







Model Curriculum

QP Name: Master Carpenter

QP Code: FFS/Q2204

QP Version: 2.0

NSQF Level: 5

Model Curriculum Version: 2.0

Furniture and Fittings Skill Council || Furniture and Fittings Skill Council (FFSC), 407-408, DLF City Court, MG Road, Sikanderpur, Gurgaon - 122002







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Training Parameters

Sector	Interiors, Furniture and Fixtures
Sub-Sector	Furniture Business Development, Installation & After Sales
Occupation	Furniture Installation & After Sales
Country	India
NSQF Level	5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7115.0300
Minimum Educational Qualification and Experience	Completed 2 nd year of 3-year/ 4-years UG Or Pursuing 2 nd year of 3-year/ 4-years UG and continuing education Or Completed 2 nd year of diploma (after Grade 12) Or Pursuing 2 nd year of 2-year diploma after Grade 12 Or Grade 12 pass with 2 years of any combination of NTC/NAC/CITS or equivalent. Or Completed 3-year diploma after Grade 10 with 1 year of relevant experience Or Grade 12 pass with 1-year of NTC/NAC with 1 years of relevant experience Or Completed 1 st year of 3-year/ 4-years UG with 1 year of relevant experience Or Grade 12 pass with 2 years of relevant experience Or Grade 10 pass with 4 years of relevant experience Or Previous relevant Qualification of NSQF Level 4.5 (Carpenter) with 1.5 years of relevant experience Or Previous relevant Qualification of NSQF Level 4.0
Minimum Level of Education for Training in	(Assistant Carpenter) with 3 years of relevant experience Not Applicable
School Pre-Requisite License or Training	NA NA
Minimum Job Entry Age	18 Years







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Last Reviewed on	31-08-2023
Next Review Date	31-08-2026
NSQC Approval Date	31-08-2023
Q.P. Version	2.0
Model Curriculum Creation Date	05-06-2023
Model Curriculum Valid Up to Date	31-08-2026
Model Curriculum Version	2.0
Minimum Duration of the Course	720 hours
Maximum Duration of the Course	720 hours







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:

- Define different types of Architectural and Interior Projects.
- Categorize and describe different raw materials and architectural hardware.
- Categorize and describe different advanced power tools, equipment, and machinery.
- Describe the organisational map of Furniture Industry and highlight the importance of Furniture and Fittings Installation occupation.
- List the Key Result Areas of the Master Carpenter's Role.
- Define the scope of work for various types of projects.
- Estimate the cost of different types of Products and Projects.
- Analyse and estimate the resources required for the project.
- Plan, organize, and manage various tasks and teams.
- Describe the vendor management principles and apply the same during project execution.
- Explain the grievance redressal guidelines and conduct performance review.
- Describe and examine the project design dockets and product drawings.
- Prepare and review the fabrication and assembly of products for different types of projects.
- Apply surface finishing techniques on different types of products.
- Perform and review installation of product components and architectural hardware.
- Demonstrate project and team supervision techniques.
- Plan and conduct periodic quality check and handover.
- Follow and ensure the compliance of the Occupational Health and Safety protocols.
- Explain the methods for Material Conservation and Resources Optimization.
- Describe the process and significance of World Skills Competitions.
- Demonstrate the process of fabrication, assembly, installation, and finishing for different types of products during On-the-Job Training.

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
Bridge Module(s)	24:00	36:00	00:00	00:00	60:00
Module 1: Introduction to various Architectural and Interior Projects	04:00	08:00	00:00	00:00	12:00







Module 2: Introduction to advanced raw materials and architectural hardwares	06:00	12:00	00:00	00:00	18:00
Module 3: Introduction to advanced power tools, equipment, and machinery	06:00	12:00	00:00	00:00	18:00
Module 4: Organizational context of Interiors Industry and employability skills	04:00	04:00	00:00	00:00	08:00
Module 5: Introduction to the role of a Master Carpenter	04:00	00:00	00:00	00:00	04:00
FFS/N2220: Assist in product costing and resource planning for on-site activities of the various projects NOS Version No. 2 NSQF Level- 5	26:00	64:00	00:00	00:00	90:00
Module 6: Defining scope of work	08:00	16:00	00:00	00:00	24:00
Module 7: Project and product costing	10:00	36:00	00:00	00:00	46:00
Module 8: Resource planning and management	08:00	12:00	00:00	00:00	20:00
FFS/N2221: Ensure proper work allocation and team management for the projects NOS Version No. 2 NSQF Level- 5	26:00	34:00	00:00	00:00	60:00
Module 9: Team and task management	08:00	14:00	00:00	00:00	22:00
Module 10: Vendor management	10:00	12:00	00:00	00:00	22:00
Module 11: Grievance redressal and performance management	08:00	08:00	00:00	00:00	16:00







					3
FFS/N2222: Perform and review the fabrication, assembly, finishing, and installation activities for different projects NOS Version No. 2 NSQF Level- 5	36:00	144:00	00:00	00:00	180:00
Module 12: Project design dockets and product drawings	12:00	24:00	00:00	00:00	28:00
Module 13: Supervise work at the on-site	04:00	24:00	00:00	00:00	24:00
Module 14: Fabrication, Assembly, and Surface Finishing of the products	06:00	40:00	00:00	00:00	44:00
Module 15: Installation of product and architectural hardware	06:00	32:00	00:00	00:00	36:00
Module 16: Project Supervision, Quality Check, and Handover	08:00	24:00	00:00	00:00	32:00
DGT/VSQ/N0102: Employability Skills (60 Hours) NOS Version No. 1 NSQF Level- 4	30:00	30:00	00:00	00:00	60:00
Module 17: Employability Skills	30:00	30:00	00:00	00:00	60:00
FFS/N8203: Maintain health, safety, and greening practices at the worksite NOS Version No. 3 NSQF Level- 5	12:00	18:00	00:00	00:00	30:00
Module 18: Health, safety, and hygiene protocols	08:00	12:00	00:00	00:00	20:00
Module 19: Material Conservation and resources optimization	04:00	06:00	00:00	00:00	10:00
Bridge Module	06:00	24:00	00:00	00:00	30:00
Module 20: World Skills Competition and Skillingopportunities	06:00	24:00	00:00	00:00	30:00
On-the Job Training	00:00	00:00	210:00	00:00	210:00
Module 21: On-the Job Training for different types of products at the workshop	00:00	00:00	210:00	00:00	210:00
Total Duration	160:00	350:00	210:00	00:00	720:00







Module Details

Module 1: Introduction to various Architectural and Interior Projects Bridge Module

Terminal Outcomes:

- Explain the scope and significance of the furniture industry.
- Explain the functioning of the furniture industry.
- Describe the segments of the furniture industry.
- Comprehend various processes used in the Furniture and Fittings industry.

Duration: 04:00	Duration: 08:00		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
 Discuss the relevance of the Furniture and Fittings sector in Indian and global context. List all the industries involved in the Furniture and Fittings Sector. Explain the role of a furniture in the Interior Design and Allied industries. Discuss new trends and advancements related to different types of furniture. Describe the factors affecting furniture market growth and opportunities. Describe the various stages and segments involved in fabrication of different types of furniture. 	Demonstrate how to plan the process flow of a given product based on different segments in the industry.		
Classroom Aids			
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)			

Tools, Equipment, and Other Requirements

Project/Theme Based Props as required







Module 2: Introduction to advanced raw materials and architectural hardwares

Bridge Module

Terminal Outcomes:

- Discuss the usage of different types of raw materials in the Furniture and Fittings Sector.
- Demonstrate the process of performing quality tests to check the quality of the raw materials.
- Explain the usage of different types of advanced architectural hardware and fittings.

Duration: 06:00	Duration: 12:00	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
 Describe the various types of raw materials used in manufacturing furniture. Describe the structural properties associated with different types of raw materials. List all the quality tests to check the strength and durability of the raw materials. State the various sizes and specifications associated with different types of raw materials. Describe various categories of advanced architectural hardware and fittings used in furniture manufacturing and their usage. Discuss the new trends and advancements related to raw materials and architectural hardwares. 	 Distinguish between different types of raw materials. Classify various advanced architectural hardware used in the furniture manufacturing process. Demonstrate the usage of various hardware and fittings. Demonstrate how to perform quality check of materials based on specified norms. 	

Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Workbench, Manual Tools, Electric/ Power Tools, Housekeeping- Materials, Tools and Equipment, Project/Theme based props for simulation as required.







Module 3: Introduction to advanced power tools, equipment, and machinery

Bridge Module

Terminal Outcomes:

- Describe the operational procedures for different types of advanced tools and equipment safely.
- Demonstrate the usage of advanced power tools, equipment, and machinery.

Duration: 06:00	Duration: 12:00	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
 List the various advanced tools, equipment, and machines required for a particular job, purpose, and functioning. Elaborate on the precautions to be taken while handling different electrical and mechanical products. Discuss the new trends and advancements related to tools, machines, and equipment. Explain the process of cleaning the worksite, tools, and equipment. List various Furniture Fixtures & Equipment (FF&E) required in the furniture manufacturing process. 	 Demonstrate how to use the advanced tools, equipment, and machines as per the manufacturer's manuals. Differentiate between various advanced tools and equipment and their purpose. Demonstrate how to prepare the work area and equipment for efficient job work. 	

Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Workbench, Manual Tools, Electric/ Power Tools, Housekeeping- Materials, Tools and Equipment, Project/Theme based props for simulation as required.







Module 4: Organizational context of Interiors Industry and employability skills

Bridge Module

Terminal Outcomes:

- Explain the various departments in an organisation structure.
- Explain the methods and mechanisms for effective communication.
- Demonstrate the usage of effective communication and interpersonal skills.
- Communicate and perform basic financial transactions digitally.
- Demonstrate appropriate behaviour and work ethics.
- Discuss the organizational hygiene and sanitation guidelines while working at the worksite.

Duration : <i>04:00</i>	Duration : <i>04:00</i>			
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes			
 Elaborate about various organizational processes, code of conduct, reporting matrix, and escalation hierarchy. List all the documents required to carry out the job, such as job card and checklist for oneself. Categorize the problems based on the need of the escalation in the hierarchy. State the importance of coordinating and resolving conflicts with the team members to achieve a smooth workflow. Explain the importance of team objectives and goals. Explain the difference between briefing and debriefing. Explain the basic parts of a computer, smartphones, and their functioning. Explain the importance of Internet in an assigned task. Distinguish between various social media platforms: YouTube, WhatsApp, Facebook, Twitter, etc. Summarize the Bank Account opening procedure and associated terminologies List the steps involved in a financial transaction using a suitable medium. State the significance of payment methods and gateways for financial transactions. 	 Demonstrate the use of appropriate behaviour and language while communicating with colleagues. Perform how to report problems that need escalation. Demonstrate active listening skills while communicating. Demonstrate how to fill a sample job card for the submission. Demonstrate the functioning of a computer and its accessories. Perform the process of operating an email account. Demonstrate the usage of internet to analyze and research a given task. Demonstrate how to operate various social media platforms: YouTube, WhatsApp, Facebook, Twitter, etc. Demonstrate how to open and manage a bank account. Demonstrate the steps involved in a financial transaction using a suitable medium. 			
White Board Board Marker Duster Projector Tablet Chairs Tables Court Board (Ontional)				

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Sample of Job Cards, Sample of Escalation Matrix, Organization Structure, Project/Theme based props for simulation as required.







Module 5: Introduction to the role of a Master Carpenter *Bridge Module*

Terminal Outcomes:

- Discuss how to work as per the defined role and responsibilities of a Master Carpenter.
- Discuss the scope of work for a Master Carpenter job role.

Duration: 04.00	Duration: 00:00				
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes				
 Describe the occupational map of the Furniture and Fittings industry. Describe the career progression path for a Master Carpenter job role. Describe the attributes and basic skill sets required for a Master Carpenter. Explain the role, responsibilities, and limitations of a Master Carpenter. List the various operations/activities that take place at the worksite and Master Carpenter's role in the same. Discuss the regulatory authorities, laws, and regulations related to an individual while working in the Furniture and Fittings industry. Explain the importance of job cards and timely reporting to supervisors in employee performance evaluation. List all the documents required to carry out the job, such as job sheet and checklist for oneself. 					
Classroom Aids	Classroom Aids				
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)					
Tools, Equipment, and Other Requirements					
N.A.					







Module 6: Defining scope of work Mapped to FFS/N2220 v 2.0

Terminal Outcomes:

- Explain the process of defining the scope of work for the project.
- Demonstrate the preparation of the scope of work for the assigned project.
- Explain the process of dealing with various internal and external stakeholders.
- Demonstrate the process of analysing and identifying the client needs and specifications.

Du	ration: 08:00	Duration: 16:00
Th	eory – Key Learning Outcomes	Practical – Key Learning Outcomes
•	Discuss various pre-requisites involved in interpreting details based on client specifications. Describe various materials, fittings, tools, and equipment based on different woodworking operations. Discuss the SOP of planning the project schedule and timelines. Discuss the documentation requirements during the preparation of the scope of work. Explain the various parameters affecting client interaction in terms of experience, nature of work, required job work details, etc. Describe the organizational policies associated with the resolution of client queries/ complaints. Discuss the importance of maintaining a good working relationship with clients and other agencies. Discuss various documentation requirements associated with the client interaction process.	 coordinating with team members on the work products. Analyze the product details to identify the required materials, tools, and equipment. Demonstrate how to prepare a project implementation plan. Perform the required documentation for the given project details in a specified format. Assess the requirements of the customer through discussion and understand their requirements. Demonstrate the grievance redressal process for client queries.
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Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Sample of budget and cost estimate forms







Module 7: Project and product costing Mapped to FFS/N2220 v 2.0

Terminal Outcomes:

- Explain various materials and logistics considerations while preparing a cost estimate.
- Discuss various pre-requisites involved in the preparation of a budget and cost estimates.
- Demonstrate the preparation of cost and budget estimates based on project specifications.

Duration: 10:00	Duration: 36:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Discuss the SOP involved in preparing and evaluating a budget. List all the factors which affect the budget preparation. Discuss various elements of a budget and how to factor them into the process. List all the documentation compliances with the budget preparation. Explain the process of breaking each activity into various cost heads required for budget calculation. State the importance of financial literacy. 	 Examine the product details and specifications based on client requirements for cost estimates. Interpret the product specifications for identifying the required elements in cost estimation. Employ suitable templates and tools while preparing a realistic budget. Employ suitable training methods to guide the team members about financial literacy and responsibilities.
Classroom Aids	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)	
Tools, Equipment, and Other Requirements	
Sample of budget and cost estimate forms	







Module 8: Resource planning and management Mapped to FFS/N2220 v 2.0

Terminal Outcomes:

- Explain the various pre-requisites involved in planning and organizing a physical site survey and recce.
- Discuss the process of analysing the worksite for potential health and safety hazards.
- Examine the worksite for the proper execution of activities during physical site survey and recce.

Duration : <i>08:00</i>	Duration: 12:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 List all the required tools and equipment for site survey and recce. Define the usage of mathematics and geometry skills in the site survey and recce process. Explain the correct way of using all the required tools and equipment for site survey and recce. State the importance of preparing and validating a measurement sheet. List various factors on the worksite affecting the furniture fabrication and project planning. Explain various organizational policies and codes of conduct for site survey and recce operations. 	 Demonstrate the process of planning and organizing the site survey and recce. Examine the worksite for the execution of measurement and marking activities based on specified instructions. Demonstrate how to validate the measurement sheet. Analyze the worksite to determine the assembly and installation requirements. Employ suitable organizational policies while conducting site survey and recce.
Classroom Aids	

Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Sample of job cards, Measurement and Marking Tools, Project/Theme based props for simulation as required.







Module 9: Team and task management *Mapped to FFS/N2221 v 2.0*

Terminal Outcomes:

- Describe the various elements involved in a work monitoring plan.
- State the significance of effective work monitoring plan in the project execution.
- Demonstrate the preparation of a work monitoring plan involving resources allocation for the worksite.

Duration : 08:00	Duration: 14:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 State the significance of preparing an effective monitoring and evaluation plan. List all the elements in a resource allocation and management system. Discuss how to identify various critical parameters during work monitoring. Discuss the importance of effective team management for high productivity and quality. State the significance of the feedback mechanism in the program's overall efficiency. 	 Demonstrate the process of designing an effective work monitoring plan. Demonstrate the process of demarcating materials and resources effectively. Employ suitable work monitoring techniques for timely work completion and coordination. Demonstrate the correct way of documenting the feedback, updates, and information received. Perform regular interaction with management for job work status reporting.
Classroom Aids	

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Project/Theme based props for simulation as required.







Module 10: Vendor management *Mapped to FFS/N2221 v 2.0*

Terminal Outcomes:

• Describe the process of vendor management.

Tools, Equipment, and Other Requirements

Sample procurement management form

- Discuss the review mechanism of quotation, bids received from vendors.
- Plan and execute the management of resources at the worksite.
- Describe effective ways to load, unload, and store the resources at the worksite.

Duration: 10:00	Duration: 12:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Explain various factors affecting the procurement plan evaluation. State the significance of various elements like price, quality, supply reliability, etc., in a procurement plan. Discuss various pre-requisites involved in marinating the required documentation compliances. List all the statutory and regulatory compliances during vendor management. Explain various techniques associated with material handling. Discuss various elements of a bill of material. 	 Analyze the procurement plan in terms of quality and costing of the work. Analyze the process of shortlisting and approval of the procurement plan. Demonstrate the process of preparing and maintaining required documentation during vendor management. Employ all the organizational policies and guidelines during vendor management. Demonstrate the process of designing and planning an effective material handling plan. Analyze the worksite for identification of required resources during project execution.
Classroom Aids	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)	







Module 11: Grievance redressal and performance management Mapped to FFS/N2221 v 2.0

Terminal Outcomes:

- Explain the steps and pre-requisites involved in the preparation of a grievance redressal and performance management system.
- State the significance of effective grievance redressal and performance management system.

Duration: 08:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Explain the role of the organizational policies in a grievance redressal mechanism. State the importance of an efficient and effective grievance redressal mechanism. Discuss the SOP involved in a grievance redressal system. Explain the role of KRA's in the performance management system of an employee. List all the pre-requisites involved in the design and implementation of a performance management system. List the factors affecting the effectiveness of a performance management system. Discuss various training delivery methods and means based on project requirement. 	 Demonstrate the process of designing a grievance redressal mechanism. Employ suitable techniques and methods to effectively address and resolve the queries, concerns, and requests. Demonstrate the process of designing an effective performance management system. Employ suitable training methods to trainthe team members in their respective roles.
Classroom Aids	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)	

Tools, Equipment, and Other Requirements

Project/Theme based props for simulation as required.







Module 12: Project design dockets and product drawings Mapped to FFS/N2222 v 2.0

Terminal Outcomes:

- Explain the process of analysing and interpreting the product specifications.
- Demonstrate the process of interpreting design specifications from the given project details.
- Discuss various standards concepts and themes associated with the engineering drawings.

Duration: 12:00	Duration: 24:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Describe various elements of an engineering drawing and layout. List all the GD&T symbols and their significance in an engineering drawing. Describe various woodworking operations and their process implementation requirements. Explain the standards concepts associated with the product design. State various storage conditions associated with the storage of engineering drawings and layouts. 	 Analyze the layouts and engineering drawings for interpreting required project details. Demonstrate the process of interpreting the GD&T symbols shown in the drawing. Demonstrate the process of planning the woodworking operations based on product specifications. Analyze the product drawings for any changes/ modifications and take necessary approvals. Demonstrate proper storage and management of product drawings.
Classroom Aids	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)	
Tools, Equipment, and Other Requirements	
Sample engineering drawing and layout	







Module 13: Supervise work at the on-site *Mapped to FFS/N2222 v 2.0*

Terminal Outcomes:

- Explain the methods for resource optimization during worksite preparation.
- Analyze the worksite for proper arrangement of materials, tools, and equipment.
- List all the necessities required while working at the worksite.

Duration: <i>04:00</i>	Duration: 24:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 State the importance of workplace management. Describe the SOP of selecting the appropriate materials based on design requirements. Describe the significance of designated bays at the worksite. Explain various techniques associated with the maintenance of tools and equipment. List all the required personal protective equipment and their significance at the worksite. Explain the working and significance of different floor and machine guards. Explain various techniques associated with housekeeping using appropriate tools and equipment. 	 Demonstrate the process of effective resource management at the worksite. Employ suitable materials and specifications based on design requirements. Demonstrate the process of organizing the materials, tools, and equipment at the designated bays. Demonstrate the correct use of tools and equipment based on manufacturers' instructions. Organize the appropriate personal protective equipment for all the personals at the worksite Demonstrate the application of floor and machine guards during working. Employ suitable methods and equipment for timely maintenance and cleaning of tools and equipment. Analyze the worksite for any safety hazards.

Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Workbench, Manual Tools, Electric/ Power Tools, Project/Theme based props for simulation as required.







Module 14: Fabrication, Assembly, and Surface Finishing of the products Mapped to FFS/N2222 v 2.0

Terminal Outcomes:

- Describe the pre-requisites associated with different woodworking operations.
- Demonstrate the fabrication of product using suitable woodworking operations.
- Demonstrate assembly of product components using appropriate fasteners and adhesives.

Duration: 06:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Discuss the steps and pre-requisites involved in planning and organizing work activities. Explain the working mechanisms of different hand and power tools used in woodworking operations. Discuss different types of fasteners and their area of application in the assembly process. List all the safety precautions associated with the fabrication process. State the significance of finishing the product into required specifications. 	 Demonstrate the process of interpreting job work requirements. Demonstrate the safe use of different hand and power tools. Employ and plan the appropriate woodworking operation based on the product specifications. Analyze the assembled product for accurate joint formations. Perform assembly of components safely and accurately. Demonstrate the process of finishing the product surface into specified specifications.

Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Workbench, Manual Tools, Electric/ Power Tools, Project/Theme based props for simulation as required.







Module 15: Installation of product and architectural hardware Mapped to FFS/N2222 v 2.0

Terminal Outcomes:

Explain various techniques associated with the assembly and installation of different types of products and accessories.

Duration : <i>06:00</i>	Duration : <i>32:00</i>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 List various installation procedures and equipment based on different types of products. Discuss various pre-requisites involved in the installation of the finished products. Explain various advanced architectural hardwares, tools, fasteners, and adhesives for efficient installation. 	
Classroom Aids	

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Workbench, Manual Tools, Electric/ Power Tools, Project/Theme based props for simulation as required.







Module 16: Project Supervision, Quality Check, and Handover *Mapped to FFS/N2222 v 2.0*

Terminal Outcomes:

- Explain the process of performing quality checking based on product specifications.
- State the role of product ergonomics in the product quality.

Duration : 08:00	Duration: 24:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Discuss the various elements of a quality control plan. List all the defects and deformations associated with the finished products and their remedial actions. Discuss various structural properties associated with different types of materials. Discuss the SOP associated with assessing the finished product for required specifications. Discuss the need for documenting at various stages of project execution. 	 Demonstrate the process of preparing a quality control plan. Employ suitable methods and tools for fault rectification. Demonstrate the process of checking the strength and load-bearing capacity of the finished furniture. Analyze the finished product for required finishes and specifications. Demonstrate the process of record-keeping and reporting to the supervisor.
Classroom Aids	
White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional) Tools, Equipment, and Other Requirements	
N.A.	







Module 17: Employability Skills Mapped to DGT/VSQ/N0102, v 1.0

Terminal Outcomes:

Duration: 30:00

Theory - Key Learning Outcomes

- Understand basics of 21st-century learning concepts like Blended Learning, Facilitation & Self Learning.
- Discuss the concept of Employability skills and their importance towards organizational growth.
- Explain the role of Employability skills in the future of work during changing markets and scenarios.
- Demonstrate steps involved in preparing a career plan using a specified tool kit.
- Employ suitable employability skills while working in an organization or at a workplace.
- Demonstrate the process of preparing sample session plans and related templates using the specified toolkit.

Duration: *30:00*

telephone.

Practical - Key Learning Outcomes

 Discuss the significance of working collaboratively with others in a team.

effective communication.

- Discuss the significance of escalating sexual harassment issues as per the POSH act.
- Outline the importance of selecting the right financial institution, product, and service.
- Discuss the legal rights, laws, and aids.
- Describe the role of digital technology in today's life.
- Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, emails, etc., safely and securely.
- Explain the types of entrepreneurship and enterprises.
- Discuss how to identify opportunities for potential business, sources of funding and

- etc. in personal or professional life.
 Show how to use basic English sentences for everyday conversation in different contexts, in person and over the
- Read and interpret text written in basic English.
- Write a short note/paragraph / letter/e mail using basic English.
- Create a career development plan with well-defined short- and long-term goals.
- Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
- Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD.
- Demonstrate how to carry out offline and online financial transactions, safely and securely.







associated financial and legal risks with its mitigation plan.

- Describe the 4Ps of Marketing-Product, Price, Place, and Promotion and apply them as per requirement.
- Describe the significance of analyzing different types and needs of the customers.
- Explain the significance of identifying customer needs and responding to them in a professional manner.
- Discuss the significance of maintaining hygiene and dressing appropriately.
- Discuss the significance of maintaining hygiene and confidence during an interview.

- List the common components of salary and compute income, expenditure, taxes, investments, etc.
- Demonstrate how to operate digital devices and use the associated applications and features, safely and securely.
- Create sample word documents, excel sheets, and presentations using basic features.
- utilize virtual collaboration tools to work effectively.
- Create a sample business plan, for the selected business opportunity.
- Create a professional Curriculum Vitae (CV).
- Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively.
- Perform a mock interview.
- List the steps for searching and registering for apprenticeship opportunities.

Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional).

Tools, Equipment, and Other Requirements

Sample CV and Biodata, Payment Gateway Devices, Sample Business Plan, Sample formats for English communication.







Module 18: Health, safety, and hygiene protocols Mapped to FFS/N8203 v 3.0

Terminal Outcomes:

- Describe how to maintain a health, safe and secure environment at workplace.
- Demonstrate health and safety procedures.
- Employ personal hygiene practices at the worksite.

Duration: 08:00	Duration: 12:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Discuss the importance of complying with organizational health, safety and security policies and procedures. Discuss the various types of cleaning consumables and equipment. Discuss the importance of following the standard operating procedures (SOP) of the organisation w.r.t cleaning and hygiene practices. Distinguish between different colour coded dustbins. Explain the importance of maintaining housekeeping documents. Label appropriate personal protective equipment needed for a job role and their application. Discuss the significance of maintaining work ethics, dress code, and personal hygiene. Explain the operational guidelines for the usage of emergency tools and equipment. List the various causes of fires and the safety procedures associated with it. Explain different types of fire and fire extinguishers to be used. Explain the steps involved in responding to an emergency situation. Describe the first aid procedures in case of emergency. Describe the types of hand signals, and signage and its application. Discuss various storage and handling procedure associated with hazardous substances. State the benefits associated with the periodic cleaning of tools and equipment. State the importance of safe lifting practices and correct body postures. 	 Illustrate different types of cleaning equipment and consumables. Employ the suitable process to report any deviations to appropriate authority. Demonstrate the identification of possible breaches in health, safety, and security policies. Demonstrate different disposal techniques depending upon different types of waste. Demonstrate the process of record-keeping and reporting to the supervisor. Demonstrate the use of personal protective equipment such as goggles, gloves, earplugs, shoes, etc. Demonstrate the correct way of sanitizing and washing hands. Demonstrate the use of emergency tools and equipment. Illustrate the emergency evacuation process in line with organizational protocols. Apply effective preventive measures in case of a fire. Demonstrate how to use equipment safely like fire extinguishers. Design a contingency plan for emergency situations like fire, short circuit, accidents, earthquake, etc. Demonstrate the use of First Aid, CPR and safety evacuation process as part of routine operations. Identity and interpret the given pictorial representations of safety signs and hand signals. Demonstrate the correct techniques while working and handling hazardous materials at







- Employ appropriate techniques for disposing hazardous materials.
- Demonstrate the correct postures while working and handling hazardous materials at the workplace.

Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Personal Protective Equipment, Housekeeping- Materials, Tools and Equipment, Project/Theme based props for simulation as required.







Module 19: Material conservation and resources optimization Mapped to FFS/N8203 v 3.0

Terminal Outcomes:

- Implement safety practices and optimize the use of resources.
- Apply conservation practices at the worksite.
- Illustrate sustainable practices at workplace for energy efficiency and waste management.

Duration: <i>04:00</i>	Duration : <i>06:00</i>				
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes				
 Explain the importance of efficient utilization and conservation of material. State the difference between renewable and non-renewable sources of energy. Explain the various ways of saving energy. Differentiate between recyclable and nonrecyclable waste. Explain the importance of effective utilization of electrical appliances. 	 Demonstrate various techniques of effective utilization of resources. Employ ways for efficient utilization of material and water. Illustrate the process of collecting and analysing the energy utilization data. Employ suitable energy efficient practices in the process. Sort the various reusable materials from the waste accumulated. Practice the segregation of recyclable and nonrecyclable waste. Demonstrate different methods of energy resource use optimization and conservation. 				

Classroom Aids

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Housekeeping- Materials, Tools and Equipment, Project/Theme based props for simulation as required.







Module 20: World Skills Competition and Skilling opportunities *Bridge Module*

Terminal Outcomes:

- Explain the significance and scope of the WorldSkills Competition.
- Discuss the career prospects associated with the candidates and officials in the skill competition.
- Demonstrate the marking and assessments of the given test projects based on World Skill Competition guidelines.

Duration: 06:00	Duration: 24:00				
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes				
 State the significance of the World Skills Organization. Discuss the different categories of sectors and trades as per the WorldSkills Competition. State the differences and similarities between Carpentry, Cabinet Making, and Joinery trades. Describe the selection criteria for a jury, workshop manager, and sector expert in the WorldSkills and India Skills Competition. Illustrate the role of a jury, workshop manager, and sector expert in the skill competition. Discuss the marking and assessment techniques used in the skill competitions. Discuss the career prospectus associated with the WorldSkills and India Skills Competition for candidates and officials. 	 Demonstrate the process of work area setup for conducting skill competition. Analyze and prepare the workflow of the given test project for the skill competition. Examine the available raw materials, tools, and equipment based on product specification requirements. Demonstrate the marking of the given test project based on specified format. Analyze the given test project for quality checking based on assessment guidelines. Prepare a detailed report of the project with suggestive measures of improvement. 				
Classroom Aids					

White Board, Board Marker, Duster, Projector, Tablet, Chairs, Tables, Smart Board (Optional)

Tools, Equipment, and Other Requirements

Workbench, Personal Protective Equipment, Measurement and Marking Tools, Manual Tools, Electric/ Power Tools, Housekeeping- Materials, Tools and Equipment, Theme based props







Module 21: On-the-Job Training for different types of products at theworkshop

Mapped to FFS/Q2204 v 2.0

Mandatory Duration: 210:00 **Recommended Duration:** 00.00

Module Name: On the Job Training

Location: On Site
Terminal Outcomes

- Prepare a cost estimate for the given project details.
- Display vendor management skills for on-site work coordination.
- Create a list of manufacturing equipment to be used for producing different typed of products.
- Identity the various components of a given product for fabrication purposes.
- Prepare a cutting list for the given product details.
- Perform measurement and marking activities and provide validation of the same.
- Demonstrate the effective ways to manage the materials, tools, and equipment in a manufacturing plant.
- Perform pre-processing on raw materials based on different product specifications.
- Demonstrate the process of cutting, edge banding, trimming, drilling, pasting on materials based on the design specifications of the product.
- Perform fabrication, assembly, installation, and finishing operations for the given products.
- Demonstrate the assembly and fittings for various architectural hardware, fittings, and accessories.
- Demonstrate how to use different hand tools and machines.
- Demonstrate how to use different heavy types of machinery.
- During the fabrication process, demonstrate various quality-related jobs, such as maintenance, calibration, testing, QC inspection, rectification of defects, etc.
- Demonstrate various safety-related practices during the fabrication of different types of products.
- Maintain a safe and secure environment at the manufacturing plant.
- Maintain compliance with the organizational, environmental- related guidelines.
- Coordinate with supervisors and colleges for job work information.
- Employ effective communication skills while working with the supervisor and clients.
- Demonstrate the integration of metals, stones, glass, inlays, etc. with the wood and panels.
- Employ suitable methods for fault identification and rectification during product fabrication.
- Demonstrate grievance redressal of the queries and complaints from the collogues and clients based on organizational policies.







Annexure

Trainer Requirements

	Trainer Prerequisites – either one of the 5 options						
Minimum Educational			evant Industry Experience	Training Experience		Remarks	
Qualification		Years	Years Specialization		Specialization		
Graduate	Engineering (Civil, Mechanical), Architecture, Interior Design, Furniture Manufacturing, Wood Work, Product Design or Any other discipline	8	Furniture manufacturing/ Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architecture	1	Preferable - Vocational or Academic Training	Preferable - Additional Certification related to specialization in furnitureo interior design sector (Software like AutoCAD, etc), CommunicationSkills	
ITI	Carpentry, Furniture Manufacturing	9	Furniture manufacturing/ Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architecture	1	Preferable - Vocational or Academic Training	Preferable - Additional Certification related to specialization in furniture or interior design sector (Software like AutoCAD, etc), Communication Skills.	
Diploma	Carpentry, Furniture Manufacturing	9	Furniture manufacturing/ Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architecture	1	Preferable - Vocational or Academic Training	Preferable - Additional Certification related to specialization in furniture or interior design sector (Software like AutoCAD, etc), Communication Skills.	
Certificate- NSQF	NSQF Level 5 Master Carpenter (FFS/Q2204)	4	Furniture manufacturing/ Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architecture	1	Preferable - Vocational or Academic Training	Required- Work Experience and Recommendation letter from Employer, Certificates of Training from companies. Preferable - Additional Certification related to specialization in furniture or interior design sector (Software like AutoCAD, etc.), Communication Skills.	













Assessor Requirements

	Assessor Prerequisites - either one of the 5 options					
Minimum Educational	Relevant Industry Evnerience		Training/Assessme nt Experience		Remarks	
Qualification		Years Specialization		Years	Specialization	
Graduate	Engineering (Civil, Mechanical), Architecture, Interior Design, Furniture Manufacturing, Wood Work, Product Design or Any other discipline	8	Furniture manufacturing/ Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architecture	1	Preferable - Vocational or Academic Training	Preferable - Additional Certification related to specialization in furniture or interior design sector (Software like AutoCAD, etc), Communication Skills.
IΤΙ	Carpentry, Furniture Manufacturin g	9	Furniture manufacturing/ Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architecture	1	Preferable - Vocational or Academic Training	Preferable - Additional Certification related to specialization in furniture or interior design sector (Software like AutoCAD, etc), CommunicationSkills.
Diploma	Carpentry, Furniture Manufacturing	9	Furniture manufacturing/ Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architecture	1	Preferable - Vocational or Academic Training	Preferable - Additional Certification related to specialization in furniture or interior design sector (Software like AutoCAD, etc), CommunicationSkills.
Certificate- NSQF	NSQF Level 5 Master Carpenter (FFS/Q2204)	4	Furniture manufacturing/ Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architecture	1	Preferable - Vocational or Academic Training	Required- Work Experience and Recommendation letter from Employer, Certificates of Training from companies. Preferable - Additional Certification related to specialization in furniture or interior design sector (Software like AutoCAD, etc.), Communication Skills.



80%.





	NSOF Lovel F F		Furniture manuf	O .		Droforable	Required- Work Experience and Recommendation letter from Employer, Certificates of Training
Certificate- NSQF	NSQF Level 5.5 Furniture Production and Installation Supervisor Or Above	3	Furniture Design/ Furniture Installation/Carpentry/ Interior Design/ Architectu			Preferable - Vocational or Academic Training	from companies. Preferable - Additional Certification related to specialization in furniture or interior design sector (Software like AutoCAD, etc.), CommunicationSkills.
	Assessor Certification						
	Domain Certification			Platform Certification			
Certified for Job Role: "Master Carpenter" mapped to QP: "FFS/Q2204, v2.0" Level 5.		Recommended that the Assessor is certified for the Job Role: "Assessor (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2701, v2.0".					

The minimum accepted score as per FFSC guidelines will be The minimum accepted score will be 80% aggregate.







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.

At FFSC, we believe to gauge the performance of a candidate a holistic approach for Assessment is essential. As such we have devised a multi-tier process to keep track of candidate overall progress at various stages. While a few techniques are imbibed as part of the training delivery program, others are explicit ways of testing. These are:

- 1. Internal (Preferred)
 - a. Trainer Led Assessment
 - b. Master Trainer/ Program Mentor Led Assessment
- 2. External
 - a. Assessment Partners/ Freelance Assessors (Mandatory)
 - b. Industry (Preferred)

1. Internal (Preferred)

a. Trainer Led Assessment:

As part of the Training Delivery Program, various tests and projects are designed at regular intervals to gauge the progress of the candidate during the training program. These are mix of Theory and practical, individual and group activities.

Trainers will be provided specific training under the ToT programs to conduct these assessments. A report of the same will be submitted to the assigned Master Trainer/ Program Mentor.

b. Master Trainer/ Program Mentor Led Assessment:

Every trainer/ batch should be connected with a Master Trainer/ Program Mentor, who will keep a check on the progress of the batch. Trainer can consult the Master Trainer/ Program Mentor with regards to training delivery or conducting periodic assessments.

Master Trainer/ Program Mentor may conduct their own session to assess the progress of the candidates, using the means as deemed suitable and feasible.

2. External

a. Assessment Partners/ Freelance Assessors:

An external assessment shall mandatorily be conducted be Assessment Partners via ToA certified Assessors or ToA certified Freelance Assessors. There are 3 key stages of any assessment activity – Pre-Assessment, During Assessment, and Post Assessment. The defined system for conducting the Assessment shall be followed at each stage.

FFSC Training and Assessment Team or any other assigned authority by FFSC, may conduct surprise or planned visits and checks from quality assurance and monitoring perspective.

The requirements and details of each stage are as highlighted below:







1. Pre-Assessment:

- a. Assessment Partner/ Assessor/ Freelance Assessor Validation
- b. Training Centre Check for Assessment Setup/Infra
- c. Question Papers submission by Assessment Partner/ Freelance Assessor to FFSC
- d. FFSC to validate and approve the Question papers in line with NOS and PC.
- e. FFSC Affiliation and Project Assessment Approval
- f. Centre ready for Assessment intimation by Training Partner or by the assigned Neutral **Assessment Centre**
- 2. During Assessment (on the Assessment Day): The Assessment can be conducted in offline, online, or hybrid format depending on the feasibility and approvals from FFSC. Under either process the below guidelines are important to be compiled:
 - a. Check the availability of the Lab Equipment for the particular Job Role as per the mode of conducting Assessment.
 - b. Candidate Validation: Confirm the Aadhar Card details of candidates
 - c. Check the duration of the training
 - d. Check the Assessment Start and End time to be as specified in documents
 - e. Assessor/ Freelance Assessor must follow the assessment guidelines at all times.
 - f. Intimation to FFSC Training and Assessment Monitoring Team for Assessment Quality Assurance checks.
 - g. Ensure evidence of conducting Assessment is gathered as per FFSC protocol:
 - i. Time-stamped and geotagged reporting of the assessor from assessment location
 - ii. Centre photographs with signboards and scheme-specific branding
 - iii. Biometric or manual attendance sheet (stamped by T.P.) of the trainees during the training period
 - iv. Time-stamped and geotagged assessment (Theory + Viva + Practical) photographs and videos
 - h. Required documentation for submissions to the FFSC

3. Post Assessment:

- a. Timely submission of the assessment documentation and feedback to FFSC
- b. Hard copies of the documents are stored
- c. Soft copies of the documents and photographs of the Assessment are uploaded/accessed from Cloud Storage
- d. Soft copies of the documents and photographs of the Assessment stored in the Hard
- e. Any other compliance requirement as defined by FFSC

b. Industry Partner:

FFSC may engage the Industry Partners and the Subject Matter Experts to conduct the Assessment of the candidates at various stages during the training program.







References

Glossary

Term	Description
Declarative Knowledge	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.
Key Learning Outcome	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).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on-site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on-site
Procedural Knowledge	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.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	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
MS	Microsoft
PPE	Personal Protective Equipment
2D	2-Dimensional
3D	3-Dimensional
SOP	Standard Operating Procedure
AR	Augmented Reality
VR	Virtual Reality
OJT	On-the-Job Training
FF&E	Furniture Fixtures & Equipment
POC	Point of Contact
POSH	Prevention Of Sexual Harassment
CPR	Cardiopulmonary Resuscitation
KRA	Key Result Areas
GD&T	Geometric Dimensioning and Tolerancing