



**FURNITURE  
& FITTINGS  
SKILL COUNCIL**  
कुशल • सक्षम • आत्मनिर्भर



# Model Curriculum

**QP Name: Cabinet Maker (WorldSkills)**

**QP Code: FFS/Q0902**

**QP Version: 1.0**

**NSQF Level: 4.5**

**Model Curriculum Version: 1.0**

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# Table of Contents

Training Parameters.....	2
Program Overview.....	3
Training Outcomes.....	3
Compulsory Modules.....	3
Module Details.....	6
Module 1: Introduction to the Interiors, Furniture, and Allied Industry.....	6
Module 2: Introduction to the role of a Cabinet Maker.....	7
Module 3: Introduction to World Skills Competition.....	8
Module 4: Docket Interpretation and Material Identification.....	9
Module 5: Drawing Preparation and Detailing.....	10
Module 6: Project Visualization.....	11
Module 7: Material Preparation and Setting out.....	12
Module 8: Jig Preparation.....	13
Module 9: Component Preparation.....	14
Module 10: Surface Lamination and Veneer Application.....	15
Module 11: Integrated Joinery and Assembly.....	16
Module 12: Hardware Installation and Fixture.....	17
Module 13: Surface Finishing.....	18
Module 14: Quality Checking.....	19
Module 15: Comprehensive Safety Compliance.....	20
Module 16: Efficient Work Area Planning.....	21
Module 17: Client Trust Development and Self-Assessment.....	22
Module 18: Supplier Relations, Estimation, and Order Management.....	23
Module 19: Collaborative Workflow Management.....	24
Module 20: Dialogue Engagement.....	25
Module 21: Quality Enhancement and Industry Insight.....	26
Annexure.....	27
Trainer Requirements.....	27
Assessor Requirements.....	28
Assessment Strategy.....	29
References.....	31
Glossary.....	31
Acronyms and Abbreviations.....	32

## Training Parameters

<b>Sector</b>	Interiors, Furniture and Fixtures
<b>Sub-Sector</b>	Furniture Design & Production
<b>Occupation</b>	Furniture Production (Work Shop)
<b>Country</b>	India
<b>NSQF Level</b>	4.5
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/7522.0200
<b>Minimum Educational Qualification and Experience</b>	As per WorldSkills and IndiaSkills criteria
<b>Minimum Level of Education for Training in School</b>	NA
<b>Prerequisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	14 Years
<b>Last Reviewed on</b>	
<b>Next Review Date</b>	
<b>NSQC Approval Date</b>	
<b>Q.P. Version</b>	1.0
<b>Model Curriculum Creation Date</b>	
<b>Model Curriculum Valid Up to Date</b>	
<b>Model Curriculum Version</b>	1.0
<b>Minimum Duration of the Course</b>	510 Hrs.
<b>Maximum Duration of the Course</b>	510 Hrs.

## Program Overview

This section summarizes the end objectives of the program along with its duration.

### Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills:

- Highlight the key components and trace the historical evolution of the Interiors, Furniture, and Allied Industry
- Define the role, enumerate responsibilities, and proficiently use essential tools
- Demonstrate comprehension of world
- skills competition structure, objectives, and showcase acquired skills
- Accurately interpret dockets and adeptly select materials based on project requirements
- Generate detailed carpentry drawings and effectively translate design plans into actionable tasks
- Develop comprehensive project visualizations incorporating design specifications
- Demonstrate proficiency in material preparation and accurate setting out for projects
- Skillfully prepare jigs for precise and efficient component manufacturing
- Execute precise component preparation adhering to project specifications
- Apply surface lamination and veneer with precision according to design requirements
- Demonstrate expertise in integrated joinery and assembly techniques
- Accurately install hardware and fixtures, ensuring proper functionality
- Apply meticulous surface finishing techniques to achieve desired outcomes
- Conduct thorough quality checks to meet industry standards
- Adhere to comprehensive safety protocols ensuring a secure work environment
- Plan work areas efficiently to optimize productivity and resource utilization
- Foster client trust through effective communication and conduct self-assessment for continuous improvement
- Manage supplier relations, provide accurate estimations, and efficiently handle order management
- Effectively manage collaborative workflows for seamless project execution
- Engage in constructive dialogues to enhance team communication and collaboration
- Continuously strive for quality enhancement and stay updated on industry insights

### Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>Bridge Module(s)</b>	<b>30:00</b>	<b>00:00</b>	<b>00:00</b>	<b>00:00</b>	<b>30:00</b>
Module 1: Introduction to the Interiors, Furniture, and Allied Industry	10:00	00:00	00:00	00:00	10:00



Module 2: Introduction to the role of a Cabinet Maker	08:00	00:00	00:00	00:00	08:00
Module 3: Introduction to World Skills Competition	12:00	00:00	00:00	00:00	12:00
<b>FFS/N2228– Interpret the work docket and demonstrate proficiency in working with drawings NOS Version No. 1 NSQF Level- 4.5</b>	<b>28:00</b>	<b>92:00</b>	<b>00:00</b>	<b>00:00</b>	<b>120:00</b>
Module 4: Docket Interpretation and Material Identification	14:00	38:00	00:00	00:00	52:00
Module 5: Drawing Preparation and Detailing	14:00	54:00	00:00	00:00	68:00
<b>FFS/N0911– Select and prepare the materials for fabrication process NOS Version No. 1 NSQF Level- 4.5</b>	<b>24:00</b>	<b>66:00</b>	<b>00:00</b>	<b>00:00</b>	<b>90:00</b>
Module 6: Project Visualization	08:00	16:00	00:00	00:00	24:00
Module 7: Material Preparation and Setting out	08:00	20:00	00:00	00:00	28:00
Module 8: Jig Preparation	08:00	30:00	00:00	00:00	38:00
<b>FFS/N0912– Perform the fabrication and assembly of product components into required specification NOS Version No. 1 NSQF Level- 4.5</b>	<b>28:00</b>	<b>92:00</b>	<b>00:00</b>	<b>00:00</b>	<b>120:00</b>
Module 9: Component Preparation	08:00	36:00	00:00	00:00	44:00
Module 10: Surface Lamination and Veneer Application	12:00	28:00	00:00	00:00	40:00
Module 11: Integrated Joinery and Assembly	08:00	28:00	00:00	00:00	36:00
<b>FFS/N0913– Install the architecture hardware and moving parts into finished product NOS Version No. 1 NSQF Level- 4.5</b>	<b>24:00</b>	<b>66:00</b>	<b>00:00</b>	<b>00:00</b>	<b>90:00</b>



Module 12: Hardware Installation and Fixture	08:00	28:00	00:00	00:00	36:00
Module 13: Surface Finishing	08:00	22:00	00:00	00:00	30:00
Module 14: Quality Checking	08:00	16:00	00:00	00:00	24:00
<b>FFS/N8209– Execute cabinet making work with safety and effective communication NOS Version No. 1 NSQF Level- 4.5</b>	<b>12:00</b>	<b>18:00</b>	<b>00:00</b>	<b>00:00</b>	<b>30:00</b>
Module 15: Comprehensive Safety Compliance	04:00	04:00	00:00	00:00	08:00
Module 16: Efficient Work Area Planning	02:00	04:00	00:00	00:00	06:00
Module 17: Client Trust Development and Self-Assessment	02:00	02:00	00:00	00:00	04:00
Module 18: Supplier Relations, Estimation, and Order Management	02:00	04:00	00:00	00:00	06:00
Module 19: Collaborative Workflow Management	02:00	04:00	00:00	00:00	06:00
<b>FFS/N8210– Engage in dialogue with client and foster ideas for product improvement QP Version No. 1 NSQF Level- 4.5</b>	<b>12:00</b>	<b>18:00</b>	<b>00:00</b>	<b>00:00</b>	<b>30:00</b>
Module 20: Dialogue Engagement	06:00	08:00	00:00	00:00	14:00
Module 21: Quality Enhancement and Industry Insight	06:00	10:00	00:00	00:00	16:00
<b>Total Duration</b>	<b>158:00</b>	<b>352:00</b>	<b>00:00</b>	<b>00:00</b>	<b>510:00</b>

# Module Details

## Module 1: Introduction to the Interiors, Furniture, and Allied Industry

### Bridge Module

#### Terminal Outcomes:

- Explain the functioning of the furniture industry.
- Describe the segments of the furniture industry.
- Explain the scope and significance of the furniture industry.

<b>Duration: 10:00</b>	<b>Duration: 00:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe the scope and significance of the furniture industry.</li> <li>• Discuss the various segments of the furniture industry and how they function.</li> <li>• Explain various types and categories of furniture.</li> <li>• Describe the types of allied or enabling industries involved in furniture manufacturing.</li> <li>• Describe the relationship between interiors and the furniture industry.</li> <li>• Classify different types of Interior projects.</li> <li>• Describe the occupational map of the furniture industry.</li> <li>• Explain the significance of the Interiors, Furniture, and Allied industries.</li> </ul>	
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
N.A.	

## Module 2: Introduction to the role of a Cabinet Maker

### Bridge Module

#### Terminal Outcomes:

- Explain the role and responsibilities of a Cabinet Maker
- Discuss the scope of work for a Cabinet Maker

<b>Duration: 08:00</b>	<b>Duration: 00:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Elaborate on the various organizational structure, processes, code of conduct, reporting matrix, and escalation hierarchy.</li> <li>• Explain the role, responsibilities, and limitations of a Cabinet Maker</li> <li>• Describe the attributes and basic skill sets required for a Cabinet Maker</li> <li>• Explain the process of communication with team members and supervisors as per the protocol of the organization.</li> <li>• List all the documents required to carry out the job, such as a job sheet and checklist for oneself.</li> <li>• List the various operations/activities that take place at the worksite and Cabinet Maker's role in the same.</li> <li>• Discuss the regulatory authorities, laws, and regulations related to an individual while working in the Furniture and Fittings Industry.</li> <li>• Discuss the career path for the Cabinet Maker job role.</li> <li>• Explain the nature of work, timeliness, and requirement.</li> </ul>	
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
N.A.	



## Module 3: Introduction to World Skills Competition

### Bridge Module

#### Terminal Outcomes:

- Explain the significance and scope of the WorldSkills Competition.
- Explain the participation criterion for WorldSkills Competition.

<b>Duration:</b> 12:00	<b>Duration:</b> 00:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• State the significance of the World Skills Organization.</li> <li>• Discuss the different categories of sectors and trades as per the WorldSkills Competition.</li> <li>• Describe the selection criteria for the WorldSkills and India Skills Competition.</li> <li>• Discuss various trades related to the Furniture and Fittings sector in the WorldSkills Competition.</li> <li>• List out the skill set required for the Carpentry trade in the World Skills Competition.</li> <li>• Discuss the career prospectus associated with the WorldSkills and India Skills Competition.</li> <li>• Explain how to participate in the World skills competition.</li> </ul>	
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
N.A.	

## Module 4: Docket Interpretation and Material Identification

*Mapped to FFS/N2228, v 1.0*

### Terminal Outcomes:

- Assess intended uses and environmental conditions based on drawing docket, ensuring clarity and precision in analysis
- Interpret drawing docket with precision, optimizing construction quality while considering design intent
- Extrapolate information from drawings and specifications to address gaps, showcasing synthesis abilities
- Identify materials specified in drawing docket, seeking clarification for discrepancies, ensuring accuracy in construction.

<b>Duration: 14:00</b>	<b>Duration: 38:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss factors affecting cabinet making construction, including intended uses and environmental conditions.</li> <li>• Explain the process of interpreting drawing docket with precision</li> <li>• Discuss techniques for extrapolating information from drawings and specifications</li> <li>• Explain the importance of seeking clarification, correcting errors in drawings.</li> <li>• Explain the importance of accurately identifying materials specified in drawing docket.</li> <li>• Describe the process of identifying materials and quantities based on drawing docket specifications.</li> <li>• Explain the significance of organizing tools, materials, and equipment for efficient cabinet making operations.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct a thorough assessment based on drawing docket and construction details, seeking clarity when needed.</li> <li>• Interpret drawing docket with precision, optimizing the potential for high-quality construction</li> <li>• Demonstrate the ability to extrapolate information from drawings and specifications while addressing's gaps or uncertainties</li> <li>• Seek clarification and correct any missing or incorrect information in drawings.</li> <li>• Demonstrate proficiency in identifying materials specified in drawing docket.</li> <li>• Showcase proficiency in identifying materials and quantities accurately for specified operations.</li> <li>• Demonstrate the ability to organize tools, materials, and equipment efficiently for specified cabinet making operations.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 5: Drawing Preparation and Detailing

*Mapped to FFS/N2228, v 1.0*

### Terminal Outcomes:

- Produce meticulous drawings to scale and full size, adhering to drawing docket specifications
- Perform drawing annotation with appropriate dimensional points, specifications, conventions, and notes on full-scale drawings

<b>Duration: 14:00</b>	<b>Duration: 54:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the principles of producing drawings to scale and full size while adhering to specifications.</li> <li>• Describe the importance of appropriate annotation and dimensional points on a full-scale drawing.</li> <li>• Explain the application of geometric methods in determining missing complex angles, joints, and intersections.</li> <li>• Describe the process of checking angles, shapes, and dimensions against specifications.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the ability to produce meticulous drawings to scale and full size based on docket specifications.</li> <li>• Demonstrate proficiency in drawing annotation, including dimensional points, specifications, conventions, and notes.</li> <li>• Employ suitable geometric methods to determine missing complex angles, joints, and intersections.</li> <li>• Demonstrate the ability to perform accurate checking of angles, shapes, and dimensions against specifications.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 6: Project Visualization

Mapped to FFS/N0911, v 1.0

### Terminal Outcomes:

- Demonstrate advanced skills in envisioning entire projects and adeptly overcoming potential challenges in cabinet making.
- Collaborate effectively with experts to enhance the depth and richness of the project visualization process

<b>Duration: 08:00</b>	<b>Duration: 16:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the importance of visualizing entire projects and resolving potential challenges for efficient fabrication.</li> <li>• Describe the importance of collaborating with experts to enrich the project visualization process in cabinet making.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the ability to visualize entire projects and proactively resolve potential challenges for efficient fabrication</li> <li>• Collaborate effectively with experts to enrich the project visualization process, incorporating valuable insights and perspectives.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 7: Material Preparation and Setting out

Mapped to FFS/N0911, v 1.0

### Terminal Outcomes:

- Evaluate and select fittings based on both functional and aesthetic considerations
- Select materials, avoiding defects, and enhancing the overall appearance of the finished product
- Assess the suitability of chosen materials concerning functionality, durability, and industry standards
- Execute precise face marking with digital tools for fabrication, ensuring design fidelity and advanced skills in accurate measurement, material set-out, and labelling.

<b>Duration: 08:00</b>	<b>Duration: 20:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the criteria for evaluating and selecting fittings based on functional requirements and aesthetic considerations.</li> <li>• Discuss the criteria for material selection, defect avoidance, and enhancing the overall appearance of the finished product.</li> <li>• Discuss the criteria for assessing the suitability of chosen materials concerning functionality, durability, and industry standards.</li> <li>• Describe the meticulous set-out process to determine measurements, sections, angles, mitres, and joints.</li> <li>• Explain the importance of face marking for maintaining fidelity to design specifications in the fabrication process.</li> <li>• Discuss the use of digital tools and technology for accurate measurement determination and material set out.</li> <li>• Explain the importance of labelling for maintaining organization and clarity throughout the fabrication process.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the ability to evaluate and select fittings based on both functional requirements and aesthetic considerations.</li> <li>• Select materials with attention to defect avoidance and enhanced appearance, aligning with design specifications.</li> <li>• Evaluate the suitability of chosen materials concerning functionality, durability, and industry standards as indicated in drawings.</li> <li>• Perform setting out materials meticulously to determine all necessary measurements, sections, angles, mitres, and joints.</li> <li>• Practice face marking of final dimensions and shapes</li> <li>• Demonstrate the ability to make use of digital tools and technology for accurate measurement determination and material set out.</li> <li>• Demonstrate the ability to perform labelling on materials and items appropriately</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 8: Jig Preparation

Mapped to FFS/N0911, v 1.0

### Terminal Outcomes:

- Apply advanced skills in selecting suitable tools, materials, and processes for jig fabrication.
- Demonstrate proficiency in producing jigs for stationary machines based on drawings

<b>Duration: 08:00</b>	<b>Duration: 30:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the need for jigs based on part specification.</li> <li>• Discuss the criteria for selecting tools, materials, and process specifications for jig fabrication.</li> <li>• Describe the process of producing jigs for stationary machines based on drawings</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and evaluate the requirement of jigs based on part specification.</li> <li>• Demonstrate the ability to select the appropriate tools, materials, and process specifications for jig fabrication.</li> <li>• Demonstrate the ability to produce jigs for stationary machines based on drawings, adhering to safety requirements</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 9: Component Preparation

Mapped to FFS/N0912, v 1.0

### Terminal Outcomes:

- Proficiently perform panel cutting using a cutting machine and shape elements using jigs on stationary machines
- Skilfully utilize woodworking machines to form grooves, rebates, and mouldings, and adapt shaped elements as necessary to meet evolving project requirements

<b>Duration: 08:00</b>	<b>Duration: 36:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the key principles of using a cutting machine for accurate panel cutting.</li> <li>• Describe the role of jigs on stationary machines in producing shaped elements according to design specifications.</li> <li>• Explain the applications of woodworking machines in skilfully forming grooves, rebates, and mouldings.</li> <li>• Describe the principles of adapting and refining shaped elements to meet evolving project requirements and design alterations.</li> <li>• Explain the significance of checking for seamless fitting of parts to ensure integration and compatibility with other items in cabinet making.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the process of cutting of panels into required specifications using a cutting machine.</li> <li>• Prepare shaped elements using jigs on stationary machines, aligning with design specifications.</li> <li>• Employ appropriate woodworking machines to form grooves, rebates, and mouldings.</li> <li>• Demonstrate the ability to modify shaped elements as necessary to meet evolving project requirements and design alterations.</li> <li>• Ensure seamless fitting of parts with other items from hand tools and machines.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list).	

## Module 10: Surface Lamination and Veneer Application

Mapped to FFS/N0912, v 1.0

### Terminal Outcomes:

- Select and check surfaces for flaws or defects before pasting
- Perform measurement and marking of laminate/sheet, cut to size, and apply edging strips and face veneers to panels with precision using suitable adhesives

<b>Duration: 12:00</b>	<b>Duration: 28:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss the importance of surface selection and inspection before pasting for a superior finish.</li> <li>• Provide insights into the fundamental principles of accurate measurement, marking, and cutting of laminates or sheets.</li> <li>• Explain the procedure of applying edging strips and face veneers to panels with precision, utilizing suitable adhesives.</li> </ul>	<ul style="list-style-type: none"> <li>• Execute precise surface selection and inspection before pasting, ensuring a top-tier finish.</li> <li>• Carry out accurate measurement, marking, and cutting of laminates or sheets in adherence to design specifications.</li> <li>• Demonstrate the application of edging strips and face veneers to panels with precision, using suitable adhesives</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	



## Module 11: Integrated Joinery and Assembly

Mapped to FFS/N0912, v 1.0

### Terminal Outcomes:

- Demonstrate advanced skills in preparing accurate joints using a variety of woodworking tools.
- Ensure joints are precise, adhering to drawings, and assemble product components with proficiency and accuracy.

<b>Duration: 08:00</b>	<b>Duration: 28:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Elaborate on the significance of accurate joint preparation for ensuring structural integrity.</li> <li>• Explain the functionalities of traditional hand tools, portable power tools, and stationary woodworking machines for cutting and preparing a variety of joints.</li> <li>• Explain the principles of preparing joints that are parallel, clean, and correct in size.</li> <li>• Provide insights into the principles of ensuring square, straight faces, edges, and shoulders in joint preparation.</li> <li>• Describe the techniques for checking joints to ensure strength and durability.</li> <li>• Elaborate on the importance of precise assembly for achieving the desired shape and specifications.</li> </ul>	<ul style="list-style-type: none"> <li>• Execute the preparation of accurate joints, ensuring precision and adherence to design specifications.</li> <li>• Demonstrate the effective use and maintenance of traditional hand tools, portable power tools, and stationary woodworking machines to cut and prepare various joints.</li> <li>• Prepare joints that meet specified standards and drawing requirements.</li> <li>• Ensure square, straight faces, edges, and shoulders in joint preparation, adhering to the design.</li> <li>• Demonstrate the ability to check joints for strength and durability according to standards.</li> <li>• Execute the assembly of product components, ensuring precision and adherence to specified shapes and dimensions.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 12: Hardware Installation and Fixture

Mapped to FFS/N0913, v 1.0

### Terminal Outcomes:

- Discuss the importance of precise positioning and fitting of hinges
- Attain expertise in achieving a snug fit along door edges, creating a polished and visually appealing outcome.
- Proficiently fit drawers and moving items into carcasses, ensuring smooth glide and optimal functionality post-assembly.

<b>Duration: 08:00</b>	<b>Duration: 28:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the significance of precision in positioning and fitting hinges</li> <li>• Elaborate on the importance of a snug fit along door edges for achieving polished and visually appealing outcomes.</li> <li>• Explain the significance of fitting drawers and moving items into carcasses for a smooth glide fit.</li> <li>• List the factors influencing the proper functioning of drawers and moving items after assembly.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate precision in positioning and fitting hinges, ensuring proper functionality and alignment as per project specifications.</li> <li>• Achieve a snug fit along door edges, producing polished and visually appealing outcomes.</li> <li>• Execute the fitting of drawers and other moving items into carcasses, achieving a glide fit for smooth functionality.</li> <li>• Verify the proper functioning of drawers and other moving items after assembly.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 13: Surface Finishing

Mapped to FFS/N0913, v 1.0

### Terminal Outcomes:

- Ensure defect-free surfaces and proficiently prepare finished product surfaces
- Produce tactile and visually appealing finishes through softening edges and achieving high-quality reflective finishes.

<b>Duration: 08:00</b>	<b>Duration: 22:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss the importance of surfaces being free from defects on complete assemblies before the final finishing process.</li> <li>• Explain the principles of surface preparation using suitable sanding tools and equipment for finished products.</li> <li>• Elaborate on the role of soft edges in achieving a tactile and visually appealing finish to components or assemblies.</li> <li>• Explain the techniques of polishing to achieve a high-quality and reflective finish on components or assemblies.</li> </ul>	<ul style="list-style-type: none"> <li>• Inspect surfaces on complete assemblies for defects before the final finishing process.</li> <li>• Execute the surface preparation of finished products, utilizing suitable sanding tools and equipment.</li> <li>• Create soft edges, ensuring a tactile and visually appealing finish to components or assemblies.</li> <li>• Execute the polishing of components or assemblies, achieving a high-quality and reflective finish.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 14: Quality Checking

Mapped to FFS/N0913, v 1.0

### Terminal Outcomes:

- Apply a discerning eye to inspect and adjust items for harmony, proportion, fit, and finish, balancing both aesthetics and functionality.
- Offer constructive feedback to contribute to continuous improvement and refinement

<b>Duration: 08:00</b>	<b>Duration: 16:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Elaborate on the principles of inspecting and adjusting items for harmony, proportion, fit, and finish, considering both aesthetic and functional requirements.</li> <li>• Elaborate on the importance of constructive feedback in fostering continuous improvement and refinement.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the ability to inspect and adjust items for harmony, proportion, fit, and finish, meeting both aesthetic and functional requirements.</li> <li>• Deliver constructive feedback for continuous improvement and refinement.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 15: Comprehensive Safety Compliance

Mapped to FFS/N8209, v 1.0

### Terminal Outcomes:

- Meticulously comply with health and safety standards, demonstrating advanced awareness and application skills in a secure working environment.
- Identify, utilize, and maintain personal protective equipment, aligning with established guidelines.
- Safely select, employ, and maintain tools, handle materials following safety guidelines, and implement safety measures

<b>Duration:</b> 04:00	<b>Duration:</b> 04:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the importance of meticulous compliance with health and safety standards.</li> <li>• Elaborate on the principles of maintaining a secure working environment and implementing safety measures.</li> <li>• Explain the significance of identifying and utilizing suitable personal protective equipment (PPE).</li> <li>• Elaborate on the importance of safely selecting, employing, and maintaining tools while following safety protocols.</li> <li>• Explain the principles of selecting and handling materials safely, adhering to safety guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>• Employ suitable methods to meticulously comply with health and safety standards.</li> <li>• Implement and maintain a secure working environment, incorporating safety measures.</li> <li>• Apply the correct use of personal protective equipment (PPE) in line with established guidelines</li> <li>• Safely select, employ, and maintain tools, following safety protocols diligently.</li> <li>• Handle materials safely, adhering to safety guidelines, throughout practical tasks.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 16: Efficient Work Area Planning

Mapped to FFS/N8209, v 1.0

### Terminal Outcomes:

- Strategically plan work areas, prioritizing efficiency and regular tidying
- Execute work efficiently, vigilantly monitoring progress to prevent unnecessary costs

<b>Duration: 02:00</b>	<b>Duration: 04:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss the principles of developing a strategic plan for the work area</li> <li>• Explain the importance of performing work efficiently and monitoring progress to prevent unnecessary costs.</li> </ul>	<ul style="list-style-type: none"> <li>• Implement and adjust a strategic plan for the work area, emphasizing efficiency and regular tidying</li> <li>• Demonstrate the ability to perform work efficiently, monitoring progress to prevent unnecessary costs.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 17: Client Trust Development and Self-Assessment

Mapped to FFS/N8209, v 1.0

### Terminal Outcomes:

- Engage in critical self-assessment, consistently seeking improvements, showcasing a dedication to personal growth and excellence.
- Foster client trust through proactive management of expectations and the delivery of sound advice

<b>Duration:</b> 02:00	<b>Duration:</b> 02:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Elaborate on the importance of critical self-assessment and the implementation of improvements in personal work.</li> <li>• Explain the importance of cultivating client trust through proactive management of expectations and offering sound advice.</li> </ul>	<ul style="list-style-type: none"> <li>• Critically assess personal work and implement improvements throughout practical tasks</li> <li>• Proactively manage client expectations and offer sound advice, enhancing trust through practical interactions.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 18: Supplier Relations, Estimation, and Order Management

Mapped to FFS/N8209, v 1.0

### Terminal Outcomes:

- Engage effectively with suppliers for negotiations and adapt to changing circumstances
- Demonstrate financial proficiency by providing accurate estimates for clients and ordering components with sufficient lead time

<b>Duration:</b> 02:00	<b>Duration:</b> 04:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Elaborate on the principles of engaging with suppliers effectively for negotiations and order placement.</li> <li>• Explain the importance of providing accurate estimates for clients, showcasing financial proficiency.</li> <li>• Elaborate on the principles of recognizing and adapting to changing circumstances efficiently.</li> <li>• Explain the importance of ordering components with sufficient lead time for seamless production continuation.</li> </ul>	<ul style="list-style-type: none"> <li>• Engage with suppliers effectively, demonstrating proficiency in negotiations and order placement.</li> <li>• Demonstrate the ability to provide accurate estimates for clients, showcasing financial proficiency.</li> <li>• Demonstrate flexibility and adaptability during changing circumstances</li> <li>• Demonstrate the ability to order components with sufficient lead time for seamless production continuation.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	



## Module 19: Collaborative Workflow Management

Mapped to FFS/N8209, v 1.0

### Terminal Outcomes:

- Demonstrate clear communication on drawings, variations, and restrictions to enhance collaboration
- Execute tasks by following instructions, meeting deadlines, and reporting progress appropriately for timely project completion

<b>Duration:</b> 02:00	<b>Duration:</b> 04:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Elaborate on the principles of clear communication regarding drawings, variations, and restrictions for effective collaboration.</li> <li>• Explain the importance of following instructions, meeting deadlines, and reporting progress for timely project completion.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the ability to communicate clearly regarding drawings, variations, and restrictions for effective collaboration.</li> <li>• Successfully applying instructions, meeting deadlines, and offering timely progress reports</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 20: Dialogue Engagement

Mapped to FFS/N8210, v 1.0

### Terminal Outcomes:

- Engage in thorough discussions on style, form, and aesthetics with clients and specialists
- Conduct precise inspections of work, minimizing issues at later stages
- Identify and articulate problems, ensuring a thorough understanding of project intricacies

<b>Duration: 06:00</b>	<b>Duration: 08:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the principles of style, form, and aesthetics relevant to cabinetry.</li> <li>• Describe the significance of precision and attention to detail in woodworking practices.</li> <li>• Outline the process of recognizing and articulating problems in project management contexts.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the ability to engage in effective discussions about style, form, and aesthetics.</li> <li>• Execute precise inspections to minimize later-stage issues, emphasizing attention to detail.</li> <li>• Demonstrate the skill of recognizing and articulating problems for a comprehensive understanding of project intricacies.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

## Module 21: Quality Enhancement and Industry Insight

Mapped to FFS/N8210, v 1.0

### Terminal Outcomes:

- Demonstrate adaptability and advanced problem-solving skills by developing inventive solutions for challenges in complex projects.
- Showcase creativity and contribute innovative ideas to enhance products, elevating overall client satisfaction

<b>Duration: 06:00</b>	<b>Duration: 10:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss the significance of adaptability and creative problem-solving in navigating complex projects.</li> <li>• Explain the role of innovation in improving product quality and client satisfaction.</li> <li>• Describe methods for staying updated on industry trends and changes</li> <li>• Explain the benefits of embracing experimentation and innovation in woodworking endeavours.</li> </ul>	<ul style="list-style-type: none"> <li>• Showcase adaptability and inventive problem-solving skills when navigating challenges in complex projects.</li> <li>• Actively contribute innovative ideas to enhance the final product and elevate client satisfaction.</li> <li>• Demonstrate the ability to stay informed about industry changes and trends through proactive learning.</li> <li>• Exhibit a proactive attitude towards experimenting with and embracing new, innovative methods.</li> </ul>
<b>Classroom Aids</b>	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).	
<b>Tools, Equipment, and Other Requirements</b>	
Workbench, Measurement and Marking Tools, Hand Tools, Power Tools, Housekeeping Tools (As per tool list)	

# Annexure

## Trainer Requirements

**A trainer should be eligible in any of below mentioned categories:**

1. Have a formal and/or recognized certification with proven industrial and/or practical experience in the relevant skill (minimum 10 years).
2. To facilitate smooth implementation of WorldSkills/IndiaSkills competition and to avoid any disruption, for the year 2024, following additional categories of trainers shall also be eligible to conduct training of WorldSkills/IndiaSkills qualifications:
  - a. Have worked as a Jury member/expert in skill competitions and other competitions of similar nature at regional/national levels  
OR
  - b. Trained/mentored competitors for IndiaSkills/ WorldSkills competitions (national/international).

**NOTE:** If a Trainer is affiliated with an organization, it is imperative to secure the endorsement of their employer, institution, or organization, including their commitment to support WorldSkills India in upcoming competitions.

## Assessor Requirements

**An assessor should be eligible in any of below mentioned categories:**

1. Have a formal and/or recognized certification with proven industrial and/or practical experience in the relevant skill (minimum 10 years).
2. To facilitate smooth implementation of WorldSkills/IndiaSkills competition and to avoid any disruption, for the year 2024, following additional categories of assessors shall also be eligible to conduct of assessment of WorldSkills/IndiaSkills qualifications:
  - a. Have worked as a Jury member/expert in skill competitions and other competitions of similar nature at regional/national levels  
OR
  - b. Trained/mentored competitors for IndiaSkills/ WorldSkills competitions (national/international).

**NOTE:** If an Assessor is affiliated with an organization, it is imperative to secure the endorsement of their employer, institution, or organization, including their commitment to support WorldSkills India in upcoming competitions.

## Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the learner on the required competencies of the program.

The following skill assessment strategy and procedures for the skill competition are taken into account:

### A - Interior Joints:

- Criteria: Surfaces should be flat with minimum saw/chisel marks, and no overcutting at internal joint faces.
- Assessment Method: Experts will assess the accuracy and cleanness of joints and cuts.

### B - Dimensions:

- Criteria: Members should be cut and assembled with high accuracy; dimensions are identified on the marking team's drawings.
- Assessment Method: Two groups of three Experts will measure dimensions; if results differ by more than 0.5 mm, a third team of two Experts will confirm measurements.

### C - Exterior Joints:

- Criteria: Joints formed with no gaps; the biggest gap in each cluster of joints is measured.
- Assessment Method: Joints are assessed by three Experts.

### D - Neatness of Finish, Cleanness, and General Impression:

- Criteria: All members in place, no unsightly joints, flat surfaces, accurate backing bevels, minimal pencil marks and stains, neat screw fixings.
- Assessment Method: Overall project judged by Experts for neatness, cleanness, and general impression.

### E - Use of Material:

- Criteria: Complete the project using provided material, optimize material ordering, no re-cutting after interior joints are marked, no sanding/planning after assembly.
- Assessment Method: Experts will ensure compliance with material use criteria.

### Assessment Procedures:

1. Team Allocation: Chief Expert allocates Experts into marking teams based on WorldSkills experience, language, and culture considerations.
2. Assigned Aspects: Each marking team is allocated specific aspects of the project to assess for all competitors.
3. Competitor Requests: Competitors can request permission for recuts (up to four) or a new piece of wood (up to two) up to their deduction credit.

### Additional Notes:

1. Communication: Clear communication between marking teams and competitors is essential.
2. Consistency: Marking teams should ensure consistency in applying assessment criteria.
3. Transparency: Competitors should be aware of the deduction credit available for recuts and new pieces.
4. Fairness: The assessment process should be fair and unbiased, considering competitors' requests within the defined limits.

This strategy aims to ensure a comprehensive and fair evaluation of skills in the WorldSkills competition, emphasizing accuracy, neatness, and adherence to specified criteria.

## References

## Glossary

Term	Description
<b>Declarative Knowledge</b>	Declarative knowledge refers to facts, concepts, and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
<b>Key Learning Outcome</b>	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (Theory) and skills (practical application).
<b>OJT (M)</b>	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on-site
<b>OJT (R)</b>	On-the-job training (Recommended); trainees are recommended the specified hours of training on-site
<b>Procedural Knowledge</b>	Procedural knowledge addresses how to do something or how to perform a task. It is the ability to work or produce a tangible work output by applying cognitive, affective, or psychomotor skills.
<b>Training Outcome</b>	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
<b>Terminal Outcome</b>	The terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.



## Acronyms and Abbreviations

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
QC	Quality Checking
PwD	Person with Disability
ToT	Training of Trainers
ToA	Training of Assessors
FFSC	Furniture and Fittings Skill Council
TP	Training Partner
PC	Performance Criteria
NA	Not Applicable
PPE	Personal Protective Equipment