



South African
Furniture Initiative

FURNITURE MAKER

WORK EXPERIENCE MODULES

MENTOR GUIDE

Mentor Guide

Furniture Maker

SAQA Qualification Code: 682201001

NQF Level: 2–4 (modules across levels) | Total Credits: As per curriculum

1. Qualification Overview

Purpose:

The Furniture Maker qualification prepares learners to manufacture, assemble, finish, and repair furniture using a wide range of materials, tools, and equipment. The learner gains workplace experience in machining, assembling, finishing, crafting bespoke items, and managing production processes.

2. Work Experience Modules

Module Code	Module Title	NQF Level	Credits
WM-01	Furniture Machining Operations	2	30
WM-02	Furniture Assembling Operations	2	24
WM-03	Furniture Finishing Operations	2	25
WM-04	Crafted Furniture Machining Operations	4	70
WM-05	Crafted Furniture Assembling Operations	3	55
WM-06	Prototype and Crafted Furniture Making and Furniture Repairing Processes	4	85

3. Mentor's Role and Responsibilities

As a mentor, you will:

- ✓ Supervise the learner's daily activities in line with each work module outcome
- ✓ Coach learners on safe and effective machine, tool, and material use
- ✓ Oversee correct application of processes, from reading technical drawings to final product inspections
- ✓ Monitor learner progress and provide regular, constructive feedback
- ✓ Review and sign off on supporting evidence (e.g., job cards, photos, checklists,

reports)

- ✔ Confirm that the learner is ready for the External Integrated Summative Assessment (EISA) by ensuring all outcomes are completed
-

4. Summary of Module Requirements

WM-01: Operate basic machining equipment, perform safety checks, conduct breakout operations, perform sanding and laminating, maintain quality, and carry out routine maintenance.

WM-02: Assemble furniture using various joints, perform dry and final assembly, conduct sanding and surface preparation, apply safety and housekeeping procedures, and ensure quality at each stage.

WM-03: Perform furniture finishing including spraying applications, prepare workpieces, handle finishing chemicals, conduct denibbing between coats, and inspect final product quality.

WM-04: Produce complex components using advanced machines (e.g., multi-borers, edge banders, lathes, moulders), design and modify jigs and templates, and ensure continuous quality inspections.

WM-05: Assemble crafted furniture, design and handle veneers, construct moulds and formers, produce curved components, and complete specialised assembly tasks.

WM-06: Manufacture prototypes and bespoke furniture, prepare technical drawings, oversee small teams, monitor quality and productivity, and apply advanced finishing techniques and repairs.

5. Supporting Evidence

Mentors must assist learners in collecting and preparing:

- ✔ Signed job cards and time sheets
 - ✔ Photos of workpieces and completed components
 - ✔ Completed checklists (quality, maintenance, production)
 - ✔ Production records and reports
 - ✔ Coaching session records, team briefings, and meeting notes (for higher-level modules)
-

6. Contextualised Workplace Knowledge

Learners must demonstrate knowledge of:

- Company products and processes
 - Department workflows and reporting structures
 - Workplace health, safety, and environmental policies
 - Correct use and maintenance of personal protective equipment (PPE)
 - Company quality standards and operating procedures
-

7. Statement of Work Experience

At the end of the work experience period, the mentor must complete and sign the **Statement of Work Experience** confirming that the learner has:

- Successfully completed all module outcomes
 - Collected and submitted all required supporting evidence
 - Demonstrated sufficient competence to progress to the External Integrated Summative Assessment (EISA)
-

8. Mentor Contact Details

Mentor Name: _____

Position: _____

Company Name: _____

Contact Number: _____

Email: _____

Final Note to Mentors

- ✓ Your guidance is critical in shaping confident, skilled, and industry-ready Furniture Makers.
- ✓ Provide learners with opportunities to work across a variety of tasks and materials.
- ✓ Emphasise accuracy, safety, and craftsmanship in every stage of learning.
- ✓ Support learners in preparing their workplace portfolio for submission to the assessment centre.

Thank you for your commitment to developing South Africa's future artisans!

SECTION 3C: WORK EXPERIENCE MODULE SPECIFICATIONS

List of Work Experience Module Specifications

- 682201001-00-WM-01, Furniture Machining Operations, NQF Level 2, Credits 30
- 682201001-00-WM-02, Furniture Assembling Operations, NQF Level 2, Credits 24
- 682201001-00-WM-03, Furniture Finishing Operations, NQF Level 2, Credits 25
- 682201001-00-WM-04, Crafted Furniture Machining Operations, NQF Level 4, Credits 70
- 682201001-00-WM-05, Crafted Furniture Assembling Operations, NQF Level 3, Credits 55
- 682201001-00-WM-06, Prototype and Crafted Furniture making and Furniture repairing Processes, NQF Level 4, Credits 85

1. 682201001-00-WM-01, Furniture Machining Operations, NQF Level 2, Credits 30

1.1 Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Produce cut timber components for the manufacturing of furniture using a range of basic machines, power tools, hand tools and equipment.

The learner will be required to:

- WM-01-WE01: Read and interpret work instructions and product specifications for machining operations
- WM-01-WE02: Prepare a workstation for machining operations
- WM-01-WE03: Perform breakout operations by operating a crosscut saw and rip saw using solid timber by cutting a minimum of 30 components of the required length and width according to the cutting list
- WM-01-WE04: Produce planed timber and board product components and products (planing straight timber, laminated timber) using surface planer and thickness planer for a minimum period of 3 weeks
- WM-01-WE05: Produce sawn timber and board product components and products (producing straight cuts, mitred cuts grooves and half laps) for a minimum period of 5 week using panel saw and radial arm saw
- WM-01-WE06: Produce shaped timber and board product components and products (simple to more complex shapes) using the band saw for a period of 2 weeks
- WM-01-WE07: Produce machine sanded timber and board components and products (sanding solid timber, veneered boards and composite boards) for a minimum period of 2 week using edge sander, stroke sander and wide belt sander
- WM-01-WE08: Produce straight laminated timber and board components
- WM-01-WE09: Apply safety measures and equipment
- WM-01-WE10: Conduct general housekeeping activities to ensure the work area is clean and neat and complying with safety regulations
- WM-01-WE11: Ensure quality of the machined product by identifying machine faults
- WM-01-WE12: Ensure quality of the machined product by identifying raw material faults and handling and storing it correctly
- WM-01-WE13: Ensure quality of the machined product by identifying process faults
- WM-01-WE14: Conduct continuous quality inspection of the machined product throughout the machining operation
- WM-01-WE15: Perform maintenance activities to ensure a well maintain machine and workshop

1.2 Guidelines for Work Experiences

1.2.1. WM-01-WE01: Read and interpret work instructions and product specifications for machining operations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Interpret a job card, cutting list, production flow/routing chart and identify all job requirements and specifications including machines and operations as well as jigs and templates for specific tasks
- WA0102 Read and interpret basic engineering drawings and identify all aspects relevant to the work specifications

Supporting Evidence

- SE0101 Signed job card

1.2.2. WM-01-WE02: Prepare a workstation for machining operations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0201 Obtain all required timber and conduct quality checks to ensure the timber quality conforms to specifications
- WA0202 Conduct prestart checks on all machines, equipment and attachments ensuring it complies with safety and working specifications and are in good working order (Inspect that the machine is operational, inspect blade for sharpness and correct blade and v-belts, etc.)
- WA0203 Select and apply personal protective clothing and equipment (PPE and PPC) for the specific machine
- WA0204 Identify and report substandard raw material, machines or PPE

Supporting Evidence

- SE0201 Prestart check list

1.2.3. WM-01-WE03: Perform breakout operations by operating a crosscut saw and rip saw using solid timber by cutting a minimum of 30 components of the required length and width according to the cutting list

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0301 Conduct the appropriate setting up procedure of the crosscut saw and rip saw according to the product specifications on the work instruction
- WA0302 Conduct safety checks on the machines, equipment and workstation to ensure compliance with safety requirements
- WA0303 Observe the direction of the grain of the timber before feeding into the saw
- WA0304 Check cut components at set intervals (do spot checks) for correctness and consistency of cut and grain direction
- WA0305 Use measuring equipment to check that the length or width correspond to cutting list
- WA0306 Label or group components on pallets according to the workplace procedures
- WA0307 Identify, mark and report substandard raw material and components
- WA0308 Dispose of off-cuts safely and store re-useable off-cuts according to sizes and type of timber

Supporting Evidence

- SE0301 Completed job card signed by supervisor to confirm work completed

1.2.4. WM-01-WE04: Produced planed timber and board product components and products (planing straight timber, laminated timber) using surface planer and thickness planer for a minimum period of 3 weeks

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0401 Conduct the appropriate setting up procedure of the surface planer and thickness planer according to the product specifications on the work instruction
- WA0402 Conduct safety checks on the machines, equipment and workstation to ensure compliance with safety requirements
- WA0403 Operate the surface planer and thickness planer complying with safety standards
- WA0404 Use vernier calliper to verify if the timber is according to specified width and thickness
- WA0405 Label or group components on pallets according to the workplace procedures
- WA0406 Identify, mark and report substandard raw material and components

Supporting Evidence

- SE0401 Completed job card signed by the supervisor to confirm work completed to company standards

1.2.5. WM-01-WE05: Produce sawn timber and board product components and products (producing straight cuts, mitred cuts grooves and half laps) for a minimum period of 5 week using panel saw and radial arm saw

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0501 Conduct the appropriate setting up procedure of the surface planer and thickness planer according to the product specifications on the work instruction
- WA0502 Conduct safety checks on the machines, equipment and workstation to ensure compliance with safety requirements
- WA0503 Operate a panel saw and radial arm saw to get the required length, and angles that are required.
- WA0504 Check cut components at set intervals (do spot checks) for correctness and consistency of length and angles
- WA0505 Label or group components on pallets according to the workplace procedures
- WA0506 Identify, mark and report substandard raw material and components

Supporting Evidence

- SE0501 Completed job card signed by the supervisor to confirm work completed to company standards

1.2.6. WM-01-WE06: Produce shaped timber and board product components and products (simple to more complex shapes) using the band saw for a period of 2 weeks

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0601 Conduct the appropriate setting up of the band saw
- WA0602 Conduct safety checks
- WA0603 Confirm if the blade size and thickness is relevant to the work to be produced
- WA0604 Operate band saw safely and produce required shape and size.
- WA0605 Label components according to work procedures
- WA0606 Identify, mark and report substandard raw material and components.

Supporting Evidence

- SE0601 Completed job card signed by the supervisor to confirm work completed to company standards

1.2.7. WM-01-WE07: Produce machine sanded timber and board components and products (sanding solid timber, veneered boards and composite boards) for a minimum period of 2 week using edge sander, stroke sander and wide belt sander

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0701 Conduct the appropriate setting up procedure of the surface planer and thickness planer according to the product specifications on the work instruction
- WA0702 Conduct safety checks on the machines, equipment and workstation to ensure compliance with safety requirements
- WA0703 Operate the relevant machines to get the required length and angles
- WA0704 Check cut components at set intervals (do spot checks) for correctness and consistency of length and angles
- WA0705 Label or group components on pallets according to the workplace procedures
- WA0706 Identify, mark and report substandard raw material and components

Supporting Evidence

- SE0701 Completed job card signed by the supervisor to confirm work completed to company standards

1.2.8. WM-01-WE08: Produce straight laminated timber and board components

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0801 Use tape measure to verify if the length is according to cutting list
- WA0802 Use hand clamps and or laminating press to laminate timber.
- WA0803 Use correct adhesives for the job.

Supporting Evidence

- SE0801 Completed job card signed by the supervisor to confirm work completed to company standards

1.2.9. WM-01-WE09: Apply safety measures and equipment

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0901 Maintain safe working environment to comply with safety standards
- WA0902 Apply ear and eye protection, dust masks, overall and no loose clothes
- WA0903 Attend regular safety meetings according to the requirements of the workplace
- WA0904 Report inadequate lighting in the machine shop
- WA0905 Participate in simulated fire emergency evacuation procedures

Supporting Evidence

- SE0901 Completed job card signed by the supervisor to confirm work completed

1.2.10. WM-01-WE10: Conduct general housekeeping activities to ensure the work area is clean and neat and complying with safety regulations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1001 Clean dust extraction bags where applicable
- WA1002 Check the dust extraction system for working condition
- WA1003 Comply with attendance and time keeping standards as determined by the company
- WA1004 Take necessary actions and measures and to reduce wastage
- WA1005 Produce minimum waste levels as determined by the company within set tolerances
- WA1006 Apply all safety routines and procedures when working with compressed air

Supporting Evidence

- SE1001 Completed job card signed by the supervisor to confirm work completed

1.2.11. WM-01-WE11: Ensure quality of the machined product by identifying machine faults

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1101 Identify and immediately report any machine defects
- WA1102 Ensure the machine is operated within design specifications
- WA1103 Identify any wrongly fitted attachment and replace
- WA1104 Identify and correct incorrect machine settings
- WA1105 Identify and correct any incorrect speed setting in terms of the rotation of the blade

- WA1106 Conduct calibration routines within the authority of the operator and report any deviations to the supervisor

Supporting Evidence

- SE1101 Job card from the supervisor

1.2.12. WM-01-WE12: Ensure quality of the machined product by identifying raw material faults and handling and storing it correctly

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1201 Inspect, identify and report all timber defects such as cracks, knots, twists, insects, wet rot and dry rot
- WA1202 Identify the incorrect moisture content of the raw material causing defects such as swelling of boards
- WA1203 Select material correctly according to type as specified on the job card
- WA1204 Handle timber and recuts as delicately as possible avoiding bumping and damaging the edges/chips using trolleys to cart it
- WA1205 Store timber correctly in an area free from moisture
- WA1206 Avoid any misinterpretation of job cards by clarifying information which could be vague or unclear

Supporting Evidence

- SE1201 Job card from the supervisor

1.2.13. WM-01-WE13: Ensure quality of the machined product by identifying process faults

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1301 Accurately determine the type of material to set the correct working speed of the machine
- WA1302 Accurately determine the type of material to apply the correct feeding of timber to the machine
- WA1303 Ensure the wood is correctly clamped to the jig to avoid damage to machine, unsafe working condition, or not producing the designed product

Supporting Evidence

- SE1301 Job card from the supervisor

1.2.14. WM-01-WE14: Conduct continuous quality inspection of the machined product throughout the machining operation

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1401 Conduct a quality inspection checking for consistency, accuracy, defects of the product

- WA1402 Conduct a final quality inspection of the machined product before hand over to next process
- WA1403 Record all defects

Supporting Evidence

- SE1401 Quality checklist

1.2.15. WM-01-WE15: Perform maintenance activities to ensure a well maintain machine and workshop

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1501 Lubricate, clean and service the machine at required intervals as part of routine maintenance activities
- WA1502 Identify and immediately report any machine or machine part or attachment defects
- WA1503 Service the machine at required intervals by replacing belts and applying calibration routines
- WA1504 Check the sharpness of blades, replace cutting tools and inspect v-belts at required intervals

Supporting Evidence

- SE1501 Completed machine maintenance checklist signed by the supervisor to confirm work completed

1.3 Contextualised Workplace Knowledge

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating and safety procedures and quality standards

5 Workshop layout and designated areas

6 Personal protective clothing and equipment

1.4 Criteria for Workplace Approval

Physical Requirements:

- Fully equipment wood machining department with advanced wood and board machining machines, tools and equipment and various types of raw material
- Compressed airline and extraction
- Key processes: wood machining processes using advanced machines

Human Resource Requirements:

- Qualifications, registration or experience of supervisor: NQF 2 qualified in furniture technology with 3 years of experience in the furniture making industry
- 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
- Bargaining Council Main Agreement

1.5 Additional Assignments to be Assessed Externally

None

2. 682201001-00-WM-02, Furniture Assembling Operations, 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:

Demonstrate the ability to identify tools and equipment and produce joints, perform lamination and assemble finished furniture product.

The learner will be required to:

- WM-02-WE01: Read and interpret work instructions and product specifications for furniture assembling operations
- WM-02-WE02: Prepare a workstation for furniture assembly operations
- WM-02-WE03: Obtain and prepare tools required to produce joints (tools including jig saws, hand routers, drills, doweling jigs, hand saws, sliding bevels, marking gauge and mortise gauge)
- WM-02-WE04: Produce minimum of 50 of each of the following joints include dove tail, mortise and tenon, half lap, housing joints, double mortise, dowel joints, biscuit joints, tongue and groove as per cutting list and drawings
- WM-02-WE05: Fit and dry assemble at least 50 of each of the following joints: dove tail, mortise and tenon, half lap, housing joints, double mortise, dowel joints, biscuit joints, tongue and groove and inspect for a snug fit
- WM-02-WE06: Produce 50 different profiles, chamfers, radiuses, rebates, dowelling necessary for the job
- WM-02-WE07: Conduct a dry assembly by fitting all components according to specification of a minimum of 100 furniture products
- WM-02-WE08: Perform final assembling of minimum 100 furniture products using clamps, glue, screws and nails
- WM-02-WE09: Perform sanding and smooth the surface and sharp edges of a minimum of 100 furniture products
- WM-02-WE10: Apply safety measures and equipment
- WM-02-WE11: Conduct general housekeeping activities to ensure the work area is clean and neat and complying with safety regulations
- WM-02-WE12: Ensure quality of the assembled product by identifying machine faults
- WM-02-WE13: Ensure quality of the assembled product by identifying raw material faults
- WM-02-WE14: Ensure quality of the assembled product by identifying process faults
- WM-02-WE15: Conduct continuous quality inspection of the assembled product throughout the assembling operation
- WM-02-WE16: Perform maintenance activities to ensure a well maintain machine and workshop

2.2 Guidelines for Work Experiences

2.2.1. WM-02-WE01: Read and interpret work instructions and product specifications for furniture assembling operations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Interpret the job card, cutting list, production flow/routing chart and identify all job requirements and specifications including machines and operations

- WA0102 Identify furniture types, styles and designs from the job card
- WA0103 Read and interpret basic engineering drawings and identify all aspects relevant to the work specifications

Supporting Evidence

- SE0101 Signed job card

2.2.2. WM-02-WE02: Prepare a workstation for furniture assembly operations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0201 Obtain all required timber and conduct quality checks to ensure the timber quality conforms to specifications
- WA0202 Obtain all required consumables and accessories specified in the job card and conduct a quality check
- WA0203 Prepare workbenches and equipment to be used
- WA0204 Select and apply personal protective clothing and equipment (PPE and PPC) for the specific machine (such as gloves, dust masks, respirators, etc.)

Supporting Evidence

- SE0201 Time sheet/ job card

2.2.3. WM-02-WE03: Obtain and prepare tools required to produce joints (tools including jig saws, hand routers, drills, doweling jigs, hand saws, sliding bevels, marking gauge and mortise gauge)

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0301 Compile and send tool list request to the store room or relevant person
- WA0302 Identify tools from the store room and sign them out as per the company policies
- WA0303 Confirm that the tools obtained are relevant to the job and joints to be produced
- WA0304 Set up the tool/ machine correctly
- WA0305 Adjust the cutting tools to meet specifications
- WA0306 Receive and inspect the tools to ensure it meet the specifications and are in good working order and select and fit attachments accurately
- WA0307 Identify machine faults such as blunt blade, wrong sanding grit, wrong nozzle, pressure that is too high or low, balance of air extraction Safely handle, care for and store tools correctly without damaging them

Supporting Evidence

- SE0301 Tool request completed and sign by the store room attendant

2.2.4. WM-02-WE04: Produce minimum of 50 of each of the following joints include dove tail, mortise and tenon, half lap, housing joints, double mortise, dowel joints, biscuit joints, tongue and groove as per cutting list and drawings

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0401 Mark-out joints as per drawings
- WA0402 Use correct tools and/or correct machine to cut joints
- WA0403 Use vises to secure workpiece to avoid injuries to self and damage to furniture component
- WA0404 Handle cutting tools correctly and safely
- WA0405 Replace bits and cutters where necessary
- WA0406 Produce quality joints in compliance with specifications and tolerances in the time allocated

Supporting Evidence

- SE0401 Time sheet/ job card and photos

2.2.5. WM-02-WE05: Fit and dry assemble at least 50 of each of the following joints: dove tail, mortise and tenon, half lap, housing joints, double mortise, dowel joints, biscuit joints, tongue and groove and inspect for a snug fit

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0501 Fit the male and female components of the joint and check if a snug fit is obtained
- WA0502 Make a final cleanout of the joints that are too tight
- WA0503 Observe the shoulder to shoulder size according to the product specifications
- WA0504 Check if joints correspond with the specification on the drawing

Supporting Evidence

- SE0501 Time sheet/ job card and photos

2.2.6. WM-02-WE06: Produce 50 different profiles, chamfers, radiuses, rebates, dowelling necessary for the job

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0601 Prepare a hand router by selecting and attaching the required bits
- WA0602 Confirm the radiuses and profile with the relevant person
- WA0603 Produce profile, chamfer, radiuses, rebates according to specification
- WA0604 Use dowelling jig to produce dowel holes
- WA0605 Check if all profiles and work produced meet requirements
- WA0606 Identify machine faults such as blunt blade, wrong sanding grit, wrong nozzle, pressure that is too high or low, balance of air extraction

Supporting Evidence

- SE0601 Time sheet/ job card and photos

2.2.7. WM-02-WE07: Conduct a dry assembly by fitting all components according to specification of a minimum of 100 furniture products

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0701 Perform dry assemble to check if the product components fit
- WA0702 Check if the product meets specifications as specified in the drawing
- WA0703 Check product for squareness and stability
- WA0704 Report any deviations to the relevant person

Supporting Evidence

- SE0701 Time sheet/ job card and photos

2.2.8. WM-02-WE08: Perform final assembling of minimum 100 furniture products using clamps, glue, screws and nails

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0801 Perform final assembly of the product using glue, nails screws and clamps
- WA0802 Use tape measure to check if the product is square
- WA0803 Remove excess glue from the joints
- WA0804 Countersink all screws
- WA0805 Punch all nails to ensure they are not protruding to the surface

Supporting Evidence

- SE0801 Time sheet/ job card and photos

2.2.9. WM-02-WE09: Perform sanding and smooth the surface and sharp edges of a minimum of 100 furniture products

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0901 Select and use the correct sand paper
- WA0902 Sand all surfaces and ensure that it is ready to accept finishing material
- WA0903 Remove all sharp edges by sanding them off
- WA0904 Apply stopping on the surface to rectify faults where necessary

Supporting Evidence

- SE0901 Time sheet/ job card and photos

2.2.10. WM-02-WE10: Apply safety measures and equipment

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1001 Maintain safe working environment to comply with safety standards
- WA1002 Apply ear and eye protection, dust masks, overall and no loose clothes
- WA1003 Attend regular safety meetings according to the requirements of the workplace
- WA1004 Report inadequate lighting in the assembly shop
- WA1005 Participate in a simulated fire emergency evacuation procedure

Supporting Evidence

- SE1001 Time sheet/ job card and photos

2.2.11. WM-02-WE11: Conduct general housekeeping activities to ensure the work area is clean and neat and complying with safety regulations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1101 Record and report assembly production information and prepare assembly documentation
- WA1102 Clean dust extraction bags where applicable
- WA1103 Check the dust extraction system for working condition
- WA1104 Comply with attendance and time keeping standards as determined by the company
- WA1105 Take necessary actions and measures and to reduce wastage
- WA1106 Produce minimum waste levels as determined by the company within set tolerances
- WA1107 Apply all safety routines and procedures when working with compressed air

Supporting Evidence

- SE1101 Time sheet/ job card and photos

2.2.12. WM-02-WE12: Ensure quality of the assembled product by identifying machine faults

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1201 Identify and immediately report any power tool defects
- WA1202 Ensure the power tool is operated within design specifications
- WA1203 Identify any wrongly fitted attachment and replace
- WA1204 Identify and correct incorrect power tool settings
- WA1205 Conduct calibration routines within the authority of the operator and report any deviations to the supervisor

Supporting Evidence

- SE1201 Time sheet/ job card and photos

2.2.13. WM-02-WE13: Ensure quality of the assembled product by identifying raw material faults

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1301 Inspect, identify and report all component defects such as cracks, knots, twists, insects, wet rot and dry rot
- WA1302 Identify component faults such as squareness of the component, incorrect size, knots causing rejects, smoothness and scratches
- WA1303 Select components correctly according to type as specified on the job card
- WA1304 Handle furniture product components with utmost care to prevent damaging or chipping the edges
- WA1305 Avoid any misinterpretation of job cards by clarifying information which could be vague or unclear

Supporting Evidence

- SE1301 Time sheet/ job card and photos

2.2.14. WM-02-WE14: Ensure quality of the assembled product by identifying process faults

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1401 Observe the direction of the grains of the wood while drilling or producing a joint to ensure the pattern of the grain is correct
- WA1402 Perform quality or style changes such as changing form solid wood to board or from soft wood to hard wood paying attention to settings such as speed and cleaning to prevent scratching
- WA1403 Identify process faults such as blade marks, timber moisture content, burn marks, paint contaminated with water, over spraying, running, mixing of wrong paints, wrong viscosity, wrong reaction or inconsistencies in the cut product
- WA1404 Store and label components and assembled furniture according to specifications and size
- WA1405 Ensure the wood is correctly clamped in the vice to avoid damage to machine, unsafe working condition, or not producing the designed product

Supporting Evidence

- SE1401 Time sheet/ job card and photos

2.2.15. WM-02-WE15: Conduct continuous quality inspection of the assembled product throughout the assembling operation

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1501 Check samples at set intervals (spot checks) for correctness and consistency of cut components
- WA1502 Conduct a quality inspection checking for consistency, accuracy, defects of the product

- WA1503 Conduct a final quality inspection of the machined product before hand over to next process
- WA1504 Record all defects

Supporting Evidence

- SE1501 Quality checklist

2.2.16. WM-02-WE16: Perform maintenance activities to ensure a well maintain machine and workshop

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1601 Lubricate, clean and service the machine at required intervals as part of routine maintenance activities
- WA1602 Identify and immediately report any machine or machine part or attachment defects

Supporting Evidence

- SE1601 Completed machine maintenance checklist

2.3 Contextualised Workplace Knowledge

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating and safety procedures and quality standards

5 Workshop layout and other designated areas

6 Personal protective clothing and equipment

2.4 Criteria for Workplace Approval

Physical Requirements:

- Fully equipment wood machining department with advanced wood and board machining machines, tools and equipment and various types of raw material
- Compressed airline and extraction
- Key processes: wood machining processes using advanced machines

Human Resource Requirements:

- Qualifications, registration or experience of supervisor: NQF 2 qualified finishing and heat setting machine operator with 3 years of experience in the finishing and heat setting department
- 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

- Bargaining Council Main Agreement

2.5 Additional Assignments to be Assessed Externally

None

3. 682201001-00-WM-03, Furniture Finishing Operations, NQF Level 2, Credits 25

3.1 Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Demonstrate the ability to prepare workstation, material products and perform spraying of a furniture product.

The learner will be required to:

- WM-03-WE01: Read and interpret work instruction and product specifications for furniture finishing operations
- WM-03-WE02: Prepare a furniture finishing workstation by obtaining all necessary tools, equipment and removing all foreign objects from the workstation
- WM-03-WE03: Prepare a minimum of 100 products or components for initial/ base coat
- WM-03-WE04: Identify, select and prepare finishing chemicals such as lacquers, varnishes, tinted lacquers, paints, varnishes, stains, sealers and primers
- WM-03-WE05: Identify, select and adjust spraying equipment for furniture finishing operations
- WM-03-WE06: Perform spraying application using conventional spray guns or pumps for a minimum of 100 products
- WM-03-WE07: Prepare workpieces for the next coat by denibbing and/or sanding between coats for a minimum of 100 products/ components using correct grit sandpaper
- WM-03-WE08: Perform all operations by adhering to safety and housekeeping rules consistently and continuously
- WM-03-WE09: Conduct general housekeeping activities to ensure the work area is clean and neat and complying with safety regulations
- WM-03-WE10: Ensure quality of the finished furniture product by identifying machine faults
- WM-03-WE11: Ensure quality of the finished furniture product by identifying raw material faults
- WM-03-WE12: Ensure quality of the finished furniture product by identifying process and product faults
- WM-03-WE13: Conduct continuous quality inspection of the finished furniture product throughout the assembling operation
- WM-03-WE14: Perform minor maintenance activities to ensure a well maintain machine

3.2 Guidelines for Work Experiences

3.2.1. WM-03-WE01: Read and interpret work instruction and product specifications for furniture finishing operations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Interpret the job card, cutting list, production flow/routing chart and identify all job requirements and specifications including machines and operations for the finishing of furniture
- WA0102 Identify furniture types, styles and designs from the job card
- WA0103 Identify all finishing and chemical applications indicated on the job card
- WA0104 Read and interpret basic engineering drawings and identify all aspects relevant to the work specifications

Supporting Evidence

- SE0101 Time sheet/ job card and photos

3.2.2. WM-03-WE02: Prepare a furniture finishing workstation by obtaining all necessary tools, equipment and removing all foreign objects from the workstation

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0201 Obtain all required material such as sanding papers
- WA0202 Prepare workbenches and equipment to be used
- WA0203 Obtain all PPE required such as gloves, dust masks, respirators, etc.
- WA0204 Remove all foreign objects from the workbench
- WA0205 Obtain and set a stop watch
- WA0206 Ensure the spray room/booth is dust free and the extraction system is in working order

Supporting Evidence

- SE0201 Time sheet/ job card and photos

3.2.3. WM-03-WE03: Prepare a minimum of 100 products or components for initial/ base coat

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0301 Identify and rectify faults on the surface of the work piece
- WA0302 Apply stopping where required selecting a matching colour
- WA0303 Perform hand sanding using the correct sand paper grit to achieve the required surface in preparation for the base coat application
- WA0304 Remove dust from the work piece
- WA0305 Cover handles, hinges and areas with masking tape where necessary
- WA0306 Label all covered areas to ensure correct colour/chemical is applied

Supporting Evidence

- SE0301 Time sheet/ job card and photos

3.2.4. WM-03-WE04: Identify, select and prepare finishing chemicals such as lacquers, varnishes, tinted lacquers, paints, varnishes, stains, sealers and primers

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0401 Confirm with the specification sheet the type of finish to be used
- WA0402 Obtain relevant finishing chemicals
- WA0403 Ensure that the finishing chemicals is within its shelf life

- WA0404 Prepare the required amount of finishing chemicals to avoid waste
- WA0405 Read and understand the relevant material safety data sheet (MSDS)
- WA0406 Mix chemicals and add catalyst where required
- WA0407 Perform viscosity checks to determine readiness for spraying

Supporting Evidence

- SE0401 Time sheet/ job card and photos

3.2.5. WM-03-WE05: Identify, select and adjust spraying equipment for furniture finishing operations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0501 Assemble the spray gun and rinse with relevant solvent ensuring the gun is properly clean and free from oil and water
- WA0502 Connect the spray gun to an air pipe and airline and allow flow of air to the spraying equipment
- WA0503 Check and adjust compressed air to the required pressure bar
- WA0504 Adjust the spray gun according to required pressure, fluid, pattern and size of the work piece
- WA0505 Run a sample to ensure specifications are met and adjust settings if necessary

Supporting Evidence

- SE0501 Time sheet/ job card and photos

3.2.6. WM-03-WE06: Perform spraying application using conventional spray guns or pumps for a minimum of 100 products

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0601 Use turn tables for spraying in the spray booth/room
- WA0602 Start the extraction booth and fan
- WA0603 Place work piece in such a way that excess spray flows through freely
- WA0604 Handle the gun correctly and perpendicular to the surface
- WA0605 Ensure the movement of the gun is straight avoiding twisting of the hand and over lapping strokes ensuring even coverage of the workpiece

Supporting Evidence

- SE0601 Time sheet/ job card and photos

3.2.7. WM-03-WE07: Prepare workpieces for the next coat by denibbing and/or sanding between coats for a minimum of 100 products/ components using correct grit sandpaper

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0701 Obtain correct grit sanding paper for denibbing
- WA0702 Sand product without removing the initial coat
- WA0703 Clean the workpiece and ensure that the surface is dry and ready to accept the final coat

Supporting Evidence

- SE0701 Time sheet/ job card and photos

3.2.8. WM-03-WE08: Perform all operations by adhering to safety and housekeeping rules consistently and continuously

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0801 Maintain safe working environment by complying with safety standards and using PPE such as ear and eye protection, dust masks, overall and no loose clothes
- WA0802 Ensure lifting equipment is used for moving heavy products material
- WA0803 Dispose of waste according to regulation and company policy
- WA0804 Work area is kept clean at all times
- WA0805 All chemicals are stored safely in fireproof storage according to safety requirements
- WA0806 Label all material in the storage facility
- WA0807 Attend regular safety meetings according to the requirements of the workplace
- WA0808 Report inadequate lighting in the finishing department
- WA0809 Participate in a simulated fire emergency evacuation procedure

Supporting Evidence

- SE0801 Time sheet/ job card and photos

3.2.9. WM-03-WE09: Conduct general housekeeping activities to ensure the work area is clean and neat and complying with safety regulations

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0901 Record and report furniture finishing production information and prepare assembly documentation
- WA0902 Clean dust extraction bags where applicable
- WA0903 Check the dust extraction system for working condition
- WA0904 Comply with attendance and time keeping standards as determined by the company
- WA0905 Take necessary actions and measures and to reduce wastage
- WA0906 Produce minimum waste levels as determined by the company within set tolerances
- WA0907 Apply all safety routines and procedures when working with compressed air

- WA0908 Store and label components and assembled furniture according to specifications and size

Supporting Evidence

- SE0901 Time sheet/ job card and photos

3.2.10. WM-03-WE10: Ensure quality of the finished furniture product by identifying machine faults

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1001 Inspect the finished product visually and by feel to ensure compliance with product specifications
- WA1002 Check the finished product against specification
- WA1003 Identify and immediately report any power tool defects
- WA1004 Ensure the power tool is operated within design specifications
- WA1005 Identify any wrongly fitted attachment and replace
- WA1006 Identify and correct incorrect power tool settings
- WA1007 Identify machine faults such as wrong nozzle, pressure that is too high or low or incorrect balance of air extraction
- WA1008 Identify product faults such as incorrect shape, warped joints, incorrect size and scratches
- WA1009 Identify process faults such as blade marks, paint/coating contaminated with water, over spraying, running, mixing of wrong paints/chemicals, wrong viscosity, wrong reaction or inconsistencies in the cut product

Supporting Evidence

- SE1001 Time sheet/ job card and photos

3.2.11. WM-03-WE11: Ensure quality of the finished furniture product by identifying raw material faults

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1101 Inspect the finished product visually and by feel to ensure compliance with product specifications and identify and report all component defects such as cracks, knots, twists, insects, wet rot and dry rot
- WA1102 Identify component faults such as squareness of the component, incorrect size, knots causing rejects, smoothness and scratches

Supporting Evidence

- SE1101 Time sheet/ job card and photos

3.2.12. WM-03-WE12: Ensure quality of the finished furniture product by identifying process and product faults

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1201 Inspect the finished product visually and by feel to ensure compliance with product specifications
- WA1202 Check the finished product against specification
- WA1203 Perform quality or style changes such as changing from solid wood to board or from soft wood to hard wood paying attention to tool settings such as speed and cleaning to prevent scratching
- WA1204 Identify process faults such as blade marks, timber moisture content, burn marks, paint contaminated with water, over spraying, running, mixing of wrong paints, wrong viscosity, wrong reaction or inconsistencies in the cut product
- WA1205 Ensure the wood is correctly clamped in the vice to avoid damage to machine, unsafe working condition, or not producing the designed product
- WA1206 Select components correctly according to type as specified on the job card
- WA1207 Handle furniture product components with utmost care to prevent damaging or chipping the edges
- WA1208 Avoid any misinterpretation of job cards by clarifying information which could be vague or unclear

Supporting Evidence

- SE1201 Time sheet/ job card and photos

3.2.13. WM-03-WE13: Conduct continuous quality inspection of the finished furniture product throughout the assembling operation

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1301 Check samples at set intervals (spot checks) for correctness and consistency of cut components
- WA1302 Conduct a quality inspection checking for consistency, accuracy, defects of the product
- WA1303 Conduct a final quality inspection of the machined product before hand over to next process
- WA1304 Record all defects

Supporting Evidence

- SE1301 Quality checklist

3.2.14. WM-03-WE14: Perform minor maintenance activities to ensure a well maintain machine

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1401 Lubricate, clean and service the machine at required intervals as part of routine maintenance activities
- WA1402 Identify and immediately report any machine or machine part or attachment defects

Supporting Evidence

- SE1401 Completed machine maintenance checklist

3.3 Contextualised Workplace Knowledge

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating and safety procedures and quality standards

5 Workshop layout and designated areas

6 Personal protective clothing and equipment

3.4 Criteria for Workplace Approval

Physical Requirements:

- Fully equipment wood machining department with advanced wood and board machining machines, tools and equipment and various types of raw material
- Compressed airline and extraction
- Key processes: wood machining processes using advanced machines

Human Resource Requirements:

- Qualifications, registration or experience of supervisor: NQF 2 qualified finishing and heat setting machine operator with 3 years of experience in the finishing and heat setting department
- 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
- Bargaining Council Main Agreement

3.5 Additional Assignments to be Assessed Externally

None

4. 682201001-00-WM-04, Crafted Furniture Machining Operations, NQF Level 4, Credits 70

4.1 Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Demonstrate the ability to produce bored, jointed, profiled, moulded and turned wooden components working from drawings and product specifications by operating various machines, taking accurate measurements and calculations, using jigs and templates

The learner will be required to:

- WM-04-WE01: Read, interpret and produce basic engineering drawings
- WM-04-WE02: Prepare for operations in the machining department
- WM-04-WE03: Design, construct and test jigs and templates for back legs of a chair, tempered legs of a server and a curved armrest for one off use, multiple use; short term use; and long term use using a suitable material for the purpose of the jig or template (Masonite, MDF; Perspex; plywood; appropriate new materials or off cuts)
- WM-04-WE04: Repair jigs and templates
- WM-04-WE05: Modify jigs and templates
- WM-04-WE06: Produce bored timber and board product components and products operating a multi-borer at 90 degrees and 45 degrees drilling and different angles
- WM-04-WE07: Operate the edge bander to produce machine banded product for a period of 2 weeks working with solid edging, impact and veneer edging
- WM-04-WE08: Produce profiled timber and board product components and products by operating a spindle, moulder and overhead router to produce components with different profiles, moulds, rebates, grooves, chamfers, radiuses, and bullnoses for a period of 3 weeks
- WM-04-WE09: Produce turned timber components and products by operating a lathe and copy lathe to produce 100 turned components
- WM-04-WE10: Produce jointed timber producing different sizes and angles of Mortise-and-Tenon joints by operating the Mortise-and-Tenon machine for a period of 2 weeks in the machining department
- WM-04-WE11: Conclude operations according to workplace requirements
- WM-04-WE12: Perform routine cleaning and minor maintenance in the workshop to maintain the good working order of the machines, tooling, equipment and safe working conditions
- WM-04-WE13: Apply safety procedures and equipment when operating machines, working with chemicals, handling wood, board and components for the duration of the work experience

4.2 Guidelines for Work Experiences

4.2.1. WM-04-WE01: Read, interpret and produce basic engineering drawings

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Produce engineering drawings for a chair, stool, table, box, cabinet, book shelve
- WA0102 Identify all components to be cut and processed in the machining department and compile a cutting list
- WA0103 Identify the manufacturing processes from the drawing and compile routing sheets
- WA0104 Identify and correctly calculate the raw material needed for the product

Supporting Evidence

- SE0101 Completed drawings
- SE0102 Completed routing sheet
- SE0103 Completed cutting list
- SE0104 Completed raw material list

4.2.2. WM-04-WE02: Prepare for operations in the machining department

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0201 Receive cutting list and other production information and check for accuracy and sufficiency and report any incorrect information
- WA0202 Receive all necessary materials and equipment for the task and confirm that all components are according to sizes, numbers and quality as per cutting list
- WA0203 Prepare the working area for the task ensuring it is clean and free from dust and oil or any foreign material which can contaminate the work piece
- WA0204 Production information is checked for accuracy and sufficiency and any incorrect information is reported to the relevant person
- WA0205 All necessary materials and equipment for the job are identified and accessed, and any non-availability is reported to the relevant person
- WA0206 The quality and quantity of materials is checked and remedial action taken if there is non-conformity
- WA0207 Accurately establish the compatibility of materials with the boring machine to be used and take correct remedial action to address non-conformity
- WA0208 Jigs, templates and other necessary dimension control aids are available, correct and fit for the purpose

Supporting Evidence

- SE0201 Prepared work area

4.2.3. WM-04-WE03: Design, construct and test jigs and templates for back legs of a chair, tempered legs of a server and a curved armrest for one off use, multiple use; short term use; and long term use using a suitable material for the purpose of the jig or template (Masonite, MDF; Perspex; plywood; appropriate new materials or off cuts)

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0301 Read and interpret the requirements and sample for the jigs and templates according to production, quality and organisational requirements
- WA0302 Jigs and templates made, provide for secure and safe attachment, accurate calibrators and sizing for their production purpose
- WA0303 Inspect jigs and templates to confirm specification accuracy and accurate sample match
- WA0304 Correctly label jigs and templates are and place in the designated location

- WA0305 Documentation is completed accurately and according to organisational requirements

Supporting Evidence

- SE0301 Photos of completed jigs
- SE0302 Completed job card confirming completion of work

4.2.4. WM-04-WE04: Repair jigs and templates

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0401 Inspect jigs and templates for damage to maintain accuracy and quality of the operations and identify damage or faults
- WA0402 Plan the repair operation to minimise production downtime
- WA0403 Repair the jig or template confirming accurate sample match

Supporting Evidence

- SE0401 Photos of repaired jigs and templates (before and after)
- SE0402 Completed job card confirming completion of work

4.2.5. WM-04-WE05: Modify jigs and templates

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0501 Determine the feasibility of the intended modification
- WA0502 Identify the modification requirement and confirm with the relevant person
- WA0503 Plan the modification process to minimise production downtime
- WA0504 Conduct the modification accurately to specification and inspect the jig or template to confirm an accurate sample match is obtained
- WA0505 Perform the modification safely and within the optimum time scales
- WA0506 Correctly mark modified jigs and templates for identification and return to their correct location

Supporting Evidence

- SE0501 Photos of modified jigs and templates (before and after)
- SE0502 Completed job card confirming completion of work

4.2.6. WM-04-WE06: Produce bored timber and board product components and products operating a multi-borer at 90 degrees and 45 degrees drilling and different angles

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0601 Set out, measure and mark material for boring applying the correct dimensions and calculations

- WA0602 Inspect and set up the machine for boring by inserting cutters, adjusting clamps and stoppers ensuring left side drills corresponds with the right hand side components
- WA0603 Identify correct dowel sizes
- WA0604 Set the correct pressure of the machine and run a test piece and correct all deviations
- WA0605 Drill materials at feed speeds suited to materials and machine applying guards and relevant safety procedures and requirements throughout the operations
- WA0606 Inspect the bored components to confirm quality and meeting product specifications
- WA0607 Identify and report substandard raw material and components
- WA0608 Label or group components on pallets for dispatch to the next operation

Supporting Evidence

- SE0601 Photos of bored timber and bored board products or components
- SE0602 Completed job card confirming accurate completion of work

4.2.7. WM-04-WE07: Operate the edge bander to produce machine banded product for a period of 2 weeks working with solid edging, impact and veneer edging

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0701 Set out, measure and mark material for edging applying the correct dimensions and calculations
- WA0702 Inspect and set up the machine for edging by adjusting cutters, rollers, pressure and height of the machine cutting unit
- WA0703 Ensure that temperature of the glue is according to edging and machine specification
- WA0704 Run and inspect a test piece to confirm correct settings
- WA0705 Edge band materials at feed speeds suited to materials and machine applying guards and relevant safety procedures and requirements throughout the operations
- WA0706 Inspect the edge banded components to confirm quality and meeting product specifications
- WA0707 Identify and report substandard raw material and components
- WA0708 Label or group components on pallets for dispatch to the next operation

Supporting Evidence

- SE0701 Photos of edge banded timber and bored board products or components
- SE0702 Completed job card confirming accurate completion of work

4.2.8. WM-04-WE08: Produce profiled timber and board product components and products by operating a spindle, moulder and overhead router to produce components with different profiles, moulds, rebates, grooves, chamfers, radiuses, and bullnoses for a period of 3 weeks

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0801 Set out, measure and mark material for profiling applying the correct dimensions and calculations
- WA0802 Inspect and set up the machine for profiling operations
- WA0803 Adjust the spindle feeder to correct height
- WA0804 Select the correct feeding speed and direction
- WA0805 Adjust cutting tools to correct angles, width and length and depth
- WA0806 Run and inspect a test piece to confirm correct settings
- WA0807 Operate the spindle, moulder and overhead router to produce components with different profiles, moulds, rebates, grooves, chamfers, radiuses, and bullnoses at feed speeds suited to materials and machine applying guards and relevant safety procedures and requirements throughout the operations
- WA0808 Inspect the profiled components to confirm quality and meeting product specifications
- WA0809 Identify and report substandard raw material and components
- WA0810 Label or group components on pallets for dispatch to the next operation

Supporting Evidence

- SE0801 Photos of profiled timber board products or components
- SE0802 Completed job card confirming accurate completion of work

4.2.9. WM-04-WE09: Produce turned timber components and products by operating a lathe and copy lathe to produce 100 turned components

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0901 Set out, measure and mark material for profiling applying the correct dimensions and calculations
- WA0902 Inspect and set up the machine for wood turning operations
- WA0903 Adjust the lathe and copy lathe to required adjustments
- WA0904 Fit components securely to the machines
- WA0905 Select and fit the correct chisels
- WA0906 Secure the templates and jigs to the machine
- WA0907 Operate a lathe and copy lathe to produce 100 turned components using the lathe and copy lathe
- WA0908 Inspect the profiled components to confirm quality and meeting product specifications
- WA0909 Identify and report substandard raw material and components
- WA0910 Label or group components on pallets for dispatch to the next operation

Supporting Evidence

- SE0901 Photos of turned timber products or components
- SE0902 Completed job card confirming accurate completion of work

4.2.10. WM-04-WE10: Produce jointed timber producing different sizes and angles of Mortise-and-Tenon joints by operating the Mortise-and-Tenon machine for a period of 2 weeks in the machining department

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1001 Set out, measure and mark timber and composite board for profiling applying the correct dimensions and calculations
- WA1002 Inspect and set up the machine for cutting joints
- WA1003 Set-up correct shoulder sizes and adjust cutting tools to correct angles, width and length and depth
- WA1004 Set the correct pressure of the machine
- WA1005 Run and inspect a test piece to confirm correct settings
- WA1006 Start, stop and control the Mortise-and-Tenon producing different sizes and angles of Mortise-and-Tenon joints
- WA1007 Cut joints according specification (joints include but not limited to: double end mortise, mitred butt joints, butt joints, tongue and groove, rail and style, dado joint, rabbet joint)
- WA1008 Inspect the jointed components to confirm quality and meeting product specifications
- WA1009 Identify and report substandard raw material and components
- WA1010 Label or group components on pallets for dispatch to the next operation

Supporting Evidence

- SE1001 Photos of jointed timber products or components
- SE1002 Completed job card confirming accurate completion of work

4.2.11. WM-04-WE11: Conclude operations according to workplace requirements

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1101 Unused materials are returned to appropriate storage
- WA1102 Apply time and self-management to achieve the operation in compliance with safety requirements and within the time allocated
- WA1103 Perform the process according to health and safety requirements within the allocated time
- WA1104 Record and submit all production information and processes
- WA1105 Faulty and/or defective equipment is tagged and reported in accordance with workplace practices
- WA1106 Waste and scrap materials are dealt with following workplace procedures in compliance with environmental requirements

Supporting Evidence

- SE1101 Completed job card confirming accurate completion of work

4.2.12. WM-04-WE12: Perform routine cleaning and minor maintenance in the workshop to maintain the good working order of the machines, tooling, equipment and safe working conditions

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1201 Inspect, clean and conduct minor maintenance tasks on machines (such as lubrication, belt tension, etc.) to maintain serviceability of the machines
- WA1202 Inspect, clean and conduct minor maintenance tasks on tooling and equipment such as sharpening to maintain the good working order
- WA1203 Faulty and/or defective equipment is tagged and reported in accordance with workplace practices
- WA1204 Clean the working environment and inspect for compliance with safety requirements

Supporting Evidence

- SE1201 Completed checklists and reports

4.2.13. WM-04-WE13: Apply safety procedures and equipment when operating machines, working with chemicals, handling wood, board and components for the duration of the work experience

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1301 Operate machines ensuring work practices minimise the risk of injury and damage to machinery, equipment and safety of self and others
- WA1302 Inspect the workshop, machines, tools and equipment to determine whether these aspects comply with occupational health and safety requirements
- WA1303 Identify, record and report conditions that present a threat to safety, health and the environment
- WA1304 Promptly identify appropriate corrective actions and consult the appropriate parties about these actions
- WA1305 Trace and report ongoing safety concerns in work area ensuring corrective actions are taken
- WA1306 Complete health, safety and environment reports using the required format
- WA1307 Identify, select and apply personal protective clothing and equipment appropriate to the task
- WA1308 Participate in a fire evacuation drill

Supporting Evidence

- SE1301 Completed checklists and reports

4.3 Contextualised Workplace Knowledge

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating and safety procedures and quality standards

5 Workshop layout and designated areas

6 Personal protective clothing and equipment

4.4 Criteria for Workplace Approval

Physical Requirements:

- Fully equipment wood machining department with advanced wood and board machining machines, tools and equipment and various types of raw material
- Compressed airline and extraction
- Key processes: wood machining processes using advanced machines

Human Resource Requirements:

- Qualifications, registration or experience of supervisor: NQF 4 qualified in furniture technology with 3 years of relevant experience in the furniture industry
- 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
- Bargaining Council Main Agreement

4.5 Additional Assignments to be Assessed Externally

None

5. 682201001-00-WM-05, Crafted Furniture Assembling Operations, NQF Level 3, Credits 55

5.1 Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Demonstrate the ability to complete crafted furniture, select prepare and lay veneers, produce curved laminated timber and perform manual edging

The learner will be required to:

- WM-05-WE01: Read, interpret and produce basic engineering drawings
- WM-05-WE02: Prepare for operations in the assembling department
- WM-05-WE03: Design, construct and test templates, moulds and formers for curved, laminated drawers and raised and curved doors and a curved armrest for one off use, multiple use; short term use; and long term use using a suitable material for the purpose of the templates, moulds and formers
- WM-05-WE04: Repair templates, moulds and formers
- WM-05-WE05: Modify templates, moulds and formers
- WM-05-WE06: Plan, cut and joint veneers
- WM-05-WE07: Lay veneers and hand fit inlays
- WM-05-WE08: Assemble and complete crafted furniture

5.2 Guidelines for Work Experiences

5.2.1. WM-05-WE01: Read, interpret and produce basic engineering drawings

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Produce engineering drawings for a chair, stool, table, box, cabinet, book shelve
- WA0102 Identify all components to be assembled and processed in the assembling department and compile a checklist
- WA0103 Identify the manufacturing processes from the drawing and compile routing sheets
- WA0104 Identify and correctly calculate the raw material (finishings, etc.) needed for the product

Supporting Evidence

- SE0101 Completed drawings
- SE0102 Completed routing sheet
- SE0103 Completed checklist
- SE0104 Completed raw material list

5.2.2. WM-05-WE02: Prepare for operations in the assembling department

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0201 Receive work instructions and product specifications and other production information and check for accuracy and sufficiency and report any incorrect information

- WA0202 Select and obtain all necessary materials and equipment for the task and confirm that all components are according to sizes, numbers and quality as per cutting list
- WA0203 Prepare the working area for the task ensuring it is clean and free from dust and oil or any foreign material which can contaminate the workpiece
- WA0204 Production information is checked for accuracy and sufficiency and any incorrect information is reported to the relevant person
- WA0205 All necessary materials and equipment for the job are identified and accessed, and any non-availability is reported to the relevant person
- WA0206 The quality and quantity of materials is checked and remedial action taken if there is non-conformity
- WA0207 Accurately establish the compatibility of materials with the boring machine to be used and take correct remedial action to address non-conformity
- WA0208 Inspect jigs, templates and other necessary dimension control aids ensuring they are available, correct and fit for the purpose

Supporting Evidence

- SE0201 Prepared work area

5.2.3. WM-05-WE03: Design, construct and test templates, moulds and formers for curved, laminated drawers and raised and curved doors and a curved armrest for one off use, multiple use; short term use; and long term use using a suitable material for the purpose of the templates, moulds and formers

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0301 Read and interpret the requirements and sample for the templates, moulds and formers according to production, quality and organisational requirements
- WA0302 Templates, moulds and formers made, provide for secure and safe attachment, accurate calibrators and sizing for their production purpose
- WA0303 Inspect templates, moulds and formers to confirm specification accuracy and accurate sample match
- WA0304 Correctly label templates, moulds and formers are and place in the designated location
- WA0305 Documentation is completed accurately and according to organisational requirements

Supporting Evidence

- SE0301 Photos of completed jigs
- SE0302 Completed job card confirming completion of work

5.2.4. WM-05-WE04: Repair templates, moulds and formers

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0401 Inspect templates, moulds and formers for damage to maintain accuracy and quality of the operations and identify damage or faults

- WA0402 Plan the repair operation to minimise production downtime
- WA0403 Repair the templates, moulds and formers confirming accurate sample match

Supporting Evidence

- SE0401 Photos of repaired jigs and templates (before and after)
- SE0402 Completed job card confirming completion of work

5.2.5. WM-05-WE05: Modify templates, moulds and formers

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0501 Determine the feasibility of the intended modification
- WA0502 Identify the modification requirement and confirm with the relevant person
- WA0503 Plan the modification process to minimise production downtime
- WA0504 Conduct the modification accurately to specification and inspect the templates, moulds and formers to confirm an accurate sample match is obtained
- WA0505 Perform the modification safely and within the optimum time scales
- WA0506 Correctly mark modified templates, moulds and formers for identification and return to their correct location

Supporting Evidence

- SE0501 Photos of modified jigs and templates (before and after)
- SE0502 Completed job card confirming completion of work

5.2.6. WM-05-WE06: Plan, cut and joint veneers

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0601 Read and interpret work instruction, product requirements and drawings for the manufacturing of veneers and select appropriate type of cut, matching of materials and jointing type and method for the task
- WA0602 Identify, select and use tools and equipment for cutting, sawing and sanding of veneers
- WA0603 Identify, select and measure materials for veneers and perform matching to achieve aesthetic and light refraction requirements
- WA0604 Inspect veneers and confirm accuracy of measuring, matching of grain direction and light refraction and cutting tasks
- WA0605 Identify, select and prepare adhesives for the jointing procedure
- WA0606 Identify jointing and veneer problems and faults and reject and replace and report to the relevant person
- WA0607 Handle, move and store workpiece in a manner which does not cause damage
- WA0608 Unused materials are returned to appropriate storage

- WA0609 Apply time and self-management to achieve the operation in compliance with safety requirements and within the time allocated

Supporting Evidence

- SE0601 Copy of signed job card
- SE0602 Photos of completed inlays
- SE0603 Production records

5.2.7. WM-05-WE07: Lay veneers and hand fit inlays

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0701 Read and correctly interpret specifications for the laying of veneers and hand fitting of inlays to identify the type and quality of veneers; grain matching; colour matching; moisture content, etc.
- WA0702 Identify, select and use tools and equipment for inlay and adhesive application and inspect to confirm correct condition for safe and effective production
- WA0703 Identify, select and inspect material surfaces and to confirm quality, to ensure it is free of defects; dust; chippings and ready to receive veneer or inlay
- WA0704 Check and confirm the inlay design and type with specification
- WA0705 Sequence of inlay settings are determined
- WA0706 Identify, correctly mix and apply adhesives in the inlaying process according to the manufacturer specifications (MSDS)
- WA0707 Apply the inlay using selected pressing and inlay techniques ensuring the lateral and vertical fit conforms to specification requirements
- WA0708 Inspect the workpiece to identify faults, ensuring the surface is from excess adhesives and exposed surfaces are straight and even
- WA0709 Unused materials are returned to appropriate storage
- WA0710 Apply time and self-management to achieve the operation in compliance with safety requirements and within the time allocated
- WA0711 Perform the process according to health and safety requirements within the allocated time
- WA0712 Record and submit all production information and processes

Supporting Evidence

- SE0701 Copy of signed job card
- SE0702 Photos of completed inlays
- SE0703 Production records

5.2.8. WM-05-WE08: Assemble and complete crafted furniture

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0801 Read and correctly interpret specifications for the manufacturing of crafted furniture to identify the type and quality of the various features of the workpiece such as veneers, inlays, moulded features, laminated features, curved drawers and doors, curved and raised panel doors, etc.
- WA0802 Check and confirm the workpiece design and type with specification
- WA0803 Identify, select and use tools and equipment for the manufacturing of the respective features and inspect to confirm correct condition for safe and effective operation
- WA0804 Identify, select and inspect material surfaces and to confirm quality, to ensure it is free of defects; dust; chippings and ready for the manufacturing process
- WA0805 Identify and select accessories, fittings and finishings as per specifications
- WA0806 Identify, correctly mix and apply adhesives in the inlaying process according to the manufacturer specifications (MSDS)
- WA0807 Apply the inlay according to the sequence using selected pressing and inlay techniques ensuring the lateral and vertical fit conforms to specification requirements
- WA0808 Produce drawer components using various machines and hand held machines for 50 drawers of different shapes and sizes including curved and laminated drawers and fit drawer bottom and front pieces and runners ensuring a smooth sliding action
- WA0809 Produce 25 curved and raised panel doors and fit to carcasses ensuring the doors fit square and true
- WA0810 Cut and prepare joints according specification including but not limited to: double end mortise, mitred butt joints, butt joints, tongue and groove, rail and style, dado joint, rabbet joint) ensuring a snug and stable fit
- WA0811 Produce mouldings according to specification (mouldings includes chamfers, radiuses, bullnoses)
- WA0812 Cut, shape and mould components according to specification (shapes include but not limited to: square, arch, concave, convex, L-shape, U-shape)
- WA0813 Inspect the work piece to identify faults, ensuring the surface is free from excess adhesives and exposed surfaces are straight and even
- WA0814 Unused materials are returned to appropriate storage
- WA0815 Apply time and self-management to achieve the operation in compliance with safety requirements and within the time allocated
- WA0816 Perform the process according to health and safety requirements within the allocated time
- WA0817 Record and submit all production information and processes

Supporting Evidence

- SE0801 Time sheet/ job card, photos and log book completed and signed by the supervisor

5.3 Contextualised Workplace Knowledge

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating and safety procedures and quality standards

5 Workshop layout and designated areas

6 Personal protective clothing and equipment

5.4 Criteria for Workplace Approval

Physical Requirements:

- Fully equipment wood machining department with advanced wood and board machining machines, tools and equipment and various types of raw material
- Compressed airline and extraction
- Key processes: wood machining processes using advanced machines

Human Resource Requirements:

- Qualifications, registration or experience of supervisor: NQF 4 qualified in furniture technology with 3 years of relevant experience in the furniture industry
- 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
- Bargaining Council Main Agreement

5.5 Additional Assignments to be Assessed Externally

None

6. 682201001-00-WM-06, Prototype and Crafted Furniture making and Furniture repairing Processes, NQF Level 4, Credits 85

6.1 Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Manufacture furniture prototypes, crafted or bespoke furniture and lead a team in the manufacturing processes.

The learner will be required to:

- WM-06-WE01: Develop and construct technical drawings indicating all components in correct quantities, shapes and sizes of the furniture product whilst evaluating the design for feasibility and practicality for 10 products
- WM-06-WE02: Identify suitable construction methods (i.e. jointing solutions) to standardise components and to simplify or optimise production and compile production documentation for 5 products
- WM-06-WE03: Determine and inspect suitable timber, fittings and finishings according to design or product specifications for 5 products
- WM-06-WE04: Prepare and set-up machines of which basic 5 machines unsupervised and on his own and a complete range of woodwork machines supervised for period of 20 days in the machining and assembling department for operation and production of machined and profiled components for once-off or bulk production ensuring optimum workflow
- WM-06-WE05: 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 for 5 basic products
- WM-06-WE06: Manufacture (machine and assemble) prototype components according to the final design and finish and prepare the prototype for display to and approval from the client or designer for 5 products
- WM-06-WE07: Produce or assemble components of furniture articles, such as store fixtures, office equipment, cabinets, or crafted furniture for 5 products
- WM-06-WE08: Modify, restyle or repair various wooden furniture, cabinets, fixtures, panelling, or other pieces
- WM-06-WE09: Finish surfaces of wooden articles or furniture (spray-on applications of 5 products)
- WM-06-WE10: Inspect quality, monitor productivity and comply with requirements (1 week)
- WM-06-WE11: Monitor safety, health, quality and productivity in the furniture machining, assembling or finishing departments (40 hours)
- WM-06-WE12: Oversee the activities of a team of operators in the furniture machining, assembling or finishing departments (side assistance) (10 days)

6.2 Guidelines for Work Experiences

6.2.1. WM-06-WE01: Develop and construct technical drawings indicating all components in correct quantities, shapes and sizes of the furniture product whilst evaluating the design for feasibility and practicality for 10 products

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 Conceptualise and visualise the final work piece in three dimensions: length, width and depth
- WA0103 Assess the feasibility for manufacturing and alert designer to any deviations from design
- WA0104 Estimate material requirements for production and estimate the amounts, types, or costs of needed materials
- WA0105 Determine the cost specifications of the product

Supporting Evidence

- SE0101 Technical drawings

6.2.2. WM-06-WE02: Identify suitable construction methods (i.e. jointing solutions) to standardise components and to simplify or optimise production and compile production documentation for 5 products

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0201 Determine product specifications and materials, work methods, and machine setup requirements, according to oral or written instructions, drawings, or work orders
- WA0202 Review blueprints or other instructions to determine operational methods or sequences
- WA0203 Produce 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 shaping or assembling parts, based on blueprints, drawings, diagrams, or oral or written instructions
- WA0205 Draw up and produce cutting lists for furniture products
- WA0206 Produce specifications for curved, laminated, profile or formed products
- WA0207 Produce furniture finishing specifications
- WA0208 Produce a job card, cutting list, production flow/routing chart

Supporting Evidence

- SE0201 Work instructions, job card, cutting list, production flow/routing chart
- SE0202 Furniture finishing specifications

6.2.3. WM-06-WE03: Determine and inspect suitable timber, fittings and finishings according to design or product specifications for 5 products

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0301 Compare physical characteristics of materials or products to specifications or standards
- WA0302 Select appropriate finishing ingredients such as paint, stain, lacquer, shellac, or varnish, depending on factors such as wood hardness and surface type.
- WA0303 Recommend woods, colours, finishes, and furniture styles, using knowledge of wood products, fashions, and styles.

Supporting Evidence

- SE0301 Product specifications

6.2.4. WM-06-WE04: Prepare and set-up machines of which basic 5 machines unsupervised and on his own and a complete range of woodwork machines supervised for period of 20 days in the machining and assembling department for operation and production of machined and profiled components for once-off or bulk production ensuring optimum workflow

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0401 Set up and program a range of woodworking machines, such as band saw, table saw, planing saw, sanding machine drill presses, lathes, shapers, routers, sanders, planers, or wood-nailing machines
- WA0402 Select knives, saws, blades, cutter heads, cams, bits, or belts, according to work piece, machine functions, or product specifications.
- WA0403 Install and adjust blades, cutter heads, boring-bits, or sanding-belts, using hand tools and rules/manufacture specifications
- WA0404 Adjust machine tables or cutting devices and set controls on machines to produce specified cuts or operations
- WA0405 Set and adjust various kinds of woodworking machines for operation by others

Supporting Evidence

- SE0401 Machines and line setup

6.2.5. WM-06-WE05: 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 for 5 basic products

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0501 Do a dry assembling to check that the construction is correct, can stand without glue, look for rigidity of the wood carcass (test run) and pieces are correct size, that it fit, squareness, angles
- WA0502 Interact with the designer, production manager and suppliers during the prototype making process

Supporting Evidence

- SE0501 Dry assembly assessment information and documentation

6.2.6. WM-06-WE06: Manufacture (machine and assemble) prototype components according to the final design and finish and prepare the prototype for display to and approval from the client or designer for 5 products

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0601 Select and draw raw material from wood store or yard or consumables from hardware store according to the requirements of the product

- WA0602 Identify compatibility/incompatibility of materials, adhesives, fittings and fasteners for the application
- WA0603 Select and use appropriate materials, equipment and processes for the item being constructed
- WA0604 Select and apply appropriate joinery, construction and finishing techniques
- WA0605 Machine furniture prototype components
- WA0606 Joint and assemble furniture prototype components
- WA0607 Attach parts or subassemblies to form completed units, using glue, dowels, panel pins, screws, or clamps
- WA0608 Trim joints and fit parts and subassemblies to form complete units using glue and clamps, and reinforcing joints using nails, screws or other fasteners
- WA0609 Decorate furniture and fixtures by inlaying wood, applying veneer and carving designs according to the specifications
- WA0610 Demonstrate how the design of the prototype components will influence the working lifetime of the item
- WA0611 Ensure that the prototype satisfies the original or varied specification
- WA0612 Finish prototype

Supporting Evidence

- SE0601 Prototype manufacturing documentation

6.2.7. WM-06-WE07: Produce or assemble components of furniture articles, such as store fixtures, office equipment, cabinets, or crafted furniture for 5 products

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0701 Select and draw raw material from wood store or yard or consumables from hardware store according to the requirements of the product
- WA0702 Identify compatibility/incompatibility of materials, adhesives, fittings and fasteners for the application
- WA0703 Select and use appropriate materials, equipment and processes for the item being constructed
- WA0704 Select and apply appropriate joinery, construction and finishing techniques
- WA0705 Machine furniture components
- WA0706 Joint and assemble furniture components
- WA0707 Attach parts or subassemblies to form completed units, using glue, dowels, panel pins, screws, or clamps
- WA0708 Trim joints and fit parts and subassemblies to form complete units using glue and clamps, and reinforcing joints using nails, screws or other fasteners
- WA0709 Decorate furniture and fixtures by inlaying wood, applying veneer and carving designs according to the specifications

Supporting Evidence

- SE0701 Production documentation

6.2.8. WM-06-WE08: Modify, restyle or repair various wooden furniture, cabinets, fixtures, panelling, or other pieces

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0801 Examine furniture to determine the extent of damage or deterioration, and to decide on the best method for repair or restoration.
- WA0802 Remove old finishes and damaged or deteriorated parts, using hand tools, stripping tools, sandpaper, steel wool, abrasives, solvents, or dip baths.
- WA0803 Fill and smooth cracks or depressions, remove marks and imperfections, and repair broken parts, using plastic or wood putty, glue, nails, or screws.
- WA0804 Produce replacement parts by recommending woods, colours, finishes, and furniture styles, using knowledge of wood products, fashions, and styles and matching types of wood, colour, grain, texture
- WA0805 Repairs to damaged furniture, repairs to damaged furnisher finishings, restoring finishes
- WA0806 Match materials for colour, grain, or texture, giving attention to knots or other features of the wood.
- WA0807 Carry out assembly repairs to damaged furniture
- WA0808 Examine furniture to determine the extent of damage or deterioration, and to decide on the best method for repair or alteration
- WA0809 Repairs to damaged furniture, repairs to damaged furnisher finishings, restoring finishes
- WA0810 Remove old finishes and damaged or deteriorated parts, using hand tools, stripping tools, sandpaper, steel wool, abrasives, solvents, or dip baths.

Supporting Evidence

- SE0801 Production documentation

6.2.9. WM-06-WE09: Finish surfaces of wooden articles or furniture (spray-on applications of 5 products)

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0901 Recommend woods, colours, finishes, and furniture styles, using knowledge of wood products, fashions, and styles.
- WA0902 Select appropriate finishing ingredients such as paint, stain, lacquer, shellac, or varnish, depending on factors such as wood hardness and surface type.
- WA0903 Trim, sand, or scrape surfaces or joints to prepare articles for finishing.
- WA0904 Smooth, shape, and touch up surfaces to prepare them for finishing, using sandpaper, pumice stones, steel wool, chisels, sanders, or grinders.
- WA0905 Mix finishing ingredients to obtain desired colours or shades.

- WA0906 Brush, spray, or hand-rub finishing ingredients, such as paint, oil, stain, or wax, onto and into wood grain and apply lacquer or other sealers.
- WA0907 Paint metal surfaces electrostatically, or by using a spray gun or other painting equipment.
- WA0908 Distress surfaces with woodworking tools or abrasives before staining to create an antique appearance, or rub surfaces to bring out highlights and shadings. (Roughens the surface “ open the grain with a wire brush)

Supporting Evidence

- SE0901 Production documentation

6.2.10. WM-06-WE10: Inspect quality, monitor productivity and comply with requirements (1 week)

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1001 Complete timesheets and other production information at the end of the job to reflect and determine productivity
- WA1002 Inspect components and finished furniture products by observing structure, squareness, the finish, the way it is constructed, how it was fit, feel and look, smooth and all rounded of, sturdiness and craftsmanship to ensure quality
- WA1003 Inspect furniture products for meeting specifications
- WA1004 Tend to bottlenecks
- WA1005 Optimize company production by planning and finding quicker and better ways and measuring against the maximum output of the company

Supporting Evidence

- SE1001 Production records
- SE1002 Attendance registers

6.2.11. WM-06-WE11: Monitor safety, health, quality and productivity in the furniture machining, assembling or finishing departments (40 hours)

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1101 Verify dimensions and check the quality or fit of furniture pieces to ensure adherence to specifications
- WA1102 Compare physical characteristics of materials or products to specifications or standards
- WA1103 Inspect tolerances and allowances for accuracy
- WA1104 Avoid backtracking, work flow interruptions or wastage
- WA1105 Use workplace technology related to the coordination, including communication equipment, time and management aids and other measuring devices
- WA1106 Communicate ideas and information to enable confirmation of work requirements and specifications and the reporting of work outcomes and problems
- WA1107 Ensure the application of safety and environmental procedures

- WA1108 Inspect the workshop for hazards and report and mitigate risks

Supporting Evidence

- SE1101 Safety, health and environmental records
- SE1102 Incident and accident reports
- SE1103 Attendance registers

6.2.12. WM-06-WE12: Oversee the activities of a team of operators in the furniture machining, assembling or finishing departments (side assistance) (10 days)

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA1201 Identify a team of operators
- WA1202 Conduct and record a daily briefing meeting
- WA1203 Delegate tasks to different team members
- WA1204 Coach, guide and advice team members on different processes, machines, tools and other resources required.
- WA1205 Record meeting
- WA1206 Lead the team in the workplace
- WA1207 Organise all materials, equipment and tools for the team members and operations
- WA1208 Record all processes and report to relevant person
- WA1209 Attend to conflicts in the work area and report accordingly

Supporting Evidence

- SE1201 Production records
- SE1202 Briefing session notes/minutes
- SE1203 Coaching session attendance registers

6.3 Contextualised Workplace Knowledge

1 Company products

2 Various departments and workflow

3 Reporting structures

4 Company standard operating and safety procedures and quality standards

5 Workshop layout and designated areas

6 Personal protective clothing and equipment

6.4 Criteria for Workplace Approval

Physical Requirements:

- Fully equipment wood machining department with advanced wood and board machining machines, tools and equipment and various types of raw material

- Compressed airline and extraction
- Key processes: wood machining processes using advanced machines

Human Resource Requirements:

- Qualifications, registration or experience of supervisor: NQF 4 qualified in furniture technology with 3 years of relevant experience in the furniture industry
- 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
- Bargaining Council Main Agreement

6.5 Additional Assignments to be Assessed Externally

None