







# **APPRENTICESHIP CURRICULUM (OPTIONAL TRADE)**

# **Furniture and Fittings**

**Assistant Carpenter** 

**Course Code: C0082200018** 

**⊠NAPS** □Non-NAPS

NSQF Level: 4



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# **Course Details**

1.	Course Name	Assistan	Assistant Carpenter					
2.	Course Code	CO0822	CO082200018					
3.	Apprenticeship Training Duration: (2 to 4 weeks of BT is embedded in this duration as per the requirement of the establishment)  Remarks	Months	Months: 6 Months					
4.	Credit	20						
5.	NSQF Level (Mandatory for NAPS)	4		NSQC	Approval Date: 31 <sup>st</sup> August 2023			
6.	Related NSQF aligned qualification details		QP/ Qualification/ NOS Name (As applicable) Assistant Carpenter	QP/ NOS Code & Version FFS/Q2201 Version: 3.0	NQR Code  QG-04-WC-00828-2023-V2-FFSC			
7.	Brief Job Role Description	fabricati person i tools, ar the sen	The Assistant Carpenter plays the primary role of assisting in the preparation of worksite, fabrication, assembly, finishing, and installation of the products on the worksite. The person is responsible for loading, unloading, moving, and storing required materials, tools, and equipment. The individual will also perform additional tasks as delegated by the senior carpenters in construction, maintenance, repairing, remodeling at the					
8.	NCO-2015 Code & Occupation (Access the NCO 2015 volumes from: <a href="https://labour.gov.in/organizationsofmole/directorate-general-employment-training-dget">https://labour.gov.in/organizationsofmole/directorate-general-employment-training-dget</a> )	7115.03	worksite. 7115.0300 & Carpenter, Structural					

9.	Minimum Eligibility Criteria	12th grade Pass with NA of experience
	(Educational and/ or Technical Qualification)	OR
		Completed 2nd year of the 3-year diploma after 10 with NA of experience
		OR
		Completed 1st year of 3-year diploma (after 10th) and pursuing regular diploma
		(pursuing 2nd year) with NA of experience
		OR
		10th grade pass with 2-year NTC plus 1 year NAC (any combination of NTC/NAC/CITS
		or equivalent) with NA of experience
		OR
		10th grade pass and pursuing continuous schooling (for 2 years program) with NA of
		experience
		OR
		11th grade pass (and pursuing continuous schooling) with NA of experience
		OR
		11th grade pass with 1 Year of experience
		OR
		10th grade pass with 2 Years of experience
		OR
		Previous relevant Qualification of NSQF Level (Multipurpose Assistant at Level-3) with
		3 Years of experience
10.	Entry Age for Apprenticeship	16 years
11.	Any Licensing Requirements (wherever applicable)	N.A.
12.	Is the Job Role amenable to Persons with Disability	⊠ Yes □ No
		If yes, check the applicable type of Disability

Apprenticeship Curriculum: NAPS

		Locomotor	Leprosy	<b>Cerebral Palsy</b>	Dwarfism	Muscular
		Disability	Cured			Dystrophy
			Person			
		Acid Attack	Blindness	<b>Low Vision</b>	Deaf	Hard of
		Victims				Hearing
		Speech and	Intellectual	Specific	Autism	Mental
		Language	Disability	Learning	Spectrum	Illness
		Disability		Disabilities	Disorder	
						<del></del>
		Multiple	Parkinson's	Haemophilia	Thalassemia	Sickle Cell
		Sclerosis	Disease			Disease
		Multiple				
		Disabilities				
		Remarks:				
		Remarks:				
13.	Submitting Body Details	Name: Furniture	e and Fittings Sk	till Council		
		E-mail ID: info@	Offsc.in			
		Contact Numbe	er: +91 124 4513	900		
14.	Certifying Body	Furniture and Fi	ttings Skill Cour	ncil		
15.	Employment Avenues/Opportunities	After completin	g this program,	participants may l	have any of the fo	ollowing
		opportunities:				
			s an Assistant C	arpenter in a Facto	orv/Workshop	
				•	•	
		Employed a	s an Assistant C	arpenter at the W	orksite/On-site	

16.	Career Progression	Vertical Progression
		Carpenter (Level-4.5)
17.	Trainer's Qualification & Experience:	Graduate (Engineering, Architecture, Interior Design, Furniture Manufacturing, Wood
		Work, Product Design or Any other Discipline) with 3 years' experience (Industry) ,1 year experience (Teaching)
		Or
		I.T.I (Carpentry, Furniture Manufacturing) with 4 years' experience (Industry) ,1 year experience (Teaching)
		Or
		Diploma (Carpentry, Furniture Manufacturing) with 4 years' experience (Industry) ,1
		year experience (Teaching)
		Or
		Certificate-NSQF (NSQF Level 4 Assistant Carpenter (FFS/Q2201)) with 4 years'
		experience (Industry) ,1 year experience (Teaching)
		Or
		Certificate (NSQF Level 4.5 Carpenter (FFS/Q2203) Or above) with 3 years' experience (Industry) ,1 year experience (Teaching)
		Or
		8th Class (Grade 8 Pass) with 5 years' experience (Industry) ,1 year experience (Teaching)
		Or
		CITS (Relevant CITS Course) with 3 years' experience (Industry) ,1 year experience
		(Teaching)
18.	Curriculum Creation Date	07-03-2024
19.	Curriculum Valid up to Date	31-08-2026

# **Module Details**

S. No	Madula/NOS Nama Cada Varsian	Outcomes	Assessme	ent Marks	Passing Po	ercentage
3. NO	Module/NOS Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
1	Introduction to the role of an Assistant Carpenter Bridge Module	<ul> <li>Describe the Carpentry trade and its scope in the Interiors, furniture, and fittings sector.</li> <li>Describe the Installation trade and its scope in the Interiors, furniture, and fittings sector.</li> <li>Describe the roles and responsibilities of Assistant Carpenter in woodworking projects and the reporting levels.</li> <li>Explain the transition to Carpenter (Level-4) status with an overview of the apprenticeship program.</li> <li>Describe the mechanics of job card scheduling.</li> <li>Follow all the organizational policies and schedules applicable to the Assistant Carpenter job role while working.</li> <li>Practice job card management in every assigned task for effective work monitoring.</li> <li>Demonstrate the elements of the code of conduct with the employer while working.</li> </ul>	0	0	0	0
2	Introduction to raw materials, advanced architectural hardware and fittings, advanced tools, equipment, and machines  Bridge Module	<ul> <li>Describe common types and characteristics of solid wood.</li> <li>Identify and describe the application of engineered wood products.</li> <li>Describe how lumber is milled, seasoned, stored, and ordered.</li> <li>Explain the properties and usage of different types of raw materials other than wood and their applications in woodworking.</li> <li>Explain the safe usage of different hand and power tools.</li> <li>Describe the fasteners and adhesives used for wood and wood derivative materials.</li> </ul>	0	0	0	0

S. No	Module/NOS Name, Code, Version	Outcomes	Assessment Marl		Passing Pe	ercentage
3. IVO	Woodule/NO3 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		Describe the types and uses of sanding abrasives.				
		Describe the routine maintenance process for using different hand,				1
		power, and machine tools.				
		<ul> <li>List various types of advanced architectural hardware and fittings and their working procedures.</li> </ul>				
		• List the safety precautions associated with the usage of electric and power tools.				ı
		• Illustrate different factory setups and their worksite management techniques.				
		<ul> <li>Discuss various cleaning agents and equipment used for housekeeping at the worksite.</li> </ul>				
		Differentiate between different types of wood species and wood derivative materials.				ı
		Differentiate between the thickness and size of different engineered wood derivate materials.				ı
		• Identify various types of advanced architectural hardware and their technical specifications.				ı
		<ul> <li>Practice the installation of a range of advanced hardware and accessories.</li> </ul>				ı
		Inspect the safe working of tools and equipment before usage.				1
		Perform the calibration of required tools and equipment before usage.				ı
		Practice the usage of various hand tools in the woodworking process.				1
		Practice the usage of various portable power tools in the woodworking process.				
		Practice the usage of various stationary power tools in the woodworking process.				

S. No	Module/NOS Name, Code, Version	Outcomes Th	Assessme	ent Marks	Passing Po	ercentage
3. NO	Woudie/NO3 Name, Code, Version		Th.	Pr.	Th.	Pr.
		<ul> <li>Practice the usage of a portable sander for finishing processes.</li> <li>Demonstrate the safe operation and regular maintenance of portable planning and shaping equipment.</li> <li>Demonstrate the steps involved in using a miter saw and circular saw.</li> <li>Practice the working of a table saw for woodworking operation.</li> <li>Practice the usage of different marking tools for the fabrication of components.</li> <li>Demonstrate the steps involved in the sharpening of hand tools and machine blades.</li> <li>Perform the fabrication of assigned projects using appropriate fasteners, adhesives, hand, and power tools.</li> <li>Demonstrate the procedures involved in carrying out housekeeping practices at regular intervals.</li> </ul>				
3	Recce of the worksite  Mapped to NOS/N2206, v3.0	<ul> <li>Explain the importance of timely reporting and completion of job cards for the assigned work.</li> <li>Discuss the process of analyzing and interpreting the worksite layouts, drawings, and blueprints.</li> <li>List all the tools and equipment used for conducting the site survey.</li> <li>Explain the steps involved in conducting a site survey and recce.</li> <li>Describe various methods and techniques involved in carrying out mathematical calculations.</li> <li>Describe various health and safety considerations at the worksite.</li> <li>Explain various documentation pre-requisites for site survey and recce operations.</li> <li>Interpret and extract the information from the given job card.</li> </ul>	10	31	70%	70%

S. No	Module/NOS Name, Code, Version	Outcomes Assessment Marks Passir		1		ercentage
3. 140	Wouldey 1403 Hairie, Code, Version	Outcomes		Pr.	Th.	Pr.
		<ul> <li>Interpret the survey data using a set of blueprints and engineering drawings.</li> <li>Prepare the recce checklist based on the defined scope of work.</li> <li>Segregate the different tools and equipment required for conducting a site survey.</li> <li>Perform the physical site survey using appropriate tools and equipment.</li> <li>Perform geo-tagging of the location during the survey.</li> <li>Perform the identification and marking of HVAC, electrical, plumbing points, etc., while conducting site survey and recce.</li> <li>Analyze the worksite and prepare a list of any possible work hazards.</li> <li>Practice the measurement activity using appropriate tools and equipment.</li> <li>Practice the marking activity using appropriate tools and equipment.</li> <li>Demonstrate the use of correct formulae in mathematical calculations during site recce.</li> <li>Demonstrate the process of preparing the measurement sheet.</li> <li>Perform daily reporting of the assigned work to the supervisor.</li> </ul>				
4	Material management  Mapped to NOS/N2206, v3.0	<ul> <li>Explain the significance of preparing and maintaining a material loading/ unloading/ handling instruction sheet.</li> <li>Discuss the importance of correct material handling and storage on a worksite.</li> <li>Describe various storage conditions and appropriate equipment associated with different types of materials.</li> </ul>	9	25	70%	70%

S. No	Module/NOS Name, Code, Version	Outcomes		ent Marks	Passing Po	ercentage
3. 140	Wiodule/NO3 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Explain various batch marking and recording techniques for storing materials at the worksite.</li> <li>Discuss the techniques associated with the segregation and storage of materials.</li> </ul>				
		<ul> <li>Describe the usage of different handling equipment.</li> <li>List various safety and floor guards required during safe working at the worksite.</li> <li>Explain all the necessary steps involved in performing Quality Checks</li> </ul>				
		<ul> <li>of materials.</li> <li>Prepare the material loading/unloading/handling instruction sheets.</li> <li>Identify the appropriate handling equipment for the transportation of materials.</li> <li>Demonstrate the different techniques employed for visual quality</li> </ul>				
		<ul> <li>checks and be able to conduct them effectively.</li> <li>Practice the usage of different types of material handling tools and equipment.</li> <li>Perform the material movement using appropriate tools and equipment.</li> </ul>				
		<ul> <li>Demonstrate different techniques employed for effective storage and stacking of materials.</li> <li>Practice the segregation and sorting of the materials at the worksite.</li> <li>Demonstrate the process of record keeping using appropriate documentation formats.</li> <li>Perform effective waste disposal based on the type of waste.</li> <li>Practice visual quality checking for different types of materials at regular intervals.</li> </ul>				

S. No	Module/NOS Name, Code, Version	Outcomes	Assessme	ent Marks	Passing Pe	ercentage
3. NO	Wiodule/NO3 Name, Code, Version	Journal of Marine, Code, Version	Th.	Pr.	Th.	Pr.
5	Worksite preparation, fabrication,	• Discuss the essential elements of a tool kit for a woodworker.	3	22	70%	70%
	and installation	• Discuss the various elements of a workbench and its importance in				
	Mapped to NOS/N2206, v3.0	woodworking operations.				
		• Discuss the safety precautions associated with using electrical				
		appliances and tools at the worksite.				
		• State the preventive measures related to handling and disposal of				
		hazardous materials at the worksite.				
		Describe the process of identifying and selecting appropriate tools and				
		equipment for the required tasks.				
		• Identify and arrange all the tools and equipment at the worksite for				
		the required woodworking operations				
		• Perform the assembly and installation of the workbench at the				
		worksite.				
		Practice the sharpening of blades and edges of the woodworking tools				
		at regular intervals.				
		Check the functionality of different hand and power tools for usage at				
		the worksite.				
		Place the machine and floor guards correctly for the required				
		operation at the worksite.				
	•	Setup the miter saw, and table saw based on required woodworking				
		operations.				
		Practice cleaning and maintenance of workstation during				
		woodworking operations at regular intervals.				
		Demonstrate the efficient process of housekeeping using appropriate				
		tools and equipment.				

S No	Module/NOS Name, Code, Version Outcomes	Quitcomos	Assessme	ent Marks	Passing Percentage	
3. NO		Outcomes	Th.	Pr.	Th.	Pr.
S. No	Module/NOS Name, Code, Version  Drawings and resource management  Mapped to NOS/N2207, v3.0	<ul> <li>Describe the process of interpreting and maintaining a job card for designing and drafting operations.</li> <li>Explain various calculations and formulae to set out and confirm wood product accuracy.</li> <li>Explain the difference between different types of technical drawings.</li> <li>Discuss different elements and standards used in the technical drawings.</li> <li>Explain the steps in preparing a technical drawing using appropriate tools and equipment.</li> <li>Interpret the 2D/3D drawings of the product.</li> <li>Practice the preparation of part definition and finish specification</li> </ul>		ı		
		<ul> <li>sheet based on product technical drawings.</li> <li>Practice tracing/ drafting the product parts on the drawing board to determine the intermediate gaps, angles, and joints.</li> <li>Calculate the dimensions of the parts using product drawing and draught prepared on a drawing board.</li> <li>List all the materials and resources required based on the specified product drawings.</li> <li>Select the appropriate resources based on product drawings interpretation.</li> <li>Prepare the cutting list of the product parts based on their dimensions and material requirements.</li> <li>Practice the isometric projection of the different products using free hands.</li> </ul>				

S. No	Module/NOS Name, Code, Version	Outcomes	Assessme	ent Marks	Passing Po	ercentage
3. NO	Widutie/NO3 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
7	Joinery and fabrication of the parts of the products	• Describe various types of woodworking joints and their area of application.	22	65	70%	70%
	Mapped to NOS/N2207, v3.0	<ul> <li>Describe the application of different wood joints for fabrication, assembly, and installation.</li> </ul>				
		• Explain the usage and maintenance procedures for different hand and power tools.				
		• State the significance of jigs and fixtures in the fabrication and assembly processes.				
		• Describe the steps involved in performing different woodworking operations.				
		• List the significance of adhesives and fittings used in the joinery and fabrication of different parts of the products.				
		<ul> <li>Practice the preparation of jigs and fixtures based on different types and shapes of products using appropriate tools and equipment.</li> </ul>				
		<ul> <li>Practice the marking and measurement for preparing different types of woodworking joints.</li> </ul>				
		<ul> <li>Practice fabricating different woodworking joints and forming a frame based on the assigned project.</li> </ul>				
		• Practice the correct usage of carpentry and joinery chisels, handsaws, and other hand-held tools.				
		• Practice using power drills, power planers, power saws, power routers, and sanders for woodworking.				
		<ul> <li>Using appropriate hand and power tools, perform the woodworking involving different test projects for wood selection, cutting, sizing, planning, drilling, and shaping.</li> </ul>				

S. No	Module/NOS Name, Code, Version	Outcomes	Assessme	ent Marks	Passing Po	ercentage
3. INO	Wiodule/NO3 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Practice the planning and thicknessing of wood pieces into the desired size.</li> <li>Demonstrate the part assembly during fabrication using appropriate fasteners and fittings.</li> <li>List different types of adhesives used in the fabrication of the assigned products.</li> <li>Check the parts for conformity with the required specifications at regular intervals.</li> <li>Follow environmental and relevant health and safety regulations relating to woodworking.</li> <li>Perform housekeeping practices at regular intervals during worksite operations.</li> </ul>				
8	Assembling the various components of the product  Mapped to NOS/N2208, v3.0	<ul> <li>Describe the pre-assembly issues pertaining to the quality of the assembled products.</li> <li>Illustrate the usage of different types of hardware fittings and accessories commonly used in assembly operation.</li> <li>Describe the process of verifying the materials or parts which do not conform to the requirements.</li> <li>Describe various tools and equipment used in the assembly operation of furniture.</li> <li>Explain the various elements of an assembly drawing.</li> <li>Discuss the assembly techniques associated with different types of products.</li> <li>Check and clean the dust particles from the parts before starting the assembly work.</li> <li>Practice the reading and interpretation of assembly drawings.</li> </ul>	5	31	70%	70%

S. No	Module/NOS Name, Code, Version	Outcomes	Assessme	ent Marks	Passing Pe	ercentage
3. 140	Wiodule/ NO3 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Demonstrate the steps involved in planning and executing the assembly operation.</li> <li>Perform the segregation and arrangement of required tools, materials, equipment, and products based on assembly operation requirements.</li> <li>Practice using specific hand and power tools required for measurement, marking, and assembly operation.</li> <li>Mark the points on the finished parts for the assembly operation.</li> <li>Demonstrate the usage of appropriate work holding devices to fix and set the workpiece on the workbench as per the job work requirements.</li> <li>Use appropriate material handling equipment for lifting and handling parts during the assembly process.</li> <li>Carry out the parts' drilling, routing, cutting, and shaping using appropriate tools and equipment based on assembly process requirements.</li> <li>Select and apply suitable adhesives during the assembly operation.</li> <li>Practice the usage of fasteners for product assembly with no gaps and loose parts.</li> <li>Perform the assembly of the parts for the assigned project.</li> <li>Perform the visual inspection of the processed parts in conformance to the required specifications for the assembly process.</li> <li>Demonstrate proper housekeeping practices before and after work completion.</li> </ul>				
9	Finishing the surface of the product  Mapped to NOS/N2208, v 3.0	<ul> <li>Discuss various types of finishing defects and their preventive actions.</li> <li>Discuss various quality parameters associated with the visual aesthetic of the products.</li> <li>Explain various types of sanding paper and their grades.</li> </ul>	4	21	70%	70%
		Discuss the variety of clamps used in woodworking along with their applications.				

S. No	Module/NOS Name, Code, Version	Outcomes	Assessme	ent Marks	Passing Po	ercentage
3. 140	Wodule/NO3 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Identify and select the appropriate finishing material for the parts based on its material specifications and client requirements.</li> <li>Practice the inspection of parts joinery for minimum defects and gaps.</li> <li>Practice the usage of clamps for pasting and holding different parts of a product.</li> <li>Perform the final finishing of the product's surface by removing excess glue marks and scratches.</li> <li>Demonstrate the use of an electric orbital sander to finish the products' surface.</li> <li>Perform cleaning of finished parts using appropriate tools and materials.</li> <li>Perform a visual inspection of the finished part based on specified specifications.</li> <li>Practice the safe storage and handling of finished parts at the worksite.</li> </ul>				
10	Installation of the product and its handover  Mapped to NOS/N2208, v3.0	<ul> <li>Explain the role of Assistant Carpenter and its career prospectus for on-site installation work.</li> <li>Discuss the significance and usage of different tools and equipment required for installation work.</li> <li>Explain the various installation processes and relevant fittings associated with different types of products.</li> <li>Describe the significance of conformance to health and hygiene practices while installation at the worksite.</li> <li>Identify and mark the placement of the products for installation at the</li> </ul>	10	29	70%	70%
		<ul><li>worksite.</li><li>Practice the proper cleaning of the parts before installation work.</li></ul>				

S. No	Module/NOS Name, Code, Version	Outcomes	Assessme	Assessment Marks		ercentage
3. NO	Wiodule/ NOS Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Demonstrate the safe handling of products and their parts during the installation process.</li> <li>Demonstrate the various installation methods for installing different types of products.</li> <li>Perform installation of different types of hardware fittings on the products using appropriate tools and equipment.</li> <li>Practice using appropriate woodworking tools and equipment for preparing cutouts and slots on the products during installation.</li> <li>Comply with the electrical safety norms while installing products onsite.</li> <li>Follow health, safety, and worksite guidelines associated with working.</li> <li>Perform testing and visual inspection for the installed product's strength, durability, and functionality.</li> <li>Identify faults and failures in the installed products, if any, and carry out the preventive measure.</li> <li>Practice the final finishing of the installed product for the handover.</li> <li>Demonstrate the steps involved in the project handover at the worksite after installation.</li> <li>Practice the preparation of proper installation and handover documentation while working.</li> </ul>				
11	Health and safety practices at the worksite  Mapped to NOS/N8201, v3.0	<ul> <li>Describe the accident reporting requirements and first aid responses to common injuries.</li> <li>Describe the requirements for the usage of personal protective equipment.</li> </ul>	24	50	70%	70%

C No.	Module/NOS Name, Code, Version	Outcomes	Assessment Marks		Passing Pe	rcentage
S. No	iviodule, 1403 Ivaille, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		Describe the safe work practices used in a workshop and on-site.				
		Describe potential health hazards related to on-site work.				
		Explain the organizational practices associated with the health and				
		hygiene practices at the workplace.				
		• Explain the correct handwashing and sanitizing process at the workplace.				
		List first aid box items and their use.				
		Describe the importance of safety signs and hand signals.				
		Explain different types of fire extinguishers.				
		Apply the standard work practices used in a workshop and on-site.				
		Select and use appropriate personal protective equipment.				
		Apply the concepts of personal safety awareness and practices while				
		working at the worksite.				
		Carry out routine cleaning of workplace, tools, and equipment.				
		<ul> <li>Perform the inspection of the work area for health and safety breaches.</li> </ul>				
		<ul> <li>Practice the usage of emergency equipment like Fire extinguishers in emergencies and accidents.</li> </ul>				
		Practice the first aid responses using a first aid kit.				
		Perform mock drills at regular intervals for health and safety purposes.				
		Follow the company's emergency procedures promptly, calmly, and				
		efficiently.				
		Deal with hazards, as per the procedure, safely, competently, and				
		within the limits of authority.				
		Record all the health and safety records legibly and accurately.				

S. No	Module/NOS Name, Code, Version	Quitcomos	Outcomes Assessment Marks Passing Percenta		ercentage	
3. 110	Wiodule/1403 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Report safety and security breaches or hazards to the company's designated person.</li> <li>Demonstrate effective application of 5S principles at the workplace.</li> <li>Practice safe material handling using appropriate lifting practices and body postures.</li> <li>Adhere to company policy concerning personal hygiene.</li> <li>Practice preventive health check-ups at regular intervals.</li> </ul>				
12	Greening practices at the worksite  Mapped to NOS/N8201, v3.0	<ul> <li>Explain the importance of efficient utilization and conservation of material.</li> <li>State the difference between renewable and non-renewable sources of energy.</li> <li>Differentiate between recyclable and non-recyclable waste.</li> <li>Explain the importance of performing greening practices at the worksite.</li> <li>Explain various types of waste generated at the worksite and their safe disposal processes.</li> <li>Describe the role of effective arrangement of workstation layout and equipment for material conservation.</li> <li>Explain the significance of different organizational procedures for minimizing waste.</li> <li>Describe the importance of periodic cleaning and maintenance of tools and equipment.</li> <li>List the usage of different colored dustbins for waste segregation.</li> <li>Follow the organizational standards and policies for safe waste disposal at the worksite.</li> </ul>	11	15	70%	70%

S. No	Module/NOS Name, Code, Version	Outcomes	Assessment Marks		Passing Percentage	
3. NO	Wiodule/NO3 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Practice the efficient disposal of various types of waste.</li> <li>Select appropriate waste disposal methods based on worksite requirements</li> <li>Practice energy conservation practices while working at the worksite.</li> <li>Check the tools and equipment for proper functioning.</li> <li>If required, report the faults and maintenance lapses in the tools and equipment to the concerned personnel.</li> <li>List different energy-efficient devices employed at the workplace.</li> <li>Discuss the standard practices being followed for conserving electricity on the worksite.</li> <li>Perform segregation of waste based on different colored dustbins.</li> </ul>				
13	Employability Skills  Mapped to DGT/VSQ/N0102, v1.0	<ul> <li>List different learning and employability related GOI and private portals and their usage.</li> <li>Show how to practice different environmentally sustainable practices.</li> <li>Exhibit 21st century skills like Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.</li> <li>Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone.</li> <li>Read and interpret text written in basic English.</li> <li>Write a short note/paragraph / letter/e -mail using basic English.</li> <li>Create a career development plan with well-defined short- and long-term goals.</li> </ul>	20	30	70%	70%

S. No	Module/NOS Name, Code, Version	Outcomes	Assessme	ent Marks	Passing Pe	ercentage
3. 140	Woudie/NO3 Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.</li> <li>Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD.</li> <li>Demonstrate how to carry out offline and online financial transactions, safely and securely.</li> <li>List the common components of salary and compute income, expenditure, taxes, investments, etc.</li> <li>Demonstrate how to operate digital devices and use the associated applications and features, safely and securely.</li> <li>Create sample word documents, excel sheets, and presentations using basic features.</li> <li>Utilize virtual collaboration tools to work effectively.</li> <li>Create a sample business plan, for the selected business opportunity.</li> <li>Create a professional Curriculum Vitae (CV).</li> <li>Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively.</li> <li>Perform a mock interview.</li> <li>List the steps for searching and registering for apprenticeship opportunities.</li> </ul>				
14	Introduction to World Skills Competition and Test Project Bridge Module	<ul> <li>Describe the World Skills Competition and the three trades associated with the Interiors, Furniture, and Fittings Sector.</li> <li>Explain the participating criteria and selection process for the World Skills Competition.</li> <li>Discuss the various career prospectus related to World Skills Competition.</li> </ul>	0	0	0	0

S. No	Madula/NOS Nama Cada Varsian	Outcomes	Assessment Marks		Passing Percentage	
5. NO	Module/NOS Name, Code, Version	Outcomes	Th.	Pr.	Th.	Pr.
		<ul> <li>Discuss the relevance of the assigned carpentry test project with the World Skills Competition.</li> <li>Prepare the process flow and list of required materials for completion of the assigned test project.</li> <li>Display appropriate etiquette and behavior while working.</li> <li>Demonstrate the effective distribution of assigned test projects into different stages of fabrication based on the specified time limit.</li> <li>Check the functionality of tools and equipment before working on the assigned test project.</li> <li>Demonstrate the correct usage of health and safety equipment during working.</li> <li>Perform the drafting of test projects for determining the intermediate angles, joints, and measurements.</li> <li>Use appropriate tools and equipment to perform the marking, cutting, shaping, routing, and drilling.</li> <li>Demonstrate the fabrication of the assigned carpentry test project within the specified time.</li> <li>Perform sanding and finishing of the test project within the specified time.</li> <li>Assist the supervisor in measuring, marking, and quality checking the assigned test project for assessment.</li> <li>Demonstrate effective workplace management and waste disposal at the worksite.</li> <li>Prepare a feedback report on the skills acquired during the training program and highlight any suggestions or modifications to the trainer.</li> </ul>	Th.	Pr.	Th.	Pr.
		Total Marks	122	328	70	1%

# Glossary

Term	Description
Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be
Sector	defined as a distinct subset of the economy whose components share similar characteristics and interests.
Occupation Occupation is a set of job roles, which perform similar/related set of functions in an industry.	
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an
Job role	organization.
Occupational Standards	OS specify the standards of performance an individual must achieve when carrying out a function in the
Occupational Standards	workplace, together with the Knowledge and Understanding (KU) they need to meet that standard
(OS)	consistently. Occupational Standards are applicable both in the Indian and global contexts.
National Occupational	NOS are occupational standards which apply uniquely in the Indian context.
Standards (NOS)	1003 are occupational standards which apply uniquely in the indian context.
Declarative Knowledge	Declarative knowledge refers to facts, concepts, and principles that need to be known and/or understood in
Decidiative knowledge	order to accomplish a task or to solve a problem.
	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order
Key Learning Outcome	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
Due and well Knowledge	Procedural knowledge addresses how to do something or how to perform a task. It is the ability to work or
Procedural Knowledge	produce a tangible work output by applying cognitive, affective, or psychomotor skills.
Training Outeens	Training outcome is a statement of what a learner will know, understand and be able to do upon the
Training Outcome	completion of the training.
Torminal Outcome	The terminal outcome is a statement of what a learner will know, understand and be able to do upon the
Terminal Outcome	completion of a module. A set of terminal outcomes help to achieve the training outcome.

# Acronyms

Acronym	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

# Annexure 1: Tools and Equipment

# List of Tools and Equipment

For a Batch size of 20 Candidates

The tools and equipment required are:

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size (In Nos)
1	Working Bench- Modular	Material: Wood/Metal, Configuration: Modular design for flexibility	10
2	Bench Vice	Type: Fixed Bench Vice, Jaw Opening: Adjustable	20
3	Dustbin	Material: Durable plastic/metal, Capacity: Appropriate for waste generated	10
4	Fire Extinguisher	Type: ABC Dry Chemical, Size: As per safety regulations	1
5	Goggles	Type: Safety goggles, Lens: Impact-resistant	20
6	Ear Plug	Material: Foam/Rubber, Noise Reduction Rating: ANSI certified	20
7	Hand Gloves	Material: Leather/Rubber, Size: Various sizes available	20
8	First Aid Kit	Contents: Bandages, antiseptic, etc., Compliance: Meets workplace safety standards	1
9	Nose Mask	Type: N95 Respirator, Fit: Adjustable nose clip	20
10	Apron	Material: Durable fabric, Design: Provides protection for clothing	20
11	Safety Shoes	Material: Steel toe, durable, Compliance: Meets safety standards	20
12	Try Square- 12" (300 mm)	Material: Steel, Size: 12 inches	20
13	Try Square- 4" (100 mm)	Material: Steel, Size: 4 inches	10
14	Sliding Bevel	Material: Wood/Metal, Angle: Adjustable	10
15	Steel Ruler- 6" (150 mm)	Material: Stainless steel	5

16	Steel Ruler- 12" (300 mm)	Material: Stainless steel	20
17	Steel Ruler- 39" (1000 mm)	Material: Stainless steel	5
18	Measurement Tape 5M	Length: 5 meters, Material: Durable, marked in metric units	20
19	Marking Knife (Ambidextrous Type)	Type: Ambidextrous marking knife, Blade: Sharp for precise marking	20
20	Marking Gauge	Material: Wood/Metal, Blade: Adjustable for precise marking	20
21	Mortise Gauge	Material: Wood/Metal, Size: Standard for mortise measurements	5
22	Carpentry Pencil ("HB" Type)	Type: Standard carpenter's pencil, Lead: Medium hardness	20
23	Combination Square	Material: Steel, Features: 90-degree and 45-degree angles	1
24	Notebook	Size: Standard notebook, Paper: Durable with grid lines	20
25	Spirit Level	Type: Bubble level, Length: Standard sizes	10
26	Dividers	Material: Steel, Size: Adjustable for various measurements	20
27	Compass	Type: Drafting compass, Size: Adjustable for various circles	20
28	Set Square	Material: Steel, Features: 90-degree and 45-degree angles	20
29	Calculator (Scientific)	Type: Scientific calculator	10
30	Hand Saw- 22 inch/ 560 mm (Cross Cut Sharpened with 8TPI)	Type: Hand saw, Length: 22 inches, Teeth Per Inch (TPI): 8	20
31	Hand Saw- 26 inch/ 650 mm (Rip Style Sharp with 4-5TPI)	Type: Hand saw, Length: 26 inches, Teeth Per Inch (TPI): 4-5	2
32	Back Saw- 12 x 2.5 inch/300 x 65 mm (Rip Style Sharp with 13-15 TPI)	Type: Back saw, Size: 12 x 2.5 inches, Teeth Per Inch (TPI): 13-15	5
33	Japanese Saw (Dozuki Type)	Type: Pull saw (Dozuki type)	1

45 46 47	Pincer/ Nail Puller Allen Key Set Triangular File 4" with Handle	Type: Combination pliers, Material: Steel Sizes: Various sizes, Material: High-quality steel Length: 4 inches, Cut: Various	1 2 20
44	Cross Head Hammer	Type: Cross peen hammer, Weight: As per specifications	5
43	Wooden Mallet	Material: Wood, Weight: Suitable for carpentry work	5
42	Jack Plane- No. 5 1/2 (15" or 381mm)	Type: Jack plane, Size: No. 5 1/2, Length: 15 inches	20
41	Mortise Chisel 1/2" (12mm) with Handle	Size: 1/2", Material: High-quality steel	20
40	Mortise Chisel 1/4" (6mm) with Handle	Size: 1/4", Material: High-quality steel	20
39	Bevel Chisel 1" (25mm) with Handle	Size: 1", Material: High-quality steel	20
38	Bevel Chisel 3/4" (20mm) with Handle	Size: 3/4", Material: High-quality steel	20
37	Bevel Chisel 5/8" (16mm) with Handle	Size: 5/8", Material: High-quality steel	20
36	Bevel Chisel 1/2" (12mm) with Handle	Size: 1/2", Material: High-quality steel	20
35	Bevel Chisel 3/8" (9mm) with Handle	Size: 3/8", Material: High-quality steel	20
34	Bevel Chisel 1/4" (6mm) with Handle	Size: 1/4", Material: High-quality steel	20

54	"F" Clamps- 6"	Type: "F" clamp, Length: 6 inches	15
55	"F" Clamps- 12"	Type: "F" clamp, Length: 12 inches	15
56	Toggle Clamp	Type: Toggle clamp	15
57	Masking Tape	Type: Masking tape	1
58	Aluminium Oxide Sanding Paper- 120 Grit	Type: Sanding paper, Grit: 120	1
59	Aluminium Oxide Sanding Paper - 180 Grit	Type: Sanding paper, Grit: 180	1
60	Aluminium Oxide Sanding Paper - 400 Grit	Type: Sanding paper, Grit: 400	1
61	Fevicol	Type: Adhesive	5
62	Screw Driver tip bit set	Type: Screwdriver bit set	5
63	Screw 3x50mm (PZ head CSK)	Type: Screw	500
64	Screw 3x75mm (PZ head CSK)	Type: Screw	500
65	Electric Hand Plunge Router (Bosch/ Makita/ Dewalt etc.)	Power: As per specifications	5
66	Router Bit Set (Straight bit set)	Types: Various router bits	5
67	Electric Impact Drill Machine (Bosch/ Makita/ Dewalt etc.)	Power: As per specifications	5
68	Drill Bit Set- Twist Bit	Types: Various twist drill bits	5
69	Drill Bit Set- Lip and Spur or Brad Point	Types: Lip and spur or brad point drill bits	5
70	Drill Bit- Flat Bit (Commonly Used)	Type: Flat drill bit	5
71	Drill Bit- Forster Bit (Commonly Used)	Type: Forstner drill bit	5
72	Drill Bit- Counter Sink Bit (Commonly Used)	Type: Countersink drill bit	5
73	Electric Orbital Sander (Bosch/ Makita/ Dewalt etc.)	Type: Electric orbital sander	5
74	Disk Sanding Paper (Velcro)- 120 Grit	Type: Sanding paper, Grit: 120	5

75	Disk Sanding Paper (Velcro)- 180 Grit	Type: Sanding paper, Grit: 180	5
76	Disk Sanding Paper (Velcro)- 400 Grit	Type: Sanding paper, Grit: 400	5
77	Mitre Saw/ Circular Saw	Type: Electric circular saw or miter saw	2
78	Saw Blade- 80 Teeth	Type: Saw blade, Teeth: 80	2
79	Jig Saw with blade (Bosch/ Makita/ Dewalt etc.)	Type: Electric jig saw	2
80	Domino Jointer	Type: Joinery tool	2
81	Jointer Bit Set- 4, 5, 6, 8, 10 mm	Types: Various jointer bits	2
82	Table Saw	Type: Electric table saw	1
83	Portable Dust Collector	Type: Portable dust collector	1
84	Tack Cloth	Type: Tack cloth	2
85	Sanding Block	Type: Sanding block	2
86	Two-part Filler Or Wax Filler	Types: Wood filler, wax filler	1
87	Rubber Gloves	Type: Rubber gloves	5

### **Classroom Aids**

The aids required to conduct sessions in the classroom are:

- 1. White Board/ Green Board
- 2. Board Marker
- 3. Duster
- 4. Projector/Smart TV
- 5. Laptop
- 6. Chairs (For theory lectures)
- 7. Trainer's Table/ Podium
- 8. Storage Cabinet

### Annexure 2: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the apprentice 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.

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#### 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 geo-tagged 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

### Apprenticeship Curriculum: NAPS

- 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 Drives
- 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 programs.