance is achieved and maintained
- IAC0504 Notches and other marks are accurately placed and complies with standard applications

### **7.2.6. PM-07-PS06: Inspect and set the machine according to the type and quality of the fabric and the height of the lay prior to cutting**

#### ***Scope of Practical Skill***

Given cutting machine, cutting lay and cutting plan the learner must be able to:

- PA0601 Inspect the blade and sharpen if blunt
- PA0602 Set the machine settings such as height or speed, etc.
- PA0603 Set and change guides according to the fabric and operation
- PA0604 Test the cutting blade for sharpness n a piece of the lay according to the fabric and operation requirements
- PA0605 Inspect a test piece to identify incorrect settings and make the necessary adjustments
- PA0606 Identify and apply all safety equipment such as a chain maille glove

#### ***Applied Knowledge***

- AK0601 Speed setting of the machine
- AK0602 Techniques to sharpen blunt blades
- AK0603 Techniques to secure the blade and guide

#### ***Internal Assessment Criteria***

- IAC0601 Machine settings (blade, speed, etc.) are applied and adjusted according to the fabric and operation
- IAC0602 The correct guides are secured according to the fabric and lay
- IAC0603 A test piece is inspected to establish whether the machine settings are correct

### **7.3 Provider Programme Accreditation Criteria**

#### *Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

#### *Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

#### *Legal Requirements:*

- OHASA compliant

### **7.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **8. 683401000-PM-08, Manufacture Upholstery Bespoke Furniture or Prototypes for Bulk Production, NQF Level 4, Credits 30**

### **8.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Manufacture upholstery furniture prototypes according to an approved design and finish and prepare prototypes for display to and approval from the client

The learner will be required to:

- PM-07-PS07: Cut stripes, checks, patterns and pattern repeat fabric into component parts according to a cutting plan by operating an upright knife (repeat for single ply, multi plies, circular knife or band knife)
- PM-07-PS08: Identify sewing machines, machine parts and attachments and set the machine according to the fabric and operation (tension, correct threading, seam width, change needles, stitch adjustment)
- PM-07-PS09: Pick up, align and sew cut components and parts using a lockstitch machine; or longarm; twin needle; overlock machine; multi needle machine performing a minimum of two operations

### **8.2 Guidelines for Practical Skills**

**8.2.1. PM-07-PS07: Cut stripes, checks, patterns and pattern repeat fabric into component parts according to a cutting plan by operating an upright knife (repeat for single ply, multi plies, circular knife or band knife)**

#### ***Scope of Practical Skill***

Given prepared lay with cutting plan, specifications and templates the learner must be able to:

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

**8.2.2. PM-07-PS08: Identify sewing machines, machine parts and attachments and set the machine according to the fabric and operation (tension, correct threading, seam width, change needles, stitch adjustment)**

#### ***Scope of Practical Skill***

Given a minimum of selection of three machines (lockstitch machine; or longarm; twin needle; overlock machine or multi needle machine), types of threads, needles the learner must be able to:

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

**8.2.3. PM-07-PS09: Pick up, align and sew cut components and parts using a lockstitch machine; or longarm; twin needle; overlock machine; multi needle machine performing a minimum of two operations**

### ***Scope of Practical Skill***

Given a variety of swatches (fabric/material) and shapes, colours, textures, compositions, a variety of threads and a variety (sizes) of needles and tools and machines the learner must be able to:

### ***Applied Knowledge***

### ***Internal Assessment Criteria***

## **8.3 Provider Programme Accreditation Criteria**

### *Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

### *Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

### *Legal Requirements:*

- OHASA compliant

## **8.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **9. 683401000-PM-09, Repair and Re-Upholster Upholstery Furniture, NQF Level 4, Credits 10**

### **9.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Repair and re-upholster upholstery furniture by identifying defects and faults and identifying corrective action to repair defects or re-upholster

The learner will be required to:

- PM-08-PS01: Analyse manufacturing requirements for upholstery furniture by reading and interpreting design and technical information from designs and drawings
- PM-08-PS02: Construct frames for upholstery prototypes or bespoke furniture
- PM-08-PS03: Plan and prepare for attaching foundations to the given frames

### **9.2 Guidelines for Practical Skills**

#### **9.2.1. PM-08-PS01: Analyse manufacturing requirements for upholstery furniture by reading and interpreting design and technical information from designs and drawings**

##### ***Scope of Practical Skill***

Given designs and/or drawings of upholstery furniture and information on manufacturing capability of a company the learner must be able to:

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

#### **9.2.2. PM-08-PS02: Construct frames for upholstery prototypes or bespoke furniture**

##### ***Scope of Practical Skill***

Given technical specifications for upholstery prototypes, raw material (timber, springs and webbing), tools and equipment, PPE the learner must be able to:

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

#### **9.2.3. PM-08-PS03: Plan and prepare for attaching foundations to the given frames**

##### ***Scope of Practical Skill***

Given a range of drawing, measuring and marking instruments, technical drawings, product specifications, work instructions, samples, prototypes and photos of prototypes the learner must be able to:

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

### **9.3 Provider Programme Accreditation Criteria**

#### *Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

#### *Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

#### *Legal Requirements:*

- OHASA compliant

### **9.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **10. 683401000-PM-10, Inspect Upholstery Furniture During Various Stages of the Manufacturing Process to Ensure Conformance to Quality Standards, NQF Level 4, Credits 15**

### **10.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Inspect upholstery furniture during various stages of the manufacturing process to ensure conformance to quality standards

The learner will be required to:

- PM-08-PS04: Hand build upholstery suspension systems (springs and webbing)
- PM-08-PS05: Attach foam or other padding such as loose fibre stuffing, cotton, felt, and/or foam padding to upholstery prototypes or bespoke furniture frames to form smooth rounded surfaces
- PM-08-PS06: Attach covers (advanced, non-sewn, shaped) upholstery prototype or bespoke furniture using hand tools and knowledge of fabrics and upholstery methods
- PM-08-PS07: Finish upholstery prototype or bespoke furniture using hand tools and suitable methods to secured trims and accessories

### **10.2 Guidelines for Practical Skills**

#### **10.2.1. PM-08-PS04: Hand build upholstery suspension systems (springs and webbing)**

##### ***Scope of Practical Skill***

Given a range of drawing, measuring and marking instruments, technical drawings, product specifications, work instructions, samples, prototypes and photos of prototypes and raw materials the learner must be able to:

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

#### **10.2.2. PM-08-PS05: Attach foam or other padding such as loose fibre stuffing, cotton, felt, and/or foam padding to upholstery prototypes or bespoke furniture frames to form smooth rounded surfaces**

##### ***Scope of Practical Skill***

Given technical specifications for upholstery prototypes and frame with springs/webbing, raw material for padding, consumables, tools and equipment the learner must be able to:

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

#### **10.2.3. PM-08-PS06: Attach covers (advanced, non-sewn, shaped) upholstery prototype or bespoke furniture using hand tools and knowledge of fabrics and upholstery methods**

##### ***Scope of Practical Skill***

Given technical specifications for upholstery prototypes, prepared frame with springs/webbing and padding, raw material for padding, consumables, tools and equipment the learner must be able to:

***Applied Knowledge***

***Internal Assessment Criteria***

**10.2.4. PM-08-PS07: Finish upholstery prototype or bespoke furniture using hand tools and suitable methods to secured trims and accessories**

***Scope of Practical Skill***

Given technical specifications for upholstery prototypes, upholstery prototype, raw material (trims or accessories), consumables, tools and equipment the learner must be able to:

***Applied Knowledge***

***Internal Assessment Criteria***

**10.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

*Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

*Legal Requirements:*

- OHASA compliant

**10.4 Exemptions**

- â€¢ No exemptions, but the module can be achieved in full through a normal RPL process

## **11. 683401000-PM-11, Reengineer Upholstery Furniture Products to Address Development or Manufacturing Defects, NQF Level 4, Credits 15**

### **11.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Apply reengineering principles to change or adapt product specifications to address a fault or defect

The learner will be required to:

- PM-09-PS01: Examine upholstery furniture pieces to identify defects and identify corrective action to repair defect
- PM-09-PS02: Apply complex frame repairs in craft upholstery
- PM-09-PS03: Measure sizes and create patterns of different panels using shape of furniture as outline and draw up a cutting list consisting of following components:
- PM-09-PS04: Cut new covering material and drape and smooth over sections of furniture to ensure matching shades, colours, pile and patterns in material
- PM-09-PS05: Conduct sewing operations where necessary to seam cushions and join various sections of covering material
- PM-09-PS06: Repair and reupholster furniture by fitting and securing material on inside of arms, back, seat, over outside back and arms of prepared wooden frame
- PM-10-PS01: Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects
- PM-10-PS02: Examine and inspect upholstered furniture products or work to verify conformance to specifications
- PM-10-PS03: Suggest possible solutions to solve the problem (short term and long term)

### **11.2 Guidelines for Practical Skills**

#### **11.2.1. PM-09-PS01: Examine upholstery furniture pieces to identify defects and identify corrective action to repair defect**

##### ***Scope of Practical Skill***

Given upholstery items with defects and in need of repair, raw materials, consumables, tools and equipment the learner must be able to:

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

#### **11.2.2. PM-09-PS02: Apply complex frame repairs in craft upholstery**

##### ***Scope of Practical Skill***

Given upholstery item with frame defects and in need of repair, raw materials, consumables, tools and equipment the learner must be able to:

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

**11.2.3. PM-09-PS03: Measure sizes and create patterns of different panels using shape of furniture as outline and draw up a cutting list consisting of following components:**

#### ***Scope of Practical Skill***

Given upholstery item to be re-upholstered or repaired, raw materials, consumables, tools and equipment the learner must be able to:

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

**11.2.4. PM-09-PS04: Cut new covering material and drape and smooth over sections of furniture to ensure matching shades, colours, pile and patterns in material**

#### ***Scope of Practical Skill***

Given upholstery item to be re-upholstered or repaired, raw materials, consumables, tools and equipment the learner must be able to:

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

**11.2.5. PM-09-PS05: Conduct sewing operations where necessary to seam cushions and join various sections of covering material**

#### ***Scope of Practical Skill***

Given upholstery item to be re-upholstered or repaired, raw materials, consumables, tools and equipment the learner must be able to:

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

**11.2.6. PM-09-PS06: Repair and reupholster furniture by fitting and securing material on inside of arms, back, seat, over outside back and arms of prepared wooden frame**

#### ***Scope of Practical Skill***

Given upholstery item to be re-upholstered or repaired, raw materials, consumables, tools and equipment the learner must be able to:

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

**11.2.7. PM-10-PS01: Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects**

***Scope of Practical Skill***

Given upholstery furniture and materials with defects and faulty equipment and tools (could be simulated or DVD) the learner must be able to:

***Applied Knowledge***

***Internal Assessment Criteria***

**11.2.8. PM-10-PS02: Examine and inspect upholstered furniture products or work to verify conformance to specifications**

***Scope of Practical Skill***

Given Given upholstery furniture with faults or defects the learner must be able to:

***Applied Knowledge***

***Internal Assessment Criteria***

**11.2.9. PM-10-PS03: Suggest possible solutions to solve the problem (short term and long term)**

***Scope of Practical Skill***

Given inspection reports indicating faults and defects the learner must be able to:

***Applied Knowledge***

***Internal Assessment Criteria***

**11.3 Provider Programme Accreditation Criteria**

***Physical Requirements:***

- All tools, machinery, consumables, equipment, specified in the scope statement

***Human Resource Requirements:***

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

***Legal Requirements:***

- OHASA compliant

#### 11.4 Exemptions

- No exemptions, but the module can be achieved in full through a normal RPL process

## **12. 683401000-PM-12, Develop Technical Specifications and Line Setup Requirements for Manufacturing of Upholstery Furniture, NQF Level 4, Credits 15**

### **12.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to Providing documentation, detailed instructions, drawings, or specifications to inform others about how parts, equipment, or structures are to be fabricated, constructed, assembled, modified, maintained, or used

The learner will be required to:

- PM-11-PS01: Investigate and identify reasons for reengineering
- PM-11-PS02: Analyse the upholstery product and product specifications to identify changes and adaptations required
- PM-11-PS03: Carry out and evaluate prototype adaptations
- PM-11-PS04: Incorporate agreed changes and adaptations into technical specifications
- PM-11-PS05: Compile and present new or adapted specifications resulting from changes to relevant personnel according to organisational requirements
- PM-12-PS01: Read and analyse product specifications, samples and/or technical drawings to extract all relevant information to the production process and product
- PM-12-PS02: Compile an input requirement list for upholstery product

### **12.2 Guidelines for Practical Skills**

#### **12.2.1. PM-11-PS01: Investigate and identify reasons for reengineering**

##### ***Scope of Practical Skill***

Given a request for reengineering of an upholstery product the learner must be able to:

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

#### **12.2.2. PM-11-PS02: Analyse the upholstery product and product specifications to identify changes and adaptations required**

##### ***Scope of Practical Skill***

Given a request for reengineering of an upholstery product, product design specifications and technical specifications the learner must be able to:

##### ***Applied Knowledge***

##### ***Internal Assessment Criteria***

#### **12.2.3. PM-11-PS03: Carry out and evaluate prototype adaptations**

##### ***Scope of Practical Skill***

Given a request for reengineering of an upholstery product, product design specifications and adapted technical specifications the learner must be able to:

***Applied Knowledge***

***Internal Assessment Criteria***

**12.2.4. PM-11-PS04: Incorporate agreed changes and adaptations into technical specifications**

***Scope of Practical Skill***

Given a request for reengineering of an upholstery product, product design specifications, technical specifications and report from analysis the learner must be able to:

***Applied Knowledge***

***Internal Assessment Criteria***

**12.2.5. PM-11-PS05: Compile and present new or adapted specifications resulting from changes to relevant personnel according to organisational requirements**

***Scope of Practical Skill***

Given a request for reengineering of an upholstery product, product design specifications, technical specifications and report from analysis and tested adaptations the learner must be able to:

***Applied Knowledge***

***Internal Assessment Criteria***

**12.2.6. PM-12-PS01: Read and analyse product specifications, samples and/or technical drawings to extract all relevant information to the production process and product**

***Scope of Practical Skill***

Given a range of drawing, measuring and marking instruments, technical drawings, product specifications, work instructions, samples, prototypes and photos of prototypes the learner must be able to:

- PA0101 Read and interpret a technical drawing
- PA0102 Identify the views and perspective
- PA0103 Identify different line types
- PA0104 Identify the adaptations to a drawing (sections)
- PA0105 Identify and apply the codes and legends
- PA0106 Apply colour identification
- PA0107 Discuss upholstery fabrics, colours, and styles with internal customers, and provide cost estimates
- PA0108 Extract relevant information such as estimating sizes and quantities, or determining time, costs, resources, or materials needed to perform a work activity

### ***Applied Knowledge***

- AK0101 Company procedures and formats

### ***Internal Assessment Criteria***

- IAC0101 Technical specifications are read and interpreted to produce a work plan and cutting list
- IAC0102 Reads work order and applies knowledge and experience with materials to determine type and amount of material required to cover work piece
- IAC0103 Read and interpret a drawings for a furniture product and identify and visualise the features and aesthetic appearance of the design and product

## **12.2.7. PM-12-PS02: Compile an input requirement list for upholstery product**

### ***Scope of Practical Skill***

Given a range of drawings, measuring and marking instruments, technical drawings, product specifications, work instructions, samples, prototypes and photos of prototypes, prototype the learner must be able to:

- PA0201 Take accurate measurements of the various components of an upholstered furniture product to be covered
- PA0202 Consider allowances such as allowing for shrinkage, seams and stitching
- PA0203 Calculate the meterage of fabrics, leather, man-made fabrics, padding for the manufacturing of the furniture product
- PA0204 Calculate the amount of other raw material such as springs, webbing, etc. for the manufacturing of the furniture product

### ***Applied Knowledge***

- AK0201 Company procedures and formats

### ***Internal Assessment Criteria***

- IAC0201 Production methods are identified and evaluated and optimum processes determined
- IAC0202 Measures, drapes, and smooths material, wrong-side-out, over sections of furniture to ensure most economical use and to serve as guide in matching shades, colors, and designs in cloth
- IAC0203 Work plan is an accurate reflection of the tasks to be performed and the raw materials and consumables to be used to prepare the frame and raw materials within the allocated time
- IAC0204 Cutting list is complete, and allowances and specifications for raw materials meet workplace requirements
- IAC0205 Drawing equipment and tools are identified and used to produce basic technical drawings that meet the industry standard
- IAC0206 A cutting list for the webbing and springs meets the required standards for the materials and allowances

## **12.3 Provider Programme Accreditation Criteria**

*Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

*Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

*Legal Requirements:*

- OHASA compliant

**12.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## **13. 683401000-PM-13, Guide Teams in the Upholstery Manufacturing Departments to Achieve Set Targets and Outputs, NQF Level 3, Credits 4**

### **13.1 Purpose of the Practical Skill Modules**

The focus of the learning in this module is on providing the learner an opportunity to acquire the techniques and skills to supervise all activities of a work team to achieve the production targets of a upholstery manufacturing departments and guide teams in a fair and consistent manner

The learner will be required to:

- PM-12-PS03: Develop and construct technical drawings indicating all components in correct quantities, shapes and sizes of the upholstery furniture product whilst assessing feasibility for manufacture and alert designer to any deviations from design
- PM-12-PS04: Compile a routing sheet, cutting plan and production line set-up
- PM-12-PS05: Identify and prepare machines and tools for production according to machine/tools capabilities and worker skills and availability
- PM-13-PS01: Supervise a team in the upholstery manufacturing departments
- PM-13-PS02: Allocate tasks, equipment and resources to achieve set targets and give instructions to team members and receive feedback
- PM-13-PS03: Deal with poor performance
- PM-13-PS04: Coach members to enhance skills
- PM-13-PS05: Enforce occupational health and safety plans, policies and procedures
- PM-13-PS06: Find and apply information on a specific product, consumable or material to solve an upholstery related problem

### **13.2 Guidelines for Practical Skills**

**13.2.1. PM-12-PS03: Develop and construct technical drawings indicating all components in correct quantities, shapes and sizes of the upholstery furniture product whilst assessing feasibility for manufacture and alert designer to any deviations from design**

#### ***Scope of Practical Skill***

Given a range of drawings, measuring and marking instruments, technical drawings, product specifications, work instructions, samples, prototypes and photos of prototypes, prototype the learner must be able to:

#### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

**13.2.2. PM-12-PS04: Compile a routing sheet, cutting plan and production line set-up**

#### ***Scope of Practical Skill***

Given a range of drawings, measuring and marking instruments, technical drawings, product specifications, work instructions, samples, prototypes and photos of prototypes, prototype the learner must be able to:

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

### **13.2.3. PM-12-PS05: Identify and prepare machines and tools for production according to machine/tools capabilities and worker skills and availability**

#### ***Scope of Practical Skill***

Given a list of machines and machine capabilities of a company the learner must be able to:

### ***Applied Knowledge***

#### ***Internal Assessment Criteria***

### **13.2.4. PM-13-PS01: Supervise a team in the upholstery manufacturing departments**

#### ***Scope of Practical Skill***

Given case studies related to work performance and achievement of targets the learner must be able to:

- PA0101 Identify areas of poor time keeping
- PA0102 Identify areas of poor performance
- PA0103 Identify areas of poor quality
- PA0104 Identify opportunities of maximising resource allocation
- PA0105 Identify opportunities of rewarding excellent performance
- PA0106 Identify corrective actions where required

### ***Applied Knowledge***

- AK0101 Time keeping skills
- AK0102 Determining quality
- AK0103 Rewarding performance techniques

#### ***Internal Assessment Criteria***

- IAC0101 Corrective actions to address poor work performance and non-achievement of targets are proposed and are in line with the incident
- IAC0102 Resource allocation is maximised
- IAC0103 Excellent performance is rewarded

### **13.2.5. PM-13-PS02: Allocate tasks, equipment and resources to achieve set targets and give instructions to team members and receive feedback**

#### ***Scope of Practical Skill***

Given a weekly action plan as well as different scenarios related to incorrect interpretation of instructions, lack of monitoring and control the learner must be able to:

- PA0201 Allocate each team member a daily task or set of tasks
- PA0202 Allocate equipment and resources
- PA0203 Give clear instructions and ensure that the team member understood it
- PA0204 Identify the correct way of formulating the instruction
- PA0205 Identify areas of poor monitoring and control, poor feedback and identify corrective actions

#### ***Applied Knowledge***

- AK0201 Planning techniques
- AK0202 Resource allocation
- AK0203 Instructions
- AK0204 Monitoring and control techniques

#### ***Internal Assessment Criteria***

- IAC0201 The task and resource allocation and instructions are clear and in support of the action plan
- IAC0202 Write clear, unambiguous and concise instructions and test for the correct understanding thereof
- IAC0203 Corrective actions are appropriate to the identified problem areas

### **13.2.6. PM-13-PS03: Deal with poor performance**

#### ***Scope of Practical Skill***

Given information on worker performance, attendance and work policies and procedures the learner must be able to:

- PA0301 Identify the area of poor work performance
- PA0302 Identify the applicable disciplinary policy and procedure to apply
- PA0303 Conduct a disciplinary procedure (verbal warning and first written warning)
- PA0304 Keep records of the disciplinary procedure and actions

#### ***Applied Knowledge***

- AK0301 Disciplinary policies and procedures
- AK0302 Performance evaluation

#### ***Internal Assessment Criteria***

- IAC0301 The disciplinary procedures (verbal warning and first written warning) is correctly applied and is appropriate to the poor work performance

### **13.2.7. PM-13-PS04: Coach members to enhance skills**

#### ***Scope of Practical Skill***

Given information on a production team the learner must be able to:

- PA0401 Identify poor skills leading to poor performance and safety risks
- PA0402 Rectify by demonstrating correct application of the skill or tasks to improve performance or compliance with requirements
- PA0403 Explain efficiency and effectiveness in concise terms
- PA0404 Coach team members to enhance productivity
- PA0405 Conduct job observations for individual team members

#### ***Applied Knowledge***

- AK0401 Coaching techniques
- AK0402 Communication techniques

#### ***Internal Assessment Criteria***

- IAC0401 Coaching in frame preparing, covering and advanced covering skills are provided to individuals to address incorrect technical skills and enhance quality of product or process (demonstrate the correct way of doing the task or showing a DVD)
- IAC0402 An engaging approach is applied when interacting with team members

### **13.2.8. PM-13-PS05: Enforce occupational health and safety plans, policies and procedures**

#### ***Scope of Practical Skill***

Given occupational health and safety policies and procedures and taken to a site the learner must be able to:

- PA0501 Complete a risk assessment to determine on site compliance to occupational health and safety requirements

#### ***Applied Knowledge***

- AK0501 Risk assessment techniques
- AK0502 Recording of information

#### ***Internal Assessment Criteria***

- IAC0501 The risk assessment indicates all areas of non-conformance and identifies the causes and suggests corrective actions

### **13.2.9. PM-13-PS06: Find and apply information on a specific product, consumable or material to solve an upholstery related problem**

#### ***Scope of Practical Skill***

Given a basic related research topic, upholstery problem and access to information sources the learner must be able to:

- PA0601 Identify and access suitable information sources
- PA0602 Investigate the topic at hand
- PA0603 Identify and select relevant information
- PA0604 Analyse the information
- PA0605 Select the most relevant information and formulate and justify the solution
- PA0606 Explain the methodology applied to select the solution

### ***Applied Knowledge***

- AK0601 Search engines and other sources of information
- AK0602 Basic research methodologies
- AK0603 Problem solving methodologies

### ***Internal Assessment Criteria***

- IAC0601 Various solutions are offered and analysed to select the most appropriate option based on durability, efficiency and cost effectiveness in writing

## **13.3 Provider Programme Accreditation Criteria**

### *Physical Requirements:*

- All tools, machinery, consumables, equipment, specified in the scope statement

### *Human Resource Requirements:*

- Trainer/learner ratio of 1:10
- Trainers must be qualified upholstery frame preparers with 2 years of experience
- Assessor (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)
- Moderator (NQF 3 qualification with minimum of 3 years of clicking experience, registered assessor, minimum 1 year experience as an assessor)

### *Legal Requirements:*

- OHASA compliant

## **13.4 Exemptions**

- No exemptions, but the module can be achieved in full through a normal RPL process

## SECTION 3C: WORK EXPERIENCE MODULE SPECIFICATIONS

### List of Work Experience Module Specifications

- 683401000-WM-01, Upholstery Furniture Frame Preparation Processes, NQF Level 2, Credits 24
- 683401000-WM-02, Upholstery Furniture Frame Cover Fitting Processes, NQF Level 2, Credits 24
- 683401000-WM-03, Upholstery Pattern and Template Making Processes, NQF Level 3, Credits 15
- 683401000-WM-04, Upholstery Cutting Lay Preparation, NQF Level 3, Credits 10
- 683401000-WM-05, Advanced Upholstery Covering Processes, NQF Level 3, Credits 25
- 683401000-WM-06, Material Cutting and Sewing Processes for Upholstery Prototypes or Bespoke Furniture, NQF Level 2, Credits 24
- 683401000-WM-07, Bespoke Upholstery Furniture and/or Upholstery Prototypes Manufacturing and Repairs, NQF Level 4, Credits 56
- 683401000-WM-08, Furniture Re-upholstery Department, NQF Level 4, Credits 17
- 683401000-WM-09, Upholstery Furniture Technical Specifications and Re-engineering, NQF Level 4, Credits 20
- 683401000-WM-10, Supervision in the Upholstery Department, NQF Level 4, Credits 16

## **1. 683401000-WM-01, Upholstery Furniture Frame Preparation Processes, NQF Level 2, Credits 24**

### **1.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

prepare upholstery frames for consequent processes by securing webbing, springs and foam according to workplace standard operating procedures and production targets

The learner will be required to:

- WM-01-WE01: Read and interpret work instructions which may include prototype, sample, technical drawings and product specifications
- WM-01-WE02: Prepare for upholstery frame preparation activities
- WM-01-WE03: Prepare upholstery frames for the next process by interweaving and fastening webbing to the backs and seats of furniture
- WM-01-WE04: Prepare upholstery frames for the next process by attaching springs to the seats, arms and backs of upholstery frames
- WM-01-WE05: Prepare upholstery frames for the next process by attaching coils to the seats, arms and backs of upholstery frames
- WM-01-WE06: Prepare webbed and sprung upholstery frames for the next process by attaching foam or padding/stuffing to the seats, arms and backs of upholstery frames
- WM-01-WE07: Perform end-of shift routines in the upholstery frame preparing department

### **1.2 Guidelines for Work Experiences**

#### **1.2.1. WM-01-WE01: Read and interpret work instructions which may include prototype, sample, technical drawings and product specifications**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Work instructions are correctly interpreted and all information is understood or otherwise clarified with supervisor
- WA0102 Upholstery furniture type is identified from the work instructions
- WA0103 Obtain raw materials such as webbing, springs, foam and other consumables as indicated in the work instructions from the store

##### ***Supporting Evidence***

- SE0101 Attendance register

#### **1.2.2. WM-01-WE02: Prepare for upholstery frame preparation activities**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Clean the workstation ensuring it is free of objects which may cause damage or contamination of the upholstery product
- WA0202 Inspect PPC ensuring it is in good condition
- WA0203 Apply ergonomic principles when lifting and handling heavy objects
- WA0204 Apply ergonomic principles by standing in the correct position and apply correct posture when operating tools and performing webbing and springing operations
- WA0205 Inspect the work area for compliance with health, safety and environmental regulations and report all hazards or risks
- WA0206 Diligently report incidents or accidents to the supervisor according to workplace procedures
- WA0207 Select, inspect and prepare correct tools, equipment ensuring good working condition
- WA0208 Select and inspect webbing according to coding, colour, size and elasticity ensuring correct product for the job
- WA0209 Select and inspect springs according to gauges, uses and sizes ensuring correct product for the job
- WA0210 Select consumables such as tacks, clips, staples and nails ensuring correct size for the job
- WA0211 Select and inspect the upholstery frame ensuring quality and reporting defects and faults such as knots, buckling, etc.
- WA0212 Select and inspect cloth for covering the webbing and springs according to the work instruction

### ***Supporting Evidence***

- SE0201 List of raw material used

### **1.2.3. WM-01-WE03: Prepare upholstery frames for the next process by interweaving and fastening webbing to the backs and seats of furniture**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Interpret the specifications to identify the webbing and webbing pattern for the given frames
- WA0302 Standing in the correct position and apply correct posture when performing the frame preparing techniques
- WA0303 Measure and cut the webbing to the specified lengths in the cutting list, taking into account the allowances required
- WA0304 Measure and mark the rails of the frame and tack or staple the webbing strips to sides of the frame using hand tools and applying the correct interlacing pattern and sequence
- WA05 Stretch, tension and interlace webbing across frame using hand tools ensuring correct tension and allow for specified deflection

- WA0306 Inspect and check the frame to ensure that webbing is not too tight and distorting the seat rails and is in conformance with quality standards of the company

#### ***Supporting Evidence***

- SE0301 Production records indicating number of frames prepared with webbing

#### **1.2.4. WM-01-WE04: Prepare upholstery frames for the next process by attaching springs to the seats, arms and backs of upholstery frames**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Interpret work instructions to determine the required arc height and shape of the seat and back, whether the springs are for seats or backs, and the quantity, type, gauge and size of spring
- WA0402 Stand in the correct position and apply correct posture when performing the frame preparing techniques
- WA0403 Determine the required length of the spring by measuring the inside frame length and measure the length of the spring using the correct technique and measuring equipment
- WA0404 Measure and mark the rails of the frame (back and / or seat and / or arms) and tack, nail or staple the clips for the springs using a nail or staple gun applying correct direction of springs
- WA0405 Space and attach e-clips to the frame using a staple gun or nail gun ensuring compliance with safe operating procedures
- WA0406 Clip the springs and crimp wire to stabilise the foundation applying correct technique

##### ***Supporting Evidence***

- SE0401 Production records indicating number of frames prepared with springs

#### **1.2.5. WM-01-WE05: Prepare upholstery frames for the next process by attaching coils to the seats, arms and backs of upholstery frames**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0501 Interpret work instructions to determine the required height and shape of the seat and back, whether the springs are for seats or backs, and the quantity, type, gauge and size of coil spring
- WA0502 Stand in the correct position and apply correct posture when performing the frame preparing techniques
- WA0503 Prepare and attach webbing to the frame to meet the work instructions
- WA0504 Position and correctly space the coil springs applying the correct direction and ensuring the sharp ends are bent to prevent damage to the stuffing/padding
- WA0505 Position, interlace and attach the coil springs onto the webbing and tack the twine to the frame securely.

- WA0506 Fasten border wire to springs, using metal clips or by twisting crimp wire around border wire and top of spring.
- WA0507 Conduct a quality check and record mistakes, material defects, any weakness in the foundation constructed by the springs, and consumables and tool defects

***Supporting Evidence***

- SE0501 Production records indicating number of frames prepared with coils

**1.2.6. WM-01-WE06: Prepare webbed an sprung upholstery frames for the next process by attaching foam or padding/stuffing to the seats, arms and backs of upholstery frames**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0601 Interpret work instructions to determine the required height and shape of the seat and back and the quantity, type, density and size of foam or stuffing
- WA0602 Read and interpret material safety data sheets (MSDS) for correct handling, usage and storage of adhesives and other chemicals (solvents)
- WA0603 Select, inspect and prepare correct tools and consumables for respective techniques
- WA0604 Select foam/padding according to the thickness, density and size of foam
- WA0605 Stand in the correct position and apply correct posture when performing the frame preparing techniques
- WA0606 Apply techniques to bond foam to foam using correct amount of adhesive for good bonding
- WA0607 Apply techniques to bond foam to other substances using correct amount of adhesives for good bonding
- WA0608 Apply techniques to shape padded area according to design or style
- WA0609 Apply correct sequence of tasks according to the design
- WA0610 Inspect foam for correct densities, correct sizes, correct shapes or profile, the feel of the foam, good bonding
- WA0611 Inspect prepared frames for quality such as correct positioning and appearance of the padding and foam, measuring the middle and centralized, according to the divisions of the couch

***Supporting Evidence***

- SE0601 Production records indicating number of frames prepared with foam or stuffing

**1.2.7. WM-01-WE07: Perform end-of shift routines in the upholstery frame preparing department**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0701 Perform routine cleaning of tools or equipment to remove dust, dirt and other contaminants

- WA0702 Perform minor maintenance of hand tools, power tools and pneumatic tools such as sharpening or replacing blunted edges and handle and store correctly
- WA0703 Perform dust extraction procedures where necessary
- WA0704 Check that the tools and equipment is in working condition once the procedures are completed
- WA0705 Record legibly the hourly production, down time, quality faults, and production history
- WA0706 Record any production related problems experienced during the shift
- WA0707 Accurately record waste
- WA0708 Accurately record defects and faults (raw material and prepared frames)

### ***Supporting Evidence***

- SE0701 Shift records

### **1.3 Contextualised Workplace Knowledge**

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating procedures and quality standards

5 Workshop/production line layout and designated areas

6 Personal protective clothing and equipment (PPE) and safety procedures

### **1.4 Criteria for Workplace Approval**

#### *Physical Requirements:*

- Fully equipment upholstery frame preparing department with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Frame preparing processes

#### *Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 2 qualified upholstery frame preparer with 3 years of experience in upholstery frame preparing
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

#### *Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

### **1.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

## **2. 683401000-WM-02, Upholstery Furniture Frame Cover Fitting Processes, NQF Level 2, Credits 24**

### **2.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

fit prepared upholstery covers to prepared frames according to workplace standard operating procedures and production targets

The learner will be required to:

- WM-02-WE01: Read and interpret work instructions which may include prototype, sample, technical drawings and product specifications
- WM-02-WE02: Prepare for upholstery frame preparation activities
- WM-02-WE03: Cover upholstery seats
- WM-02-WE04: Fit covers to prepared frames using visible and concealed finishing techniques
- WM-02-WE05: Perform end-of shift routines in the upholstery cover fitting department

### **2.2 Guidelines for Work Experiences**

#### **2.2.1. WM-02-WE01: Read and interpret work instructions which may include prototype, sample, technical drawings and product specifications**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Work instructions are correctly interpreted and all information is understood or otherwise clarified with supervisor
- WA0102 Upholstery furniture type is identified from the work instructions
- WA0103 Obtain raw materials such as webbing, springs, foam and other consumables as indicated in the work instructions from the store

##### ***Supporting Evidence***

- SE0101 Attendance register

#### **2.2.2. WM-02-WE02: Prepare for upholstery frame preparation activities**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Clean the workstation ensuring it is free of objects which may cause damage or contamination of the upholstery product
- WA0202 Inspect PPC ensuring it is in good condition
- WA0203 Apply ergonomic principles when lifting and handling heavy objects

- WA0204 Apply ergonomic principles by standing in the correct position and apply correct posture when operating tools and performing webbing and springing operations
- WA0205 Inspect the work area for compliance with health, safety and environmental regulations and report all hazards or risks
- WA0206 Diligently report incidents or accidents to the supervisor according to workplace procedures
- WA0207 Select, inspect and prepare correct tools, equipment ensuring good working condition
- WA0208 Select and inspect prepared slip covers according to colour, size, dimensions and allowances ensuring correct product for the job
- WA0209 Inspect material to insure quality of direction of pile, flaws and defects, number of components
- WA0210 Select and inspect springs according to gauges, uses and sizes ensuring correct product for the job ensuring correct product for the job
- WA0211 Select consumables such as tacks, clips, staples and nails ensuring correct size for the job
- WA0212 Select and inspect the upholstery frame ensuring quality and reporting defects and faults such as knots, buckling, etc.
- WA0213 Select and inspect cloth for covering the webbing and springs according to the work instruction

### ***Supporting Evidence***

- SE0201 List of raw material used

### **2.2.3. WM-02-WE03: Cover upholstery seats**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Study work instructions to determine shape and profile of seat and method
- WA0302 Identify and match the fabric covers to the specified frames
- WA0303 Use a staple gun to temporarily attach shaped covers to drop-on and drop-in seat frames
- WA0304 Use the correct hand straining techniques to ensure that the main thread lines from left to right, and back to front, are straight
- WA0305 Strain the covers on square seats to the sides and corners and, when correctly positioned, add tension and staple home
- WA0306 Strain the covers on round seats from the centre of the circle so that the tension is equally matched in all directions and staple onto the frame
- WA0307 Make relief cuts so that the strains to each side of the clover shape don't drag the threads over from the opposite side
- WA0308 Attach bottom cloth neatly so that all staples, fabric edges, and threads are hidden

- WA0309 Inspect the covered seats for quality such as stretch, tension and deflection of fabric, spacing of tacks, nails and staples, uniformity, positioning of the cover and alignments, pattern matching ensuring it meets company quality standards

***Supporting Evidence***

- SE0301 Production records indicating number of covered upholstery seats

**2.2.4. WM-02-WE04: Fit covers to prepared frames using visible and concealed finishing techniques**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Interpret the specifications and identify the preferred finishing methods (visible or concealed)
- WA0402 Fit covers to the frame using concealed finishing methods so that all staples and cut edges of fabric are hidden, and the bottom cloth hides it underneath the upholstered item
- WA0403 Fit covers to the frame using visible finishing methods such as using gimp pins, spaced studs, close studding, studs with banding, continuous studding strip, gimp / braid, double piping
- WA0404 Attach gimp pins, upholstery studs, banding strips, continuous studding strips, vinyl banding strips braid to turned under straight edges
- WA0405 Attach gimp pins, upholstery studs, banding strips, continuous studding strips, vinyl banding strips braid to contoured shapes to cover a staple line
- WA0406 Inspect the covered frame for quality such as stretch, tension and deflection of fabric, spacing of tacks, nails and staples, uniformity, pleating and folding and positioning of the cover and alignments, pattern matching ensuring it meets company quality standards

***Supporting Evidence***

- SE0401 Production records indicating number of covered upholstery frames

**2.2.5. WM-02-WE05: Perform end-of shift routines in the upholstery cover fitting department**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0501 Perform routine cleaning of tools or equipment to remove dust, dirt and other contaminants
- WA0502 Perform minor maintenance of hand tools, power tools and pneumatic tools such as sharpening or replacing blunted edges and handle and store correctly
- WA0503 Perform dust extraction procedures where necessary
- WA0504 Check that the tools and equipment is in working condition once the procedures are completed
- WA0505 Record legibly the hourly production, down time, quality faults, and production history
- WA0506 Record any production related problems experienced during the shift

- WA0507 Accurately record waste
- WA0508 Accurately record defects and faults (raw material and prepared frames)

### ***Supporting Evidence***

- SE0501 Shift records

## **2.3 Contextualised Workplace Knowledge**

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating procedures and quality standards

5 Workshop/production line layout and designated areas

6 Personal protective clothing and equipment (PPE) and safety procedures

## **2.4 Criteria for Workplace Approval**

### *Physical Requirements:*

- Fully equipment upholstery frame preparing department with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Upholstery cover fitting processes
- Fully equipment upholstery frame preparing department with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Upholstery cover fitting processes

### *Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 3 qualified cover fitter with 3 years of experience in upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5
- Qualifications, registration or experience of supervisor: NQF 3 qualified cover fitter with 3 years of experience in upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

### *Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation
- Compliance with occupational health and safety regulations

- Compliance with Labour Legislation

## **2.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

### **3. 683401000-WM-03, Upholstery Pattern and Template Making Processes, NQF Level 3, Credits 15**

#### **3.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

make and produce upholstery patterns and templates from sketches, customer descriptions or blueprints which matches all quality standards and calculate material and determine manufacturing process

The learner will be required to:

- WM-03-WE01: Prepare for and dimension the upholstery pattern or template making task
- WM-03-WE02: Plan the upholstery pattern or template making process
- WM-03-WE03: Measure and plot upholstery dimensions and components
- WM-03-WE04: Complete upholstery pattern or template

#### **3.2 Guidelines for Work Experiences**

##### **3.2.1. WM-03-WE01: Prepare for and dimension the upholstery pattern or template making task**

###### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Observe work health and safety requirements, including personal protection clothing and equipment throughout the work
- WA0102 Interpret work instruction which may include drawings or sample to establish required sizes of finished upholstery products
- WA0103 Check size requirements in relation to the production process and finishing capacity of the workplace

###### ***Supporting Evidence***

- SE0101 Work instructions
- SE0102 Planning sheet and notes

##### **3.2.2. WM-03-WE02: Plan the upholstery pattern or template making process**

###### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Identify material for pattern or template is for approximate size and characteristics
- WA0202 Identify, locate and assemble required instruments and equipment
- WA0203 Interpret drawings and related specifications

- WA0204 Apply procedures for using pattern development instruments and tools and prepared equipment

***Supporting Evidence***

- SE0201 Production information

**3.2.3. WM-03-WE03: Measure and plot upholstery dimensions and components**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Use equipment and tools following normal workplace procedures
- WA0302 Measure, explode and plot each dimension maintaining appropriate angles, arcs and curves
- WA0303 Perform visual inspection and measurements to compare pattern dimensions and shapes with drawings and specifications

***Supporting Evidence***

- SE0301 Completed upholstery pattern or template

**3.2.4. WM-03-WE04: Complete upholstery pattern or template**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Complete upholstery pattern or template ensuring that the pattern indicates completion date and original drawing details
- WA0402 Obtain required workplace approval of pattern or template
- WA0403 Mark plans with notations for workplace requirements, including authorship, process or customer requirements, authorisation and any review dates
- WA0404 Adhere to time limits for completing the operation, set targets and safety requirements
- WA0405 Copy and file plans as required, according to workplace policies and procedures

***Supporting Evidence***

- SE0401 Filed completed upholstery pattern or template

**3.3 Contextualised Workplace Knowledge**

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating procedures and quality standards

5 Workshop/production line layout and designated areas

6 Personal protective clothing and equipment (PPE) and safety procedures

### **3.4 Criteria for Workplace Approval**

#### *Physical Requirements:*

- Fully equipped upholstery department for advanced cover fitting with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Advanced upholstery cover fitting processes

#### *Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 4 qualified advanced upholstery cover fitter with 3 years of experience in advanced upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

#### *Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

### **3.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

## **4. 683401000-WM-04, Upholstery Cutting Lay Preparation, NQF Level 3, Credits 10**

### **4.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

Prepare an upholstery cutting lay in line with fabric direction, calculating and adding all allowance for seams and ensuring optimal use of fabric

The learner will be required to:

- WM-04-WE01: Prepare a single lay for cutting of upholstery components
- WM-04-WE02: Prepare a multiple-lay for cutting of upholstery components

### **4.2 Guidelines for Work Experiences**

#### **4.2.1. WM-04-WE01: Prepare a single lay for cutting of upholstery components**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Obtain and interpret job specifications identifying aspects such as fabric, template, number of items, cutting plan, tolerances
- WA0102 Identify required fabrics, number of items to be cut and select and inspect required equipment
- WA0103 Identify fabric sizes to be cut are from work instruction and determine required allowances
- WA0104 Observe workplace health and safety requirements, including personal protection needs throughout the work
- WA0105 Select, prepare and clean suitable work area ensuring it free of any contaminants
- WA0106 Plan work sequence
- WA0107 Ensure selected fabrics are in accordance with work order and laid out smooth and square
- WA0108 Inspect fabrics for flaws and appropriate finish
- WA0109 Identify nap/pile direction, pattern matches and face of the materials
- WA0110 Check tools and equipment for operation
- WA0111 Measure and mark fabric including registration points
- WA0112 Place template on fabric to ensure layout of cutting plan meets pile direction and minimise waste and weight or pin to minimise movement during cutting
- WA0113 Adhere to time limits for completing the operation, set targets and safety requirements

##### ***Supporting Evidence***

- SE0101 Prepared single lay ready for cutting operations

#### **4.2.2. WM-04-WE02: Prepare a multiple-lay for cutting of upholstery components**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Obtain and interpret job specifications identifying aspects such as fabric, template, number of items, cutting plan, tolerances
- WA0202 Select equipment for job such as markers, ruler, straight edges, cutting tools, templates, weights and/or skewers and confirm to be in working order
- WA0203 Select fabric in accordance with job specifications
- WA0204 Roll out top lay of fabric and place template on fabric to ensure layout of cutting plan meets pile direction and minimise waste
- WA0205 Calculate fabric meterage in accordance with number of lays and check fabric availability
- WA0206 Use marker to mark out the fabric and label fabric panels ensuring clear line, line up with template, tolerances and allowances
- WA0207 Roll out remaining layers, cut to length, and stack ensuring flat, even salvages
- WA0208 Place top lay on top of remaining layers and weight or pin to minimise movement during cutting
- WA0209 Record fabric usage while marking out fabric in accordance with worksite policies and procedures
- WA0210 Adhere to time limits for completing the operation, set targets and safety requirements

##### ***Supporting Evidence***

- SE0201 Prepared multiple-lay ready for cutting operations

#### **4.3 Contextualised Workplace Knowledge**

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating procedures and quality standards

5 Workshop/production line layout and designated areas

6 Personal protective clothing and equipment (PPE) and safety procedures

#### **4.4 Criteria for Workplace Approval**

*Physical Requirements:*

- Fully equipped upholstery department for advanced cover fitting with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Advanced upholstery cover fitting processes

*Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 4 qualified advanced upholstery cover fitter with 3 years of experience in advanced upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

*Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

**4.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

## **5. 683401000-WM-05, Advanced Upholstery Covering Processes, NQF Level 3, Credits 25**

### **5.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

Fit advanced covers to prepared complex and exposed upholstery frames applying advanced covering techniques

The learner will be required to:

- WM-05-WE01: Prepare for advanced cover fitting operations, sewing advanced loose upholstery components, complex cushions, deep buttoning operations and inspect raw material for conformance with company standards
- WM-05-WE02: Fit prepared fabric covers to prepared complex upholstery frames and upholstery exposed frames
- WM-05-WE03: Prepare, sew and finish advanced loose covers
- WM-05-WE04: Produce complex shaped cushions and padded items including a T-cushion
- WM-05-WE05: Perform buttoning and deep buttoning procedures to decorate upholstered furniture

### **5.2 Guidelines for Work Experiences**

#### **5.2.1. WM-05-WE01: Prepare for advanced cover fitting operations, sewing advanced loose upholstery components, complex cushions, deep buttoning operations and inspect raw material for conformance with company standards**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Obtain and interpret job specifications for the upholstery furniture identifying aspects such as fabric, templates, number of items and finishings
- WA0102 Select, prepare and clean suitable work area ensuring it is free of any contaminants
- WA0103 Select tools and equipment appropriate to the task, inspect for good working order and apply health and safety work instructions
- WA0104 Select and inspect prepared (sprung and pre-padded) frame for defects in timber, construction, springs and padding ensuring company standards are met
- WA0105 Identify, select and inspect various cut components and indicate appropriate sections of the frame ensuring the material is free from faults and defects and ensuring dimensions of fabric components meet specifications

##### ***Supporting Evidence***

- SE0101 Prepared work station conforming with workplace standards

#### **5.2.2. WM-05-WE02: Fit prepared fabric covers to prepared complex upholstery frames and upholstery exposed frames**

### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Fit and secure cover components (inside and outside) in the correct sequence to the upholstery frame using appropriate sewing or stapling procedure ensuring smooth finish, no twists in fabric, tops in correct position, no puckering on corners or edges and surplus fabric removed
- WA0202 Insert pleats and tucks where required ensuring they are evenly spaced, pleats and tucks folded down and along grain
- WA0203 Apply correct tension to fabric ensuring that visual appearance of the work piece conforms to specifications
- WA0204 Inspect covered upholstery frame for faults such as marks; incorrect alignment; incorrect tension or incorrect positioning with the covering, all fixed components are secure, components are accurately centred and evenly spaced and material is cut and shaped to conform to the specified design profiles, visual appearance, (including alignment of patterns, pleating and spacing of tacks, staples etc.) and take corrective action
- WA0205 Fit legs, glides, or castors in accordance with job specifications
- WA0206 Handle and move upholstered item delicately and store in designated area
- WA0207 Adhere to time limits for completing the operation, set targets and safety requirements

### ***Supporting Evidence***

- SE0201 Covered upholstery frame conforming with workplace standards and completed within set time limits

### **5.2.3. WM-05-WE03: Prepare, sew and finish advanced loose covers**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Ensure fabric placement and alignment is appropriate for the type and number of components required and the fabric characteristics (patterns, stripes, pile)
- WA0302 Accurately align materials and components in their correct position, making sure that components are correctly orientated and aligned to meet fabric, pattern and design requirements
- WA0303 Use sewing methods which are appropriate to the type of component and attach the components in an efficient sequence, securely and to the required shape and finish
- WA0304 Attach lining component, fasteners and finishing materials such as edgings, trimmings and linings and for the covering of buttons, including braid, piping, fringe, polished wood borders, castors, bun feet etc.
- WA0305 Check and confirm that there are no loose threads on the finished loose cover and that the visual appearance of the loose cover meets the specification
- WA0306 Accurately position and securely attach closures, trimmings or decorative finishes using methods which will give the required durability and appearance

- WA0307 Inspect finished product to confirm quality and take corrective action to address faults or defects such as flaws, distortions and colour/pattern variations in the fabric, inaccurate measurements and mis-alignments, slipping, fraying, inaccuracies, poor seam quality and equipment faults
- WA0308 Adhere to time limits for completing the operation, set targets and safety requirements

#### ***Supporting Evidence***

- SE0301 Covered upholstery furniture conforming with workplace standards and completed within set time limits

#### **5.2.4. WM-05-WE04: Produce complex shaped cushions and padded items including a T-cushion**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Accurately align materials and components in their correct position, making sure that components are correctly orientated and aligned to meet fabric, pattern and design requirements
- WA0402 Use sewing methods which are appropriate to the type of component and attach the components in an efficient sequence, securely and to the required shape and finish
- WA0403 Check and confirm that there are no loose threads on the finished complex shaped cushions and padded items and that the visual appearance of the complex shaped cushions and padded items meets the specification
- WA0404 Accurately position and securely attach closures, trimmings or decorative finishes using methods which will give the required durability and appearance
- WA0405 Inspect finished product to confirm quality and take corrective action to address faults or defects such as flaws, distortions and colour/pattern variations in the fabric, inaccurate measurements and mis-alignments, slipping, fraying, inaccuracies, poor seam quality and equipment faults
- WA0406 Adhere to time limits for completing the operation, set targets and safety requirements

##### ***Supporting Evidence***

- SE0401 Sewn cushions conforming with workplace standards and completed within set time limits

#### **5.2.5. WM-05-WE05: Perform buttoning and deep buttoning procedures to decorate upholstered furniture**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0501 Read and interpret the work specification and sample to determine fabric type, button type, button size and positioning and shape of the deep buttoning and prepare for assembling of buttons and performing a deep buttoning procedures
- WA0502 Select and inspect raw material and consumables for assembling buttons and performing deep buttoning techniques

- WA0503 Assemble buttons according to the work piece and diagram
- WA0504 Accurately position and fit the buttons ensuring visual balance and cover shape
- WA0505 Identify faults and defects such as incorrect positioning; incorrect alignment; incorrect tension; incorrect shape and take corrective action
- WA0506 Adhere to time limits for completing the operation, set targets and safety requirements

### ***Supporting Evidence***

- SE0501 Buttoning and deep buttoning conforming with workplace standards and completed within set time limits

## **5.3 Contextualised Workplace Knowledge**

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating procedures and quality standards

5 Workshop/production line layout and designated areas

6 Personal protective clothing and equipment (PPE) and safety procedures

## **5.4 Criteria for Workplace Approval**

### *Physical Requirements:*

- Fully equipped upholstery department for advanced cover fitting with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Advanced upholstery cover fitting processes

### *Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 4 qualified advanced upholstery cover fitter with 3 years of experience in advanced upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

### *Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

## **5.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

## **6. 683401000-WM-06, Material Cutting and Sewing Processes for Upholstery Prototypes or Bespoke Furniture, NQF Level 2, Credits 24**

### **6.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

Apply information and measurements from patterns, templates, sketches or design specifications to lay out, cut and sew upholstery materials (fabric or leather) to produce cut covering components and sewn advanced covers or cushions

The learner will be required to:

- WM-06-WE01: Prepare the workstation for laying, cutting and sewing of upholstery prototype or bespoke furniture
- WM-06-WE02: Produce single ply and/or multiply lays for cutting of material components for upholstery prototypes or bespoke furniture
- WM-06-WE03: Cut material (leather or stripes, checks, patterns and pattern repeat fabric) into component parts according to a cutting plan by using hand knife or operating an upright knife, circular knife or band knife and ensure economical use of material
- WM-06-WE04: Sew material components for bespoke furniture or prototypes covers, or for advanced cushions

### **6.2 Guidelines for Work Experiences**

#### **6.2.1. WM-06-WE01: Prepare the workstation for laying, cutting and sewing of upholstery prototype or bespoke furniture**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Clean and inspect the work area ensuring safety compliance and preventing contamination of material or product
- WA0102 Interpret cutting plan, work specifications, technical drawing or sample to identify the components according to furniture style and total plies and verify the cutting requirement against the sample
- WA0103 Interpret technical specifications (which could be a sample) to determine type and amount of material required, and obtain required amount of materials from storeroom or as issued
- WA0104 Determine from experience and knowledge of materials approximate meterage necessary to cover furniture, allowing for shrinkage and stitching
- WA0105 Conduct a quality inspection to identify all defects or material faults
- WA0106 Identify the fabric/material and batches according to the serial numbers of the labels ensuring it is according to specifications
- WA0107 Check the cutting plan ensuring all components are included according to specifications
- WA0108 Count the components according to the type of lay and furniture design

### ***Supporting Evidence***

- SE0101 Prepared work area and production records

### **6.2.2. WM-06-WE02: Produce single ply and/or multiply lays for cutting of material components for upholstery prototypes or bespoke furniture**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Measure, drape, and smooth material, wrong-side-out, over sections of furniture to ensure most economical use and to serve as guide in matching shades, colours, and designs in cloth
- WA0202 Position patterns on material ensuring most economical use of material
- WA0203 Determines cutting lines by pinning or marking fabric, using shape of furniture as outline

#### ***Supporting Evidence***

- SE0201 Production records

### **6.2.3. WM-06-WE03: Cut material (leather or stripes, checks, patterns and pattern repeat fabric) into component parts according to a cutting plan by using hand knife or operating an upright knife, circular knife or band knife and ensure economical use of material**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Measure and cut new covering materials, using patterns and measuring and cutting instruments, following sketches and design specifications
- WA0302 Stack, align, and smooth material on cutting table ensuring the correct positioning of pile and pattern of material
- WA0303 Draw cutting lines on material such as leather, fabric, and other suitable materials following templates, sketches, or blueprints, using chalk or marking pencil by pinning or marking fabric, using shape of furniture as outline
- WA0304 Inspect cutting tools or machines to ensure it is clean and in good working condition and no oil spills
- WA0305 Check blade for sharpness and replace blunt blades
- WA0306 Cut material for slipcovers according to size and shape of furniture to match patterns, using power cutters, cutting machines and scissors (single or multi-lays)
- WA0307 Drill or punch holes (nips or ticks) in cut material components
- WA0308 Pin cut pieces together and fit assembled unit over furniture, making adjustments with pins to attain required fitting
- WA0309 Sort and count panels ensuring all panels have been cut

- WA0310 Conduct a final quality inspection ensuring cut panels meet specified quality requirements or standards and recognise poor workmanship ensuring correct seam allowances, seam allowance for piping, etc.
- WA0311 Record all relevant production information for completed operations
- WA0312 Record amount of time required for each assignment.
- WA0313 Adhere to time limits for completing the operation, set targets and safety requirements

#### ***Supporting Evidence***

- SE0301 Production records

### **6.2.4. WM-06-WE04: Sew material components for bespoke furniture or prototypes covers, or for advanced cushions**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Conduct a quality check on cut components ensuring it meets quality standards
- WA0402 Select the correct type and colour of thread to be used for sewing operations
- WA0403 Inspect machine settings and tension using a material sample to test the machine settings
- WA0404 Pick up and align components using nips and marks
- WA0405 Operate sewing machine efficiently to join various sections of covering material and/or cushions as required
- WA0406 Sew material components and assemble trim items
- WA0407 Attach binding or apply solutions to edges of cut material to prevent ravelling
- WA0408 Attach snap fasteners, grommets, buckles, cords, and other accessories to upholstery or trim items, using hand tools or equipment.
- WA0409 Hand sew buttons, hooks, or other fasteners onto fabric
- WA0410 Conduct a final quality inspection ensuring sewn components meet specified company quality requirements or standards
- WA0411 Record all relevant production information for completed operations
- WA0412 Adhere to time limits for completing the operation, set targets and safety requirements

#### ***Supporting Evidence***

- SE0401 Production records

## **6.3 Contextualised Workplace Knowledge**

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating procedures and quality standards

5 Workshop/production line layout and designated areas

6 Personal protective clothing and equipment (PPE) and safety procedures

#### **6.4 Criteria for Workplace Approval**

##### *Physical Requirements:*

- Fully equipped upholstery department for advanced prototype or bespoke upholstery manufacturing with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Advanced prototype or bespoke upholstery manufacturing processes

##### *Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 4 qualified advanced upholstery cover fitter with 3 years of experience in advanced upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

##### *Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

#### **6.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

## **7. 683401000-WM-07, Bespoke Upholstery Furniture and/or Upholstery Prototypes Manufacturing and Repairs, NQF Level 4, Credits 56**

### **7.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

Manufacture bespoke upholstery furniture or upholstery prototypes or repair damaged or faulty upholstery furniture or and conduct quality assurance inspections on upholstery furniture to ensure conformation to company standards

The learner will be required to:

- WM-07-WE01: Prepare for manufacturing of bespoke upholstery furniture or furniture prototypes
- WM-07-WE02: Construct furniture frames for bespoke upholstery furniture or furniture prototypes
- WM-07-WE03: Manufacture upholstery prototypes according to the final design and finish and prepare prototypes for display to and approval from the client
- WM-07-WE04: Repair upholstered furniture to refurbish the upholstery furniture piece to initial appearance
- WM-07-WE05: Quality assure upholstery furniture and prototypes according to the final design and finish requirements and identify deviations and causes of deviations

### **7.2 Guidelines for Work Experiences**

#### **7.2.1. WM-07-WE01: Prepare for manufacturing of bespoke upholstery furniture or furniture prototypes**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Read and interpret a design and technical drawing, sketches, customer descriptions, or blueprints
- WA0102 Identify the type of raw materials to be used for type of design
- WA0103 Do a mock-up development to assess the design, technical drawing and raw material for compatibility and recommend adaptations and modifications to solve potential technical, resources, budgetary, time, materials and equipment problems
- WA0104 Interact with the designer, production manager and suppliers during the prototype making process
- WA0105 Identify and discuss suitable construction methods to standardise components, simplify production and costing of product

##### ***Supporting Evidence***

- SE0101 Production records

#### **7.2.2. WM-07-WE02: Construct furniture frames for bespoke upholstery furniture or furniture prototypes**

### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Determine timber sizes and types to be used for the type of design for frame construction
- WA0202 Construct frame according to design specifications using appropriate tools and applying specified jointing techniques

### ***Supporting Evidence***

- SE0201 Production records

## **7.2.3. WM-07-WE03: Manufacture upholstery prototypes according to the final design and finish and prepare prototypes for display to and approval from the client**

### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Plan and prepare for attaching foundations to the given frames and adjust, attach or secure springs, webbing, card board, polypropylene, etc.
- WA0302 Interweave and fasten strips of webbing to the backs and undersides of furniture, using small hand tools and fasteners and stretch webbing and fabric, using webbing stretchers
- WA0303 Identify type of foam to be used on which section of the frame according to the design and attach foam on prepared frame using glue or stapling
- WA0304 Build furniture up with loose fiber stuffing, cotton, felt, and/or foam padding to form smooth rounded surfaces.
- WA0305 Design upholstery cover patterns and cutting plans, based on sketches, customer descriptions, or blueprints.
- WA0306 Conduct quality inspection of cut and sewn material and prepared frame
- WA0307 Fit, cover and secure material on frames, using hand tools, power tools, and/or staples
- WA0308 Staple panels/covers onto frame sections such as seat deck, inside arms, inside back, outside arms, outside back, seat border, etc. using correct methods and covering sequence
- WA0309 Conduct quality inspection to ensure all lines and patterns comply with quality and design specifications
- WA0310 Add trimmings and other accessories such as piping, fringing, studs and perform finishing required
- WA0311 Conduct quality inspection to ensure all trims comply with quality and design specifications
- WA0312 Attach the bottom section and fit required legs to upholstered frame according to design specifications
- WA0313 Send prepared frame for laboratory testing of endurance and quality compliance
- WA0314 Design team conducts inspection to ensure complies with design specifications
- WA0315 Conduct a final quality assessment to ensure compliance with design specifications

### ***Supporting Evidence***

- SE0301 Production records

#### **7.2.4. WM-07-WE04: Repair upholstered furniture to refurbish the upholstery furniture piece to initial appearance**

### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Examine furniture piece (frame, upholstery, springs, and webbing) to identify faults, damage or defects and possible causes
- WA0402 Identify corrective action to repair fault, damage or defect
- WA0403 Strip upholstery furniture piece: Remove covering, foam, webbing or defective springs and padding from seat, arms, back, and sides of work piece, using correct equipment (staple remover and chisel)
- WA0404 Apply complex frame repairs of bespoke upholstery
- WA0405 Repair or replace damaged fabric or leather material, webbing, springs, foam or padding
- WA0406 Repair or replace damaged or faulty sections/mechanisms of furniture frames
- WA0407 Refinishes exposed wood on reupholstered furniture
- WA0408 Conduct final quality inspection to ensure completed or covered item comply with aesthetic appeal and meets quality standards

### ***Supporting Evidence***

- SE0401 Production records

#### **7.2.5. WM-07-WE05: Quality assure upholstery furniture and prototypes according to the final design and finish requirements and identify deviations and causes of deviations**

### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0501 Inspect and systematically examine upholstery products or materials in various stages of manufacturing process for damage, defects, material shortages and to locate defects and to ensure conformance to quality product standards
- WA0502 Conduct visual quality assessments of upholstery furniture products to assess overall visual appearance and quality assure straightness of seams, stitch lengths, stitch faults, machine faults, match patterns, material pile and tension, corners, pleats, folds, button placement, frame straightness and not buckled
- WA0503 Identify and differentiate between manufacturing process shortfalls, design faults, process faults, raw material and machine faults
- WA0504 Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects

- WA0505 Analyse information and evaluating results to choose the best solution and solve problems
- WA0506 Inspect upholstery frame and timber to identify deviation from quality standards such as knots, dimension, buckled, water damage
- WA0507 Inspect the upholstery suspension to determine deviation from quality standards of springs, webbing, web formation, durability and size
- WA0508 Inspect the upholstery padding and filling to determine deviation from quality standards such as density and durability
- WA0509 Inspect leather to determine deviation from quality standards natural marks, brand marks, oil and dirty marks, holes, tick bites, soft spots, section of the hide
- WA0510 Inspect fabrics to determine deviation from quality standards such as colour, patterns, shades, dirty marks

### **Supporting Evidence**

- SE0501 Checklist of assessment of each aspect of the operation

### **7.3 Contextualised Workplace Knowledge**

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating procedures and quality standards

5 Workshop/production line layout and designated areas

6 Personal protective clothing and equipment (PPE) and safety procedures

### **7.4 Criteria for Workplace Approval**

#### *Physical Requirements:*

- Fully equipped upholstery department for advanced prototype or bespoke upholstery manufacturing with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Advanced prototype or bespoke upholstery manufacturing processes

#### *Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 4 qualified advanced upholstery cover fitter with 3 years of experience in advanced upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

#### *Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

### **7.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

## **8. 683401000-WM-08, Furniture Re-upholstery Department, NQF Level 4, Credits 17**

### **8.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

Re-upholster furniture by removing, repairing and replacing old upholstery covers and other worn and damaged components such as springs, webbing, padding and preparing the frame and perform re-upholstery activities according to company standards

The learner will be required to:

- WM-08-WE01: Re-upholster (removing old upholstery and preparing the frame for re-upholstery) by stripping and preparing the frame
- WM-08-WE02: Cut new covering material and drape and smooth over sections of furniture to ensure matching shades, colours, pile and patterns in material
- WM-08-WE03: Conduct sewing operations where necessary to seam cushions and join various sections of covering material
- WM-08-WE04: Secure material on inside of arms, back, and seat, and over outside back and arms of prepared frame

### **8.2 Guidelines for Work Experiences**

#### **8.2.1. WM-08-WE01: Re-upholster (removing old upholstery and preparing the frame for re-upholstery) by stripping and preparing the frame**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Strip the frame by removing covering, webbing, and padding from seat, arms, back, and sides of work piece, using tack puller, chisel, and mallet
- WA0102 Remove defective springs
- WA0103 Measure, repair or replace webbing and springs
- WA0104 Measure, repair, replace or rebuild foam or padding
- WA0105 Measure sizes and pattern of different panels using shape of furniture as outline and draw up a cutting list consisting of following components: inside back, outside back, inside arm, outside arm, inside wing, outside wing, front border, side borders, cushion top and bottom, cushion borders, piping panels

##### ***Supporting Evidence***

- SE0101 List of defects
- SE0102 Ordering list of springs, webbing and padding materials
- SE0103 Cutting list for material (including fabric or leather)

### **8.2.2. WM-08-WE02: Cut new covering material and drape and smooth over sections of furniture to ensure matching shades, colours, pile and patterns in material**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Conduct a quality inspection to identify all defects or material faults
- WA0202 Lay out materials according to specifications
- WA0203 Align and smooth material on cutting table
- WA0204 Ensure that pile and pattern of material are correctly positioned
- WA0205 Draws cutting lines on material such as leather, fabric, and other suitable materials using chalk or marking pencil to match patterns and ensure economical use of material according to size and shape of furniture
- WA0206 Inspect cutting tools or machines to ensure it is clean and in good working condition and no oil spills checking the blade for sharpness and replacing blunt blades
- WA0207 Cut material along marked lines using power cutters, cutting machines and scissors and applying measurements and information from cutting list
- WA0208 Mark nips or ticks in cut material components

#### ***Supporting Evidence***

- SE0201 Production documentation

### **8.2.3. WM-08-WE03: Conduct sewing operations where necessary to seam cushions and join various sections of covering material**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Unpack cut components and conduct workplace layout to ensure all cut components are available
- WA0302 Conduct a quality check on cut components ensuring it meets quality standards
- WA0303 Select the correct type and colour of thread to be used for sewing operations
- WA0304 Inspect machine settings and tension using a material sample to test the machine settings
- WA0305 Pick up and align components using nips and marks
- WA0306 Operate sewing machine efficiently to join various sections of covering material and/or cushions as required
- WA0307 Sew material components to assemble trim items (zips, piping, etc.)
- WA0308 Conduct a final quality inspection ensuring sewn components meet specified quality requirements or standards

#### ***Supporting Evidence***

- SE0301 Production documentation

#### **8.2.4. WM-08-WE04: Secure material on inside of arms, back, and seat, and over outside back and arms of prepared frame**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Conduct quality inspection of cut and sewn material and prepared frame
- WA0402 Fit and secure material on work piece, using hand tools, power tools or staples
- WA0403 Tack all corners to ensure cover compliance
- WA0404 Staple panels/covers onto frame sections such as seat deck, inside arms, inside back, outside arms, outside back, seat border, etc. using correct methods and covering sequence
- WA0405 Add trimmings and other accessories such as piping, fringing, studs and perform finishing required
- WA0406 Conduct quality inspection to ensure all lines and patterns comply with quality standards
- WA0407 Start with finishing: buttoning, piping, studs, etc.
- WA0408 Conduct quality inspection to ensure completed or covered item comply with aesthetic appeal or standards
- WA0409 Attach the bottom section and fit required legs to upholstered frame according to design specifications

##### ***Supporting Evidence***

- SE0401 Production documentation

### **8.3 Contextualised Workplace Knowledge**

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating procedures and quality standards

5 Workshop/production line layout and designated areas

6 Personal protective clothing and equipment (PPE) and safety procedures

### **8.4 Criteria for Workplace Approval**

#### ***Physical Requirements:***

- Fully equipped upholstery department for advanced prototype or bespoke upholstery manufacturing with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Advanced prototype or bespoke upholstery manufacturing processes

*Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 4 qualified advanced upholstery cover fitter with 3 years of experience in advanced upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

*Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

**8.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

## **9. 683401000-WM-09, Upholstery Furniture Technical Specifications and Re-engineering, NQF Level 4, Credits 20**

### **9.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

Draft and specify technical specifications by providing documentation, detailed instructions, drawings, or specifications to inform others about how parts, equipment, or structures are to be fabricated, constructed, assembled, modified, maintained or used and re-engineer upholstery products to address production problems

The learner will be required to:

- WM-09-WE01: Develop and construct technical drawings indicating all components in correct quantities, shapes and sizes of upholstery furniture product from a design, sample or customer specifications
- WM-09-WE02: Identify suitable construction methods to standardise components and to simplify or optimise production and compile production documentation
- WM-09-WE03: Compile an input requirement list
- WM-09-WE04: Draw up a cutting list for springs, webbing, foam and materials
- WM-09-WE05: Compile a routing sheet and production line set-up
- WM-09-WE06: Identify and prepare machines and tools for production according to machine/tools capabilities and worker skills and availability
- WM-09-WE07: Re-engineer upholstery furniture to address faults, accommodate changes or improve existing product

### **9.2 Guidelines for Work Experiences**

#### **9.2.1. WM-09-WE01: Develop and construct technical drawings indicating all components in correct quantities, shapes and sizes of upholstery furniture product from a design, sample or customer specifications**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Develop and produce computer aided technical drawings using a CAD application or manual tools and equipment
- WA0102 Read and interpret a design, sample or customer specifications for upholstered products to extract all relevant information and identify and visualise the features and aesthetic appearance of the design and product
- WA0103 Conceptualise and visualise the final work piece in three dimensions: length, width and depth
- WA0104 Assess the feasibility and practicality for manufacturing and alert designer to any deviations from design

- WA0105 Take accurate measurements and calculate the amount of fabrics, leather, man-made fabrics, padding and other raw material such as springs, webbing, etc. for the manufacturing of the upholstery product
- WA0106 Measures, drapes, and smooths material, wrong-side-out, over sections of furniture to ensure most economical use and to serve as guide in matching shades, colours, and designs in cloth
- WA0107 Estimate material requirements for production and estimate the amounts and types of needed materials
- WA0108 Estimate time, costs, resources, or materials needed to perform a work activities
- WA0109 Do a costing of the product to determine financial viability

***Supporting Evidence***

- SE0101 Technical drawings

**9.2.2. WM-09-WE02: Identify suitable construction methods to standardise components and to simplify or optimise production and compile production documentation**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Determine upholstery product specifications, raw materials, work methods and machine setup requirements
- WA0202 Review blueprints or other instructions to determine operational methods or sequences of operations
- WA0203 Produce upholstery furniture construction specifications according to a furniture design
- WA0204 Establish the specifications of articles to be constructed or repaired or plan the methods or operations for allowances and tolerances
- WA0205 Identify the sign off indications

***Supporting Evidence***

- SE0201 Work instructions, job card, cutting list, production flow/routing chart
- SE0202 Furniture finishing specifications
- SE0203 Sign off indications

**9.2.3. WM-09-WE03: Compile an input requirement list**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Take accurate measurements of the various components of an upholstered furniture product to be covered

- WA0302 Consider and make calculations for allowances and tolerances such as allowing for shrinkage, seams and stitching
- WA0303 Calculate the meterage of fabrics, leather, man-made fabrics, padding and other raw material such as springs, webbing, etc.

***Supporting Evidence***

- SE0301 Production documentation

**9.2.4. WM-09-WE04: Draw up a cutting list for springs, webbing, foam and materials**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Make calculations for allowed tolerances and draw up a cutting list that specifies the type, quality, dimensions and quantity of the springs, webbing, foam, materials and components required
- WA0402 Produce a systematic plan to complete the springing and webbing process within the allocated time
- WA0403 Produce upholstery finishing specifications
- WA0404 Produce a job card, cutting list, production flow/routing chart

***Supporting Evidence***

- SE0401 Cutting list is complete, and allowances and specifications for raw materials meet workplace requirements

**9.2.5. WM-09-WE05: Compile a routing sheet and production line set-up**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0501 Identify the method of production
- WA0502 Identify technology required for the manufacturing of the furniture product
- WA0503 Determine the capabilities of the production line (available technology and skills) for bulk manufacturing of a product
- WA0504 The work flow of the production line is identified and the role and position of the respective operation is recognized
- WA0505 The operation is planned taking into account the production targets of the team and the effect of bottlenecks etc. on the work flow and productivity

***Supporting Evidence***

- SE0501 Routing sheet
- SE0502 Production flow chart

### **9.2.6. WM-09-WE06: Identify and prepare machines and tools for production according to machine/tools capabilities and worker skills and availability**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0601 Identify and prepare machine requirements
- WA0602 Set machines and equipment taking into account machine/equipment limitations
- WA0603 Inspect machines and tools to confirm that the condition and settings are according to specifications

#### ***Supporting Evidence***

- SE0601 Machines signed off for work readiness

### **9.2.7. WM-09-WE07: Re-engineer upholstery furniture to address faults, accommodate changes or improve existing product**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0701 Identify reasons for reengineering such as product not comfortable, raw material out of production, a development or manufacturing defect, design or material change, process, quality or machine changes, substandard manufacturing, etc.
- WA0702 Study and apply requirements and specifications including design requirements; aesthetic appearance; agreed cost; internal manufacturing constraints and limitations, time frames
- WA0703 Apply fault finding techniques or use information on quality control to identify the cause of the shortfall or potential problems
- WA0704 Production constraints and problems are identified and options and solutions are determined
- WA0705 Identify possible changes and adaptations required which could be changes to specifications, to aesthetic appearance, to durability, to standardise components, to simplify production, etc.
- WA0706 Knock-on effect on proposed changes is identified and evaluated to determine optimum resolution of adaptations required
- WA0707 Approved changes and adaptations are incorporated into production requirements, technical specifications jigs and templates
- WA0708 Templates and jigs adaptations are determined and are produced to meet agreed prototype re-engineering
- WA0709 New or adapted specifications resulting from changes are provided to relevant personnel according to organisational requirements

#### ***Supporting Evidence***

- SE0701 Production documentation

### **9.3 Contextualised Workplace Knowledge**

- 1 Company products
- 2 Various departments and workflow
- 3 Reporting structures
- 4 Company standard operating procedures and quality standards
- 5 Workshop/production line layout and designated areas
- 6 Personal protective clothing and equipment (PPE) and safety procedures

### **9.4 Criteria for Workplace Approval**

#### *Physical Requirements:*

- Fully equipped upholstery department for advanced prototype or bespoke upholstery manufacturing with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Advanced prototype or bespoke upholstery manufacturing processes

#### *Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 4 qualified advanced upholstery cover fitter with 3 years of experience in advanced upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

#### *Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

### **9.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

## **10. 683401000-WM-10, Supervision in the Upholstery Department, NQF Level 4, Credits 16**

### **10.1 Purpose of the Work Experience Modules**

The focus of the work experience is on providing the learner an opportunity to:

Monitor productivity in various sections of the upholstery department and use acquired knowledge (consumables, materials, padding) to identify, pre-empt potential problems and solve problems in order to advise subordinates on a practical solution

The learner will be required to:

- WM-10-WE01: Monitor productivity in various sections of the upholstery department
- WM-10-WE02: Monitor safety, health, quality and productivity in the furniture upholstery departments
- WM-10-WE03: Oversee the activities of a team of operators in the furniture upholstery departments
- WM-10-WE04: Use the computer or smart device to find and record information (stock control, job card, etc.)
- WM-10-WE05: Use acquired knowledge (consumables, materials, threads) to identify and solve problems in order to advise subordinates or clients on a practical solution for a given scenario

### **10.2 Guidelines for Work Experiences**

#### **10.2.1. WM-10-WE01: Monitor productivity in various sections of the upholstery department**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0101 Complete timesheets and other production information at the end of the job to reflect and determine productivity
- WA0102 Develop plans to accomplish work, and prioritizing and organizing one's own work
- WA0103 Tend to bottlenecks
- WA0104 Optimize company production by planning and finding quicker and better ways and measuring against the maximum output of the company
- WA0105 Demonstrate the ability to tell when something is wrong or is likely to go wrong and recognise there is a problem or potential problem

##### ***Supporting Evidence***

- SE0101 Production records
- SE0102 Attendance registers

#### **10.2.2. WM-10-WE02: Monitor safety, health, quality and productivity in the furniture upholstery departments**

##### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0201 Verify dimensions and check the quality or fit of furniture pieces to ensure adherence to specifications
- WA0202 Compare physical characteristics of materials or products to specifications or standards
- WA0203 Inspect tolerances and allowances for accuracy
- WA0204 Avoid backtracking, work flow interruptions or wastage
- WA0205 Use workplace technology related to the coordination, including communication equipment, time and management aids and other measuring devices
- WA0206 Communicate ideas and information to enable confirmation of work requirements and specifications and the reporting of work outcomes and problems
- WA0207 Ensure the application of safety and environmental procedures
- WA0208 Inspect the workshop for hazards and report and mitigate risks

#### ***Supporting Evidence***

- SE0201 Safety, health and environmental records
- SE0202 Incident and accident reports
- SE0203 Attendance registers

### **10.2.3. WM-10-WE03: Oversee the activities of a team of operators in the furniture upholstery departments**

#### ***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0301 Identify a team of operators
- WA0302 Conduct and record a daily briefing meeting
- WA0303 Scheduling events, programs, activities, as well as the work of others
- WA0304 Delegate tasks to different team members
- WA0305 Coach, guide and advice team members on different processes, machines, tools and other resources required.
- WA0306 Record meeting
- WA0307 Lead the team in the workplace
- WA0308 Organise all materials, equipment and tools for the team members and operations
- WA0309 Record all processes and report to relevant person
- WA0310 Attend to conflicts in the work area and report accordingly

#### ***Supporting Evidence***

- SE0301 Production records
- SE0302 Briefing session notes/minutes
- SE0303 Coaching session attendance registers

**10.2.4. WM-10-WE04: Use the computer or smart device to find and record information (stock control, job card, etc.)**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0401 Email (internal) customers (confirmation on product pricing, quotes, proof of purchase for warrantees, invoices)
- WA0402 Email suppliers to obtain information on components
- WA0403 Use available technical specification resources effectively
- WA0404 Extract reports on department output and job achievement and productivity

***Supporting Evidence***

- SE0401 Electronic communication feed back
- SE0402 Productivity reports
- SE0403 Inspection sheet

**10.2.5. WM-10-WE05: Use acquired knowledge (consumables, materials, threads) to identify and solve problems in order to advise subordinates or clients on a practical solution for a given scenario**

***Scope of Work Experience***

The person will be expected to engage in the following work activities:

- WA0501 Research sources of information using resources effectively to identify suitable options
- WA0502 Research product specifications to identify possible faults, defects and possible causes
- WA0503 Combine, evaluate and reason with information and data to make decisions and solve problems including making decisions about the relative importance of information and choosing the best solution
- WA0504 Analyse and compare options for practicality, efficiency, durability and cost effectiveness and apply problems solving principles
- WA0505 Advise subordinates and clients on most suitable solution and delegate the execution of the decision

***Supporting Evidence***

- SE0501 Research results

### **10.3 Contextualised Workplace Knowledge**

- 1 Company products
- 2 Various departments and workflow
- 3 Reporting structures
- 4 Company standard operating procedures and quality standards
- 5 Workshop/production line layout and designated areas
- 6 Personal protective clothing and equipment (PPE) and safety procedures

### **10.4 Criteria for Workplace Approval**

#### *Physical Requirements:*

- Fully equipped upholstery department for advanced prototype or bespoke upholstery manufacturing with machines, tools and equipment and various types of raw material and upholstery frames
- Key processes: Advanced prototype or bespoke upholstery manufacturing processes

#### *Human Resource Requirements:*

- Qualifications, registration or experience of supervisor: NQF 4 qualified advanced upholstery cover fitter with 3 years of experience in advanced upholstery cover fitting
- Supervisor/subordinate ratios = 1:20
- Availability of coaches and mentors = 1:5

#### *Legal Requirements:*

- Compliance with occupational health and safety regulations
- Compliance with Labour Legislation

### **10.5 Additional Assignments to be Assessed Externally**

None, but the module can be achieved in full through RPL process

#### SECTION 4: STATEMENT OF WORK EXPERIENCE

<b>Curriculum Number:</b>	683401000
<b>Curriculum Title:</b>	Furniture Upholsterer

<b>Learner Details</b>	
<b>Name:</b>	
<b>ID Number:</b>	

Years of experience  
Qualifications

<b>Employer Details</b>	
<b>Company Name:</b>	
<b>Address:</b>	
<b>Supervisor Name:</b>	
<b>Work Telephone:</b>	
<b>E-Mail:</b>	

**683401000-WM-01, Upholstery Furniture Frame Preparation Processes, NQF Level 2, Credits 24**

WM-01-WE01	Read and interpret work instructions which may include prototype, sample, technical drawings and product specifications		
	<b>Supporting Evidence</b>	Date	Signature
SE0101	Attendance register		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Work instructions are correctly interpreted and all information is understood or otherwise clarified with supervisor		
WA0102	Upholstery furniture type is identified from the work instructions		
WA0103	Obtain raw materials such as webbing, springs, foam and other consumables as indicated in the work instructions from the store		
WM-01-WE02	Prepare for upholstery frame preparation activities		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	List of raw material used		
	<b>Scope Work Experience</b>	Date	Signature
WA0201	Clean the workstation ensuring it is free of objects which may cause damage or contamination of the upholstery product		
WA0202	Inspect PPC ensuring it is in good condition		
WA0203	Apply ergonomic principles when lifting and handling heavy objects		
WA0204	Apply ergonomic principles by standing in the correct position and apply correct posture when operating tools and performing webbing and springing operations		

WA0205	Inspect the work area for compliance with health, safety and environmental regulations and report all hazards or risks		
WA0206	Diligently report incidents or accidents to the supervisor according to workplace procedures		
WA0207	Select, inspect and prepare correct tools, equipment ensuring good working condition		
WA0208	Select and inspect webbing according to coding, colour, size and elasticity ensuring correct product for the job		
WA0209	Select and inspect springs according to gauges, uses and sizes ensuring correct product for the job		
WA0210	Select consumables such as tacks, clips, staples and nails ensuring correct size for the job		
WA0211	Select and inspect the upholstery frame ensuring quality and reporting defects and faults such as knots, buckling, etc.		
WA0212	Select and inspect cloth for covering the webbing and springs according to the work instruction		
WM-01-WE03	Prepare upholstery frames for the next process by interweaving and fastening webbing to the backs and seats of furniture		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Production records indicating number of frames prepared with webbing		
	<b>Scope Work Experience</b>	Date	Signature
WA0301	Interpret the specifications to identify the webbing and webbing pattern for the given frames		
WA0302	Standing in the correct position and apply correct posture when performing the frame preparing techniques		
WA0303	Measure and cut the webbing to the specified lengths in the cutting list, taking into account the allowances		

	required		
WA0304	Measure and mark the rails of the frame and tack or staple the webbing strips to sides of the frame using hand tools and applying the correct interlacing pattern and sequence		
WA05	Stretch, tension and interlace webbing across frame using hand tools ensuring correct tension and allow for specified deflection		
WA0306	Inspect and check the frame to ensure that webbing is not too tight and distorting the seat rails and is in conformance with quality standards of the company		
WM-01-WE04	Prepare upholstery frames for the next process by attaching springs to the seats, arms and backs of upholstery frames		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Production records indicating number of frames prepared with springs		
	<b>Scope Work Experience</b>	Date	Signature
WA0401	Interpret work instructions to determine the required arc height and shape of the seat and back, whether the springs are for seats or backs, and the quantity, type, gauge and size of spring		
WA0402	Stand in the correct position and apply correct posture when performing the frame preparing techniques		
WA0403	Determine the required length of the spring by measuring the inside frame length and measure the length of the spring using the correct technique and measuring equipment		
WA0404	Measure and mark the rails of the frame (back and / or seat and / or arms) and tack, nail or staple the clips for the springs using a nail or staple gun applying correct direction of springs		
WA0405	Space and attach e-clips to the frame using a staple gun or nail gun ensuring compliance with safe operating procedures		

WA0406	Clip the springs and crimp wire to stabilise the foundation applying correct technique		
WM-01-WE05	Prepare upholstery frames for the next process by attaching coils to the seats, arms and backs of upholstery frames		
	<b>Supporting Evidence</b>	Date	Signature
SE0501	Production records indicating number of frames prepared with coils		
	<b>Scope Work Experience</b>	Date	Signature
WA0501	Interpret work instructions to determine the required height and shape of the seat and back, whether the springs are for seats or backs, and the quantity, type, gauge and size of coil spring		
WA0502	Stand in the correct position and apply correct posture when performing the frame preparing techniques		
WA0503	Prepare and attach webbing to the frame to meet the work instructions		
WA0504	Position and correctly space the coil springs applying the correct direction and ensuring the sharp ends are bent to prevent damage to the stuffing/padding		
WA0505	Position, interlace and attach the coil springs onto the webbing and tack the twine to the frame securely.		
WA0506	Fasten border wire to springs, using metal clips or by twisting crimp wire around border wire and top of spring.		
WA0507	Conduct a quality check and record mistakes, material defects, any weakness in the foundation constructed by the springs, and consumables and tool defects		
WM-01-WE06	Prepare webbed an sprung upholstery frames for the next process by attaching foam or padding/stuffing to the seats, arms and backs of upholstery frames		
	<b>Supporting Evidence</b>	Date	Signature
SE0601	Production records indicating number of frames		

	prepared with foam or stuffing		
	<b>Scope Work Experience</b>	Date	Signature
WA0601	Interpret work instructions to determine the required height and shape of the seat and back and the quantity, type, density and size of foam or stuffing		
WA0602	Read and interpret material safety data sheets (MSDS) for correct handling, usage and storage of adhesives and other chemicals (solvents)		
WA0603	Select, inspect and prepare correct tools and consumables for respective techniques		
WA0604	Select foam/padding according to the thickness, density and size of foam		
WA0605	Stand in the correct position and apply correct posture when performing the frame preparing techniques		
WA0606	Apply techniques to bond foam to foam using correct amount of adhesive for good bonding		
WA0607	Apply techniques to bond foam to other substances using correct amount of adhesives for good bonding		
WA0608	Apply techniques to shape padded area according to design or style		
WA0609	Apply correct sequence of tasks according to the design		
WA0610	Inspect foam for correct densities, correct sizes, correct shapes or profile, the feel of the foam, good bonding		
WA0611	Inspect prepared frames for quality such as correct positioning and appearance of the padding and foam, measuring the middle and centralized, according to the divisions of the couch		
WM-01-WE07	Perform end-of shift routines in the upholstery frame preparing department		
	<b>Supporting Evidence</b>	Date	Signature

SE0701	Shift records		
	<b>Scope Work Experience</b>	Date	Signature
WA0701	Perform routine cleaning of tools or equipment to remove dust, dirt and other contaminants		
WA0702	Perform minor maintenance of hand tools, power tools and pneumatic tools such as sharpening or replacing blunted edges and handle and store correctly		
WA0703	Perform dust extraction procedures where necessary		
WA0704	Check that the tools and equipment is in working condition once the procedures are completed		
WA0705	Record legibly the hourly production, down time, quality faults, and production history		
WA0706	Record any production related problems experienced during the shift		
WA0707	Accurately record waste		
WA0708	Accurately record defects and faults (raw material and prepared frames)		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		

6	Personal protective clothing and equipment (PPE) and safety procedures		
---	--	--	--

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature
--	---	------	-----------

**683401000-WM-02, Upholstery Furniture Frame Cover Fitting Processes, NQF Level 2, Credits 24**

WM-02-WE01	Read and interpret work instructions which may include prototype, sample, technical drawings and product specifications		
	<b>Supporting Evidence</b>	Date	Signature
SE0101	Attendance register		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Work instructions are correctly interpreted and all information is understood or otherwise clarified with supervisor		
WA0102	Upholstery furniture type is identified from the work instructions		
WA0103	Obtain raw materials such as webbing, springs, foam and other consumables as indicated in the work instructions from the store		
WM-02-WE02	Prepare for upholstery frame preparation activities		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	List of raw material used		
	<b>Scope Work Experience</b>	Date	Signature
WA0201	Clean the workstation ensuring it is free of objects which may cause damage or contamination of the upholstery product		

WA0202	Inspect PPC ensuring it is in good condition		
WA0203	Apply ergonomic principles when lifting and handling heavy objects		
WA0204	Apply ergonomic principles by standing in the correct position and apply correct posture when operating tools and performing webbing and springing operations		
WA0205	Inspect the work area for compliance with health, safety and environmental regulations and report all hazards or risks		
WA0206	Diligently report incidents or accidents to the supervisor according to workplace procedures		
WA0207	Select, inspect and prepare correct tools, equipment ensuring good working condition		
WA0208	Select and inspect prepared slip covers according to colour, size, dimensions and allowances ensuring correct product for the job		
WA0209	Inspect material to insure quality of direction of pile, flaws and defects, number of components		
WA0210	Select and inspect springs according to gauges, uses and sizes ensuring correct product for the job ensuring correct product for the job		
WA0211	Select consumables such as tacks, clips, staples and nails ensuring correct size for the job		
WA0212	Select and inspect the upholstery frame ensuring quality and reporting defects and faults such as knots, buckling, etc.		
WA0213	Select and inspect cloth for covering the webbing and springs according to the work instruction		
WM-02-WE03	Cover upholstery seats		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Production records indicating number of covered upholstery seats		

	<b>Scope Work Experience</b>	Date	Signature
WA0301	Study work instructions to determine shape and profile of seat and method		
WA0302	Identify and match the fabric covers to the specified frames		
WA0303	Use a staple gun to temporarily attach shaped covers to drop-on and drop-in seat frames		
WA0304	Use the correct hand straining techniques to ensure that the main thread lines from left to right, and back to front, are straight		
WA0305	Strain the covers on square seats to the sides and corners and, when correctly positioned, add tension and staple home		
WA0306	Strain the covers on round seats from the centre of the circle so that the tension is equally matched in all directions and staple onto the frame		
WA0307	Make relief cuts so that the strains to each side of the clover shape don't drag the threads over from the opposite side		
WA0308	Attach bottom cloth neatly so that all staples, fabric edges, and threads are hidden		
WA0309	Inspect the covered seats for quality such as stretch, tension and deflection of fabric, spacing of tacks, nails and staples, uniformity, positioning of the cover and alignments, pattern matching ensuring it meets company quality standards		
WM-02-WE04	Fit covers to prepared frames using visible and concealed finishing techniques		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Production records indicating number of covered upholstery frames		
	<b>Scope Work Experience</b>	Date	Signature
WA0401	Interpret the specifications and identify the preferred		

	finishing methods (visible or concealed)		
WA0402	Fit covers to the frame using concealed finishing methods so that all staples and cut edges of fabric are hidden, and the bottom cloth hides it underneath the upholstered item		
WA0403	Fit covers to the frame using visible finishing methods such as using gimp pins, spaced studs, close studding, studs with banding, continuous studding strip, gimp / braid, double piping		
WA0404	Attach gimp pins, upholstery studs, banding strips, continuous studding strips, vinyl banding strips braid to turned under straight edges		
WA0405	Attach gimp pins, upholstery studs, banding strips, continuous studding strips, vinyl banding strips braid to contoured shapes to cover a staple line		
WA0406	Inspect the covered frame for quality such as stretch, tension and deflection of fabric, spacing of tacks, nails and staples, uniformity, pleating and folding and positioning of the cover and alignments, pattern matching ensuring it meets company quality standards		
WM-02-WE05	Perform end-of shift routines in the upholstery cover fitting department		
	<b>Supporting Evidence</b>	Date	Signature
SE0501	Shift records		
	<b>Scope Work Experience</b>	Date	Signature
WA0501	Perform routine cleaning of tools or equipment to remove dust, dirt and other contaminants		
WA0502	Perform minor maintenance of hand tools, power tools and pneumatic tools such as sharpening or replacing blunted edges and handle and store correctly		
WA0503	Perform dust extraction procedures where necessary		
WA0504	Check that the tools and equipment is in working condition once the procedures are completed		

WA0505	Record legibly the hourly production, down time, quality faults, and production history		
WA0506	Record any production related problems experienced during the shift		
WA0507	Accurately record waste		
WA0508	Accurately record defects and faults (raw material and prepared frames)		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature

**683401000-WM-03, Upholstery Pattern and Template Making Processes, NQF Level 3, Credits 15**

WM-03-WE01	Prepare for and dimension the upholstery pattern or template making task		
------------	--	--	--

	<b>Supporting Evidence</b>	Date	Signature
SE0101	Work instructions		
SE0102	Planning sheet and notes		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Observe work health and safety requirements, including personal protection clothing and equipment throughout the work		
WA0102	Interpret work instruction which may include drawings or sample to establish required sizes of finished upholstery products		
WA0103	Check size requirements in relation to the production process and finishing capacity of the workplace		
WM-03-WE02	Plan the upholstery pattern or template making process		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	Production information		
	<b>Scope Work Experience</b>	Date	Signature
WA0201	Identify material for pattern or template is for approximate size and characteristics		
WA0202	Identify, locate and assemble required instruments and equipment		
WA0203	Interpret drawings and related specifications		
WA0204	Apply procedures for using pattern development instruments and tools and prepared equipment		
WM-03-WE03	Measure and plot upholstery dimensions and components		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Completed upholstery pattern or template		

	<b>Scope Work Experience</b>	Date	Signature
WA0301	Use equipment and tools following normal workplace procedures		
WA0302	Measure, explode and plot each dimension maintaining appropriate angles, arcs and curves		
WA0303	Perform visual inspection and measurements to compare pattern dimensions and shapes with drawings and specifications		
WM-03-WE04	Complete upholstery pattern or template		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Filed completed upholstery pattern or template		
	<b>Scope Work Experience</b>	Date	Signature
WA0401	Complete upholstery pattern or template ensuring that the pattern indicates completion date and original drawing details		
WA0402	Obtain required workplace approval of pattern or template		
WA0403	Mark plans with notations for workplace requirements, including authorship, process or customer requirements, authorisation and any review dates		
WA0404	Adhere to time limits for completing the operation, set targets and safety requirements		
WA0405	Copy and file plans as required, according to workplace policies and procedures		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and		

	workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature
--	---	------	-----------

**683401000-WM-04, Upholstery Cutting Lay Preparation, NQF Level 3, Credits 10**

WM-04-WE01	Prepare a single lay for cutting of upholstery components		
	<b>Supporting Evidence</b>	Date	Signature
SE0101	Prepared single lay ready for cutting operations		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Obtain and interpret job specifications identifying aspects such as fabric, template, number of items, cutting plan, tolerances		
WA0102	Identify required fabrics, number of items to be cut and select and inspect required equipment		
WA0103	Identify fabric sizes to be cut are from work instruction and determine required allowances		
WA0104	Observe workplace health and safety requirements, including personal protection needs throughout the work		

WA0105	Select, prepare and clean suitable work area ensuring it free of any contaminants		
WA0106	Plan work sequence		
WA0107	Ensure selected fabrics are in accordance with work order and laid out smooth and square		
WA0108	Inspect fabrics for flaws and appropriate finish		
WA0109	Identify nap/pile direction, pattern matches and face of the materials		
WA0110	Check tools and equipment for operation		
WA0111	Measure and mark fabric including registration points		
WA0112	Place template on fabric to ensure layout of cutting plan meets pile direction and minimise waste and weight or pin to minimise movement during cutting		
WA0113	Adhere to time limits for completing the operation, set targets and safety requirements		
WM-04-WE02	Prepare a multiple-layer for cutting of upholstery components		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	Prepared multiple-layer ready for cutting operations		
	<b>Scope Work Experience</b>	Date	Signature
WA0201	Obtain and interpret job specifications identifying aspects such as fabric, template, number of items, cutting plan, tolerances		
WA0202	Select equipment for job such as markers, ruler, straight edges, cutting tools, templates, weights and/or skewers and confirm to be in working order		
WA0203	Select fabric in accordance with job specifications		
WA0204	Roll out top layer of fabric and place template on fabric to ensure layout of cutting plan meets pile direction and minimise waste		

WA0205	Calculate fabric meterage in accordance with number of lays and check fabric availability		
WA0206	Use marker to mark out the fabric and label fabric panels ensuring clear line, line up with template, tolerances and allowances		
WA0207	Roll out remaining layers, cut to length, and stack ensuring flat, even salvages		
WA0208	Place top lay on top of remaining layers and weight or pin to minimise movement during cutting		
WA0209	Record fabric usage while marking out fabric in accordance with worksite policies and procedures		
WA0210	Adhere to time limits for completing the operation, set targets and safety requirements		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature

**683401000-WM-05, Advanced Upholstery Covering Processes, NQF Level 3, Credits 25**

WM-05-WE01	Prepare for advanced cover fitting operations, sewing advanced loose upholstery components, complex cushions, deep buttoning operations and inspect raw material for conformance with company standards		
	<b>Supporting Evidence</b>	Date	Signature
SE0101	Prepared work station conforming with workplace standards		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Obtain and interpret job specifications for the upholstery furniture identifying aspects such as fabric, templates, number of items and finishings		
WA0102	Select, prepare and clean suitable work area ensuring it is free of any contaminants		
WA0103	Select tools and equipment appropriate to the task, inspect for good working order and apply health and safety work instructions		
WA0104	Select and inspect prepared (sprung and pre-padded) frame for defects in timber, construction, springs and padding ensuring company standards are met		
WA0105	Identify, select and inspect various cut components and indicate appropriate sections of the frame ensuring the material is free from faults and defects and ensuring dimensions of fabric components meet specifications		
WM-05-WE02	Fit prepared fabric covers to prepared complex upholstery frames and upholstery exposed frames		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	Covered upholstery frame conforming with workplace standards and completed within set time limits		
	<b>Scope Work Experience</b>	Date	Signature

WA0201	Fit and secure cover components (inside and outside) in the correct sequence to the upholstery frame using appropriate sewing or stapling procedure ensuring smooth finish, no twists in fabric, tops in correct position, no puckering on corners or edges and surplus fabric removed		
WA0202	Insert pleats and tucks where required ensuring they are evenly spaced, pleats and tucks folded down and along grain		
WA0203	Apply correct tension to fabric ensuring that visual appearance of the work piece conforms to specifications		
WA0204	Inspect covered upholstery frame for faults such as marks; incorrect alignment; incorrect tension or incorrect positioning with the covering, all fixed components are secure, components are accurately centred and evenly spaced and material is cut and shaped to conform to the specified design profiles, visual appearance, (including alignment of patterns, pleating and spacing of tacks, staples etc.) and take corrective action		
WA0205	Fit legs, glides, or castors in accordance with job specifications		
WA0206	Handle and move upholstered item delicately and store in designated area		
WA0207	Adhere to time limits for completing the operation, set targets and safety requirements		
WM-05-WE03	Prepare, sew and finish advanced loose covers		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Covered upholstery furniture conforming with workplace standards and completed within set time limits		
	<b>Scope Work Experience</b>	Date	Signature
WA0301	Ensure fabric placement and alignment is appropriate for the type and number of components required and the fabric characteristics (patterns, stripes, pile)		

WA0302	Accurately align materials and components in their correct position, making sure that components are correctly orientated and aligned to meet fabric, pattern and design requirements		
WA0303	Use sewing methods which are appropriate to the type of component and attach the components in an efficient sequence, securely and to the required shape and finish		
WA0304	Attach lining component, fasteners and finishing materials such as edgings, trimmings and linings and for the covering of buttons, including braid, piping, fringe, polished wood borders, castors, bun feet etc.		
WA0305	Check and confirm that there are no loose threads on the finished loose cover and that the visual appearance of the loose cover meets the specification		
WA0306	Accurately position and securely attach closures, trimmings or decorative finishes using methods which will give the required durability and appearance		
WA0307	Inspect finished product to confirm quality and take corrective action to address faults or defects such as flaws, distortions and colour/pattern variations in the fabric, inaccurate measurements and mis-alignments, slipping, fraying, inaccuracies, poor seam quality and equipment faults		
WA0308	Adhere to time limits for completing the operation, set targets and safety requirements		
WM-05-WE04	Produce complex shaped cushions and padded items including a T-cushion		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Sewn cushions conforming with workplace standards and completed within set time limits		
	<b>Scope Work Experience</b>	Date	Signature
WA0401	Accurately align materials and components in their correct position, making sure that components are correctly orientated and aligned to meet fabric, pattern and design requirements		

WA0402	Use sewing methods which are appropriate to the type of component and attach the components in an efficient sequence, securely and to the required shape and finish		
WA0403	Check and confirm that there are no loose threads on the finished complex shaped cushions and padded items and that the visual appearance of the complex shaped cushions and padded items meets the specification		
WA0404	Accurately position and securely attach closures, trimmings or decorative finishes using methods which will give the required durability and appearance		
WA0405	Inspect finished product to confirm quality and take corrective action to address faults or defects such as flaws, distortions and colour/pattern variations in the fabric, inaccurate measurements and mis-alignments, slipping, fraying, inaccuracies, poor seam quality and equipment faults		
WA0406	Adhere to time limits for completing the operation, set targets and safety requirements		
WM-05-WE05	Perform buttoning and deep buttoning procedures to decorate upholstered furniture		
	<b>Supporting Evidence</b>	Date	Signature
SE0501	Buttoning and deep buttoning conforming with workplace standards and completed within set time limits		
	<b>Scope Work Experience</b>	Date	Signature
WA0501	Read and interpret the work specification and sample to determine fabric type, button type, button size and positioning and shape of the deep buttoning and prepare for assembling of buttons and performing a deep buttoning procedures		
WA0502	Select and inspect raw material and consumables for assembling buttons and performing deep buttoning techniques		
WA0503	Assemble buttons according to the work piece and diagram		

WA0504	Accurately position and fit the buttons ensuring visual balance and cover shape		
WA0505	Identify faults and defects such as incorrect positioning; incorrect alignment; incorrect tension; incorrect shape and take corrective action		
WA0506	Adhere to time limits for completing the operation, set targets and safety requirements		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature

**683401000-WM-06, Material Cutting and Sewing Processes for Upholstery Prototypes or Bespoke Furniture, NQF Level 2, Credits 24**

WM-06-WE01	Prepare the workstation for laying, cutting and sewing of upholstery prototype or bespoke furniture		
------------	---	--	--

	<b>Supporting Evidence</b>	Date	Signature
SE0101	Prepared work area and production records		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Clean and inspect the work area ensuring safety compliance and preventing contamination of material or product		
WA0102	Interpret cutting plan, work specifications, technical drawing or sample to identify the components according to furniture style and total plies and verify the cutting requirement against the sample		
WA0103	Interpret technical specifications (which could be a sample) to determine type and amount of material required, and obtain required amount of materials from storeroom or as issued		
WA0104	Determine from experience and knowledge of materials approximate meterage necessary to cover furniture, allowing for shrinkage and stitching		
WA0105	Conduct a quality inspection to identify all defects or material faults		
WA0106	Identify the fabric/material and batches according to the serial numbers of the labels ensuring it is according to specifications		
WA0107	Check the cutting plan ensuring all components are included according to specifications		
WA0108	Count the components according to the type of lay and furniture design		
WM-06-WE02	Produce single ply and/or multiply lays for cutting of material components for upholstery prototypes or bespoke furniture		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	Production records		
	<b>Scope Work Experience</b>	Date	Signature

WA0201	Measure, drape, and smooth material, wrong-side-out, over sections of furniture to ensure most economical use and to serve as guide in matching shades, colours, and designs in cloth		
WA0202	Position patterns on material ensuring most economical use of material		
WA0203	Determines cutting lines by pinning or marking fabric, using shape of furniture as outline		
WM-06-WE03	Cut material (leather or stripes, checks, patterns and pattern repeat fabric) into component parts according to a cutting plan by using hand knife or operating an upright knife, circular knife or band knife and ensure economical use of material		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Production records		
	<b>Scope Work Experience</b>	Date	Signature
WA0301	Measure and cut new covering materials, using patterns and measuring and cutting instruments, following sketches and design specifications		
WA0302	Stack, align, and smooth material on cutting table ensuring the correct positioning of pile and pattern of material		
WA0303	Draw cutting lines on material such as leather, fabric, and other suitable materials following templates, sketches, or blueprints, using chalk or marking pencil by pinning or marking fabric, using shape of furniture as outline		
WA0304	Inspect cutting tools or machines to ensure it is clean and in good working condition and no oil spills		
WA0305	Check blade for sharpness and replace blunt blades		
WA0306	Cut material for slipcovers according to size and shape of furniture to match patterns, using power cutters, cutting machines and scissors (single or multi-lays)		
WA0307	Drill or punch holes (nips or ticks)in cut material		

	components		
WA0308	Pin cut pieces together and fit assembled unit over furniture, making adjustments with pins to attain required fitting		
WA0309	Sort and count panels ensuring all panels have been cut		
WA0310	Conduct a final quality inspection ensuring cut panels meet specified quality requirements or standards and recognise poor workmanship ensuring correct seam allowances, seam allowance for piping, etc.		
WA0311	Record all relevant production information for completed operations		
WA0312	Record amount of time required for each assignment.		
WA0313	Adhere to time limits for completing the operation, set targets and safety requirements		
WM-06-WE04	Sew material components for bespoke furniture or prototypes covers, or for advanced cushions		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Production records		
	<b>Scope Work Experience</b>	Date	Signature
WA0401	Conduct a quality check on cut components ensuring it meets quality standards		
WA0402	Select the correct type and colour of thread to be used for sewing operations		
WA0403	Inspect machine settings and tension using a material sample to test the machine settings		
WA0404	Pick up and align components using nips and marks		
WA0405	Operate sewing machine efficiently to join various sections of covering material and/or cushions as required		

WA0406	Sew material components and assemble trim items		
WA0407	Attach binding or apply solutions to edges of cut material to prevent ravelling		
WA0408	Attach snap fasteners, grommets, buckles, cords, and other accessories to upholstery or trim items, using hand tools or equipment.		
WA0409	Hand sew buttons, hooks, or other fasteners onto fabric		
WA0410	Conduct a final quality inspection ensuring sewn components meet specified company quality requirements or standards		
WA0411	Record all relevant production information for completed operations		
WA0412	Adhere to time limits for completing the operation, set targets and safety requirements		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature
--	---	------	-----------

**683401000-WM-07, Bespoke Upholstery Furniture and/or Upholstery Prototypes Manufacturing and Repairs, NQF Level 4, Credits 56**

WM-07-WE01	Prepare for manufacturing of bespoke upholstery furniture or furniture prototypes		
	<b>Supporting Evidence</b>	Date	Signature
SE0101	Production records		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Read and interpret a design and technical drawing, sketches, customer descriptions, or blueprints		
WA0102	Identify the type of raw materials to be used for type of design		
WA0103	Do a mock-up development to assess the design, technical drawing and raw material for compatibility and recommend adaptations and modifications to solve potential technical, resources, budgetary, time, materials and equipment problems		
WA0104	Interact with the designer, production manager and suppliers during the prototype making process		
WA0105	Identify and discuss suitable construction methods to standardise components, simplify production and costing of product		
WM-07-WE02	Construct furniture frames for bespoke upholstery furniture or furniture prototypes		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	Production records		
	<b>Scope Work Experience</b>	Date	Signature
WA0201	Determine timber sizes and types to be used for the		

	type of design for frame construction		
WA0202	Construct frame according to design specifications using appropriate tools and applying specified jointing techniques		
WM-07-WE03	Manufacture upholstery prototypes according to the final design and finish and prepare prototypes for display to and approval from the client		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Production records		
	<b>Scope Work Experience</b>	Date	Signature
WA0301	Plan and prepare for attaching foundations to the given frames and adjust, attach or secure springs, webbing, card board, polypropylene, etc.		
WA0302	Interweave and fasten strips of webbing to the backs and undersides of furniture, using small hand tools and fasteners and stretch webbing and fabric, using webbing stretchers		
WA0303	Identify type of foam to be used on which section of the frame according to the design and attach foam on prepared frame using glue or stapling		
WA0304	Build furniture up with loose fiber stuffing, cotton, felt, and/or foam padding to form smooth rounded surfaces.		
WA0305	Design upholstery cover patterns and cutting plans, based on sketches, customer descriptions, or blueprints.		
WA0306	Conduct quality inspection of cut and sewn material and prepared frame		
WA0307	Fit, cover and secure material on frames, using hand tools, power tools, and/or staples		
WA0308	Staple panels/covers onto frame sections such as seat deck, inside arms, inside back, outside arms, outside back, seat border, etc. using correct methods and covering sequence		

WA0309	Conduct quality inspection to ensure all lines and patterns comply with quality and design specifications		
WA0310	Add trimmings and other accessories such as piping, fringing, studs and perform finishing required		
WA0311	Conduct quality inspection to ensure all trims comply with quality and design specifications		
WA0312	Attach the bottom section and fit required legs to upholstered frame according to design specifications		
WA0313	Send prepared frame for laboratory testing of endurance and quality compliance		
WA0314	Design team conducts inspection to ensure complies with design specifications		
WA0315	Conduct a final quality assessment to ensure compliance with design specifications		
WM-07-WE04	Repair upholstered furniture to refurbish the upholstery furniture piece to initial appearance		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Production records		
	<b>Scope Work Experience</b>	Date	Signature
WA0401	Examine furniture piece (frame, upholstery, springs, and webbing) to identify faults, damage or defects and possible causes		
WA0402	Identify corrective action to repair fault, damage or defect		
WA0403	Strip upholstery furniture piece: Remove covering, foam, webbing or defective springs and padding from seat, arms, back, and sides of work piece, using correct equipment (staple remover and chisel)		
WA0404	Apply complex frame repairs of bespoke upholstery		
WA0405	Repair or replace damaged fabric or leather material, webbing, springs, foam or padding		

WA0406	Repair or replace damaged or faulty sections/mechanisms of furniture frames		
WA0407	Refinishes exposed wood on reupholstered furniture		
WA0408	Conduct final quality inspection to ensure completed or covered item comply with aesthetic appeal and meets quality standards		
WM-07-WE05	Quality assure upholstery furniture and prototypes according to the final design and finish requirements and identify deviations and causes of deviations		
	<b>Supporting Evidence</b>	Date	Signature
SE0501	Checklist of assessment of each aspect of the operation		
	<b>Scope Work Experience</b>	Date	Signature
WA0501	Inspect and systematically examine upholstery products or materials in various stages of manufacturing process for damage, defects, material shortages and to locate defects and to ensure conformance to quality product standards		
WA0502	Conduct visual quality assessments of upholstery furniture products to asses overall visual appearance and quality assure straightness of seams, stitch lengths, stitch faults, machine faults, match patterns, material pile and tension, corners, pleats, folds, button placement, frame straightness and not buckled		
WA0503	Identify and differentiate between manufacturing process shortfalls, design faults, process faults, raw material and machine faults		
WA0504	Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects		
WA0505	Analyse information and evaluating results to choose the best solution and solve problems		
WA0506	Inspect upholstery frame and timber to identify deviation from quality standards such as knots, dimension, buckled, water damage		
WA0507	Inspect the upholstery suspension to determine deviation from quality standards of springs, webbing,		

	web formation, durability and size		
WA0508	Inspect the upholstery padding and filling to determine deviation from quality standards such as density and durability		
WA0509	Inspect leather to determine deviation from quality standards natural marks, brand marks, oil and dirty marks, holes, tick bites, soft spots, section of the hide		
WA0510	Inspect fabrics to determine deviation from quality standards such as colour, patterns, shades, dirty marks		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature

**683401000-WM-08, Furniture Re-upholstery Department, NQF Level 4, Credits 17**

WM-08-WE01	Re-upholster (removing old upholstery and preparing the frame for re-upholstery) by stripping and preparing the frame		
	<b>Supporting Evidence</b>	Date	Signature
SE0101	List of defects		
SE0102	Ordering list of springs, webbing and padding materials		
SE0103	Cutting list for material (including fabric or leather)		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Strip the frame by removing covering, webbing, and padding from seat, arms, back, and sides of work piece, using tack puller, chisel, and mallet		
WA0102	Remove defective springs		
WA0103	Measure, repair or replace webbing and springs		
WA0104	Measure, repair, replace or rebuild foam or padding		
WA0105	Measure sizes and pattern of different panels using shape of furniture as outline and draw up a cutting list consisting of following components: inside back, outside back, inside arm, outside arm, inside wing, outside wing, front border, side borders, cushion top and bottom, cushion borders, piping panels		
WM-08-WE02	Cut new covering material and drape and smooth over sections of furniture to ensure matching shades, colours, pile and patterns in material		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	Production documentation		
	<b>Scope Work Experience</b>	Date	Signature
WA0201	Conduct a quality inspection to identify all defects or material faults		
WA0202	Lay out materials according to specifications		

WA0203	Align and smooth material on cutting table		
WA0204	Ensure that pile and pattern of material are correctly positioned		
WA0205	Draws cutting lines on material such as leather, fabric, and other suitable materials using chalk or marking pencil to match patterns and ensure economical use of material according to size and shape of furniture		
WA0206	Inspect cutting tools or machines to ensure it is clean and in good working condition and no oil spills checking the blade for sharpness and replacing blunt blades		
WA0207	Cut material along marked lines using power cutters, cutting machines and scissors and applying measurements and information from cutting list		
WA0208	Mark nips or ticks in cut material components		
WM-08-WE03	Conduct sewing operations where necessary to seam cushions and join various sections of covering material		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Production documentation		
	<b>Scope Work Experience</b>	Date	Signature
WA0301	Unpack cut components and conduct workplace layout to ensure all cut components are available		
WA0302	Conduct a quality check on cut components ensuring it meets quality standards		
WA0303	Select the correct type and colour of thread to be used for sewing operations		
WA0304	Inspect machine settings and tension using a material sample to test the machine settings		
WA0305	Pick up and align components using nips and marks		
WA0306	Operate sewing machine efficiently to join various sections of covering material and/or cushions as		

	required		
WA0307	Sew material components to assemble trim items (zips, piping, etc.)		
WA0308	Conduct a final quality inspection ensuring sewn components meet specified quality requirements or standards		
WM-08-WE04	Secure material on inside of arms, back, and seat, and over outside back and arms of prepared frame		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Production documentation		
	<b>Scope Work Experience</b>	Date	Signature
WA0401	Conduct quality inspection of cut and sewn material and prepared frame		
WA0402	Fit and secure material on work piece, using hand tools, power tools or staples		
WA0403	Tack all corners to ensure cover compliance		
WA0404	Staple panels/covers onto frame sections such as seat deck, inside arms, inside back, outside arms, outside back, seat border, etc. using correct methods and covering sequence		
WA0405	Add trimmings and other accessories such as piping, fringing, studs and perform finishing required		
WA0406	Conduct quality inspection to ensure all lines and patterns comply with quality standards		
WA0407	Start with finishing: buttoning, piping, studs, etc.		
WA0408	Conduct quality inspection to ensure completed or covered item comply with aesthetic appeal or standards		
WA0409	Attach the bottom section and fit required legs to upholstered frame according to design specifications		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature

**683401000-WM-09, Upholstery Furniture Technical Specifications and Re-engineering, NQF Level 4, Credits 20**

WM-09-WE01	Develop and construct technical drawings indicating all components in correct quantities, shapes and sizes of upholstery furniture product from a design, sample or customer specifications		
	<b>Supporting Evidence</b>	Date	Signature
SE0101	Technical drawings		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Develop and produce computer aided technical drawings using a CAD application or manual tools and		

	equipment		
WA0102	Read and interpret a design, sample or customer specifications for upholstered products to extract all relevant information and identify and visualise the features and aesthetic appearance of the design and product		
WA0103	Conceptualise and visualise the final work piece in three dimensions: length, width and depth		
WA0104	Asses the feasibility and practicality for manufacturing and alert designer to any deviations from design		
WA0105	Take accurate measurements and calculate the amount of fabrics, leather, man-made fabrics, padding and other raw material such as springs, webbing, etc. for the manufacturing of the upholstery product		
WA0106	Measures, drapes, and smooths material, wrong-side-out, over sections of furniture to ensure most economical use and to serve as guide in matching shades, colours, and designs in cloth		
WA0107	Estimate material requirements for production and estimate the amounts and types of needed materials		
WA0108	Estimate time, costs, resources, or materials needed to perform a work activities		
WA0109	Do a costing of the product to determine financial viability		
WM-09-WE02	Identify suitable construction methods to standardise components and to simplify or optimise production and compile production documentation		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	Work instructions, job card, cutting list, production flow/routing chart		
SE0202	Furniture finishing specifications		
SE0203	Sign off indications		
	<b>Scope Work Experience</b>	Date	Signature

WA0201	Determine upholstery product specifications, raw materials, work methods and machine setup requirements		
WA0202	Review blueprints or other instructions to determine operational methods or sequences of operations		
WA0203	Produce upholstery furniture construction specifications according to a furniture design		
WA0204	Establish the specifications of articles to be constructed or repaired or plan the methods or operations for allowances and tolerances		
WA0205	Identify the sign off indications		
WM-09-WE03	Compile an input requirement list		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Production documentation		
	<b>Scope Work Experience</b>	Date	Signature
WA0301	Take accurate measurements of the various components of an upholstered furniture product to be covered		
WA0302	Consider and make calculations for allowances and tolerances such as allowing for shrinkage, seams and stitching		
WA0303	Calculate the meterage of fabrics, leather, man-made fabrics, padding and other raw material such as springs, webbing, etc.		
WM-09-WE04	Draw up a cutting list for springs, webbing, foam and materials		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Cutting list is complete, and allowances and specifications for raw materials meet workplace requirements		
	<b>Scope Work Experience</b>	Date	Signature

WA0401	Make calculations for allowed tolerances and draw up a cutting list that specifies the type, quality, dimensions and quantity of the springs, webbing, foam, materials and components required		
WA0402	Produce a systematic plan to complete the springing and webbing process within the allocated time		
WA0403	Produce upholstery finishing specifications		
WA0404	Produce a job card, cutting list, production flow/routing chart		
WM-09-WE05	Compile a routing sheet and production line set-up		
	<b>Supporting Evidence</b>	Date	Signature
SE0501	Routing sheet		
SE0502	Production flow chart		
	<b>Scope Work Experience</b>	Date	Signature
WA0501	Identify the method of production		
WA0502	Identify technology required for the manufacturing of the furniture product		
WA0503	Determine the capabilities of the production line (available technology and skills) for bulk manufacturing of a product		
WA0504	The work flow of the production line is identified and the role and position of the respective operation is recognized		
WA0505	The operation is planned taking into account the production targets of the team and the effect of bottlenecks etc. on the work flow and productivity		
WM-09-WE06	Identify and prepare machines and tools for production according to machine/tools capabilities and worker skills and availability		
	<b>Supporting Evidence</b>	Date	Signature

SE0601	Machines signed off for work readiness		
	<b>Scope Work Experience</b>	Date	Signature
WA0601	Identify and prepare machine requirements		
WA0602	Set machines and equipment taking into account machine/equipment limitations		
WA0603	Inspect machines and tools to confirm that the condition and settings are according to specifications		
WM-09-WE07	Re-engineer upholstery furniture to address faults, accommodate changes or improve existing product		
	<b>Supporting Evidence</b>	Date	Signature
SE0701	Production documentation		
	<b>Scope Work Experience</b>	Date	Signature
WA0701	Identify reasons for reengineering such as product not comfortable, raw material out of production, a development or manufacturing defect, design or material change, process, quality or machine changes, substandard manufacturing, etc.		
WA0702	Study and apply requirements and specifications including design requirements; aesthetic appearance; agreed cost; internal manufacturing constraints and limitations, time frames		
WA0703	Apply fault finding techniques or use information on quality control to identify the cause of the shortfall or potential problems		
WA0704	Production constraints and problems are identified and options and solutions are determined		
WA0705	Identify possible changes and adaptations required which could be changes to specifications, to aesthetic appearance, to durability, to standardise components, to simplify production, etc.		
WA0706	Knock-on effect on proposed changes is identified and evaluated to determine optimum resolution of adaptations required		

WA0707	Approved changes and adaptations are incorporated into production requirements, technical specifications jigs and templates		
WA0708	Templates and jigs adaptations are determined and are produced to meet agreed prototype re-engineering		
WA0709	New or adapted specifications resulting from changes are provided to relevant personnel according to organisational requirements		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature

**683401000-WM-10, Supervision in the Upholstery Department, NQF Level 4, Credits 16**

WM-10-WE01	Monitor productivity in various sections of the upholstery department		
------------	---	--	--

	<b>Supporting Evidence</b>	Date	Signature
SE0101	Production records		
SE0102	Attendance registers		
	<b>Scope Work Experience</b>	Date	Signature
WA0101	Complete timesheets and other production information at the end of the job to reflect and determine productivity		
WA0102	Develop plans to accomplish work, and prioritizing and organizing one's own work		
WA0103	Tend to bottlenecks		
WA0104	Optimize company production by planning and finding quicker and better ways and measuring against the maximum output of the company		
WA0105	Demonstrate the ability to tell when something is wrong or is likely to go wrong and recognise there is a problem or potential problem		
WM-10-WE02	Monitor safety, health, quality and productivity in the furniture upholstery departments		
	<b>Supporting Evidence</b>	Date	Signature
SE0201	Safety, health and environmental records		
SE0202	Incident and accident reports		
SE0203	Attendance registers		
	<b>Scope Work Experience</b>	Date	Signature
WA0201	Verify dimensions and check the quality or fit of furniture pieces to ensure adherence to specifications		
WA0202	Compare physical characteristics of materials or products to specifications or standards		
WA0203	Inspect tolerances and allowances for accuracy		

WA0204	Avoid backtracking, work flow interruptions or wastage		
WA0205	Use workplace technology related to the coordination, including communication equipment, time and management aids and other measuring devices		
WA0206	Communicate ideas and information to enable confirmation of work requirements and specifications and the reporting of work outcomes and problems		
WA0207	Ensure the application of safety and environmental procedures		
WA0208	Inspect the workshop for hazards and report and mitigate risks		
WM-10-WE03	Oversee the activities of a team of operators in the furniture upholstery departments		
	<b>Supporting Evidence</b>	Date	Signature
SE0301	Production records		
SE0302	Briefing session notes/minutes		
SE0303	Coaching session attendance registers		
	<b>Scope Work Experience</b>	Date	Signature
WA0301	Identify a team of operators		
WA0302	Conduct and record a daily briefing meeting		
WA0303	Scheduling events, programs, activities, as well as the work of others		
WA0304	Delegate tasks to different team members		
WA0305	Coach, guide and advice team members on different processes, machines, tools and other resources required.		
WA0306	Record meeting		
WA0307	Lead the team in the workplace		

WA0308	Organise all materials, equipment and tools for the team members and operations		
WA0309	Record all processes and report to relevant person		
WA0310	Attend to conflicts in the work area and report accordingly		
WM-10-WE04	Use the computer or smart device to find and record information (stock control, job card, etc.)		
	<b>Supporting Evidence</b>	Date	Signature
SE0401	Electronic communication feed back		
SE0402	Productivity reports		
SE0403	Inspection sheet		
	<b>Scope Work Experience</b>	Date	Signature
WA0401	Email (internal) customers (conformation on product pricing, quotes, proof of purchase for warrantees, invoices)		
WA0402	Email suppliers to obtain information on components		
WA0403	Use available technical specification resources effectively		
WA0404	Extract reports on department output and job achievement and productivity		
WM-10-WE05	Use acquired knowledge (consumables, materials, threads) to identify and solve problems in order to advise subordinates or clients on a practical solution for a given scenario		
	<b>Supporting Evidence</b>	Date	Signature
SE0501	Research results		
	<b>Scope Work Experience</b>	Date	Signature
WA0501	Research sources of information using resources effectively to identify suitable options		

WA0502	Research product specifications to identify possible faults, defects and possible causes		
WA0503	Combine, evaluate and reason with information and data to make decisions and solve problems including making decisions about the relative importance of information and choosing the best solution		
WA0504	Analyse and compare options for practicality, efficiency, durability and cost effectiveness and apply problems solving principles		
WA0505	Advise subordinates and clients on most suitable solution and delegate the execution of the decision		

	<b>Contextualised Workplace Knowledge</b>	Date	Signature
1	Company products		
2	Various departments and workflow		
3	Reporting structures		
4	Company standard operating procedures and quality standards		
5	Workshop/production line layout and designated areas		
6	Personal protective clothing and equipment (PPE) and safety procedures		

	<b>Additional Assignments to be Assessed Externally</b>	Date	Signature

i think everything is up to standard .please check where i have made comment.see if what we can do