

COMPETENCY BASED CURRICULUM

PM Vishwakarma

Qualification Name: Carpenter (Advance)

Version: 1.0

Submitted By:

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PM Vishwakarma Qualification Details

Vishwakarma Qualification Name	Carpenter (Advance)
Sector Name	Furniture and Fittings
Job role Description	This qualification is designed to elevate participants with their woodworking and project execution skills with a strong emphasis on precision. The program prioritizes employability, refining communication and problem-solving, while also imparting marketing expertise, digital literacy for online presence, and financial literacy for effective business management and sustained growth. This comprehensive program equips carpenters not only with technical proficiency but also with the strategic tools needed to thrive in a dynamic market environment.
Trainee's Entry Profile	Basic Literacy and Numeracy (Certified Vishwakarma's who have completed basic training and repaid their 'Enterprise Development Loan' in a minimum of one year period)
Content availability	<input type="checkbox"/> Yes Link to Access Content: <input checked="" type="checkbox"/> No Availability Date: July'24 for PH/FG (Subject to Qualification approval date and Content guidelines availability)
Curriculum Creation Date	15-03-2024
Curriculum Valid Up to Date	15-03-2027 (3 Years) (Co-terminus with the PM Vishwakarma Scheme subject to midway changes in the qualification)

Module Details

Usage of New Machinery/ Tools/ Equipment

S. No	Module Name	Learning Outcomes	Training Duration (Hours)			Delivery Methodology	Tool/Equipment Required
			Theory	Practical	OJT		
1	Setting up and organizing the workplace	<ul style="list-style-type: none"> • Explain efficient worksite organization principles and the importance of a well-organized workspace • Identify proper storage techniques for carpentry tools and equipment • Describe the importance of tool maintenance and calibration for accurate and safe carpentry work • Identify effective cleaning methods and the benefits of a clean worksite for carpentry tasks • Explain proper debris removal procedures and waste disposal regulations in carpentry • Discuss different types of workbenches and their suitability for specific carpentry tasks • Organize worksite efficiently with principles like tool zoning, storage optimization, and layout planning • Safely store carpentry tools using appropriate solutions • Maintain a clutter-free, safe, and efficient worksite 	02:00	03:00	0:00	In-class training & demonstration	Tool Kit, Workbench

		<ul style="list-style-type: none"> • Perform regular maintenance and calibration of carpentry tools, adhering to manufacturer guidelines • Implement efficient cleaning methods for a safe and organized environment • Perform debris removal and waste disposal according to regulations • Select and organize suitable workbenches for specific carpentry tasks 					
2	Advanced Tools for Carpentry	<ul style="list-style-type: none"> • Explain safety protocols and measures specific to advanced carpentry tools and machinery • Identify the characteristics and applications of various advanced carpentry tools for specific tasks • Describe the components, functions, and safety features of a stationary combi planer machine • Explain the components, functions, and safety features of a mitre saw machine • Outline the operation and maintenance procedures for portable dust collectors during machine usage • Describe the features, applications, and safety precautions associated with electric sanding machines • Explain the components, functions, and safety features of a pneumatic air band nailer • Describe the components, functions, and control of a compressor machine • Employ rigorous safety measures with advanced tools and machinery 	03:00	08:00	0:00	In-class training & demonstration	Tool Kit, Workbench

		<ul style="list-style-type: none"> • Identify and select tools based on task characteristics for optimal efficiency • Operate stationary combi planner machine with precision and adherence to safety • Demonstrate the correct process of operating and handling a mitre saw machine, ensuring precision in cutting angles • Operate and maintain a portable dust collector effectively for a dust-free working environment • Demonstrate the usage of a portable electric sanding machine for surface finishing operation • Operate a pneumatic air band nailer, ensuring secure and efficient fastening • Operate the compressor machine efficiently for pneumatic tools 					
3	Technical Drawing	<ul style="list-style-type: none"> • Explain blueprint symbols, scales, and conventions used in carpentry drawings • Discuss the steps involved in reading and interpreting an engineering drawing • Describe drawing techniques, scale, and accuracy requirements for carpentry technical drawings • Explain orthographic projection principles and their application in carpentry drawings • Discuss how technical drawing skills can be applied to address challenges in carpentry projects • Describe the process and techniques for modifying technical drawings in response to project changes 	04:00	08:00	0:00	In-class training & demonstration	Tool Kit, Workbench

		<ul style="list-style-type: none"> • Display skills to read blueprints accurately and apply details to carpentry projects • Develop accurate and standardized technical drawings for carpentry projects, applying appropriate drawing techniques • Produce orthographic projections based on technical drawings • Apply technical drawing skills to effectively address practical challenges in carpentry projects • Perform accurate and timely modifications to technical drawings in response to evolving project requirements 					
4	Efficient Woodworking and Advanced Techniques	<ul style="list-style-type: none"> • Describe wood species characteristics, strengths, and suitability for different woodworking projects • Explain advanced material layout techniques and cutting methods, including CNC technology and precision equipment • Describe advanced woodworking tools, their functions, and their applications in cutting, planing, and shaping wood • Discuss modern strategies and technologies aimed at reducing material wastage in woodworking • Explain time management principles and techniques applicable to different stages of woodworking projects 	03:00	06:00	0:00	In-class training & demonstration	Tool Kit, Workbench

		<ul style="list-style-type: none"> • Discuss traditional and modern finishing techniques, including staining, varnishing, and advanced surface treatments • Choose wood species based on project requirements and properties • Demonstrate efficiency in employing advanced techniques for material layout and cutting • Utilize advanced tools for cutting, planing, and shaping in woodworking • Apply modern strategies to minimize material wastage, incorporating innovative techniques and technologies • Manage time effectively during woodworking processes • Apply traditional and modern finishing techniques with precision 					
5	Modular Furniture	<ul style="list-style-type: none"> • Explain design principles, functionality requirements, and feasibility considerations for modular furniture • Discuss innovative concepts and their practical applications in modular furniture design and construction • Explain both traditional and modern construction methods, materials, and techniques applicable to modular furniture • Describe installation processes, safety protocols, and efficient practices related to the installation of modular furniture 	02:00	06:00	0:00	In-class training & demonstration	Tool Kit, Workbench

		<ul style="list-style-type: none"> • Discuss quality inspection criteria, craftsmanship principles, and modern quality standards for modular furniture • Evaluate creativity, functionality, and feasibility of modular furniture designs • Apply innovative concepts into modular furniture projects • Demonstrate proficiency in building modular furniture units with a blend of traditional and modern methods • Efficiently install modular furniture with adherence to safety protocols • Conduct quality inspections post-installation with a comprehensive approach 						
		Total – Duration (Hours)	14:00	31:00	0:00			
		Grand Total Duration (Hours)	45:00					

Entrepreneurship Skills, Design Workshops and Bureau of Indian Standards (BIS)

Sn	Module Name	Learning Outcomes	Training Duration (Hours)			Delivery Methodology	Tool/Equipment Required
			Theory	Practical	OJT		
1	BIS Standards in Carpentry	<ul style="list-style-type: none"> • Explain BIS standards for woodworking material selection and usage • Discuss specific BIS codes for wood, adhesives, finishes, and relevant carpentry materials • State the significance of BIS quality control in improving the efficient and quality of process • Discuss BIS standards for carpentry processes, including cutting, shaping, and finishing • Implement and adhere to BIS standards for woodworking materials, ensuring compliance and product quality • Comply with specific BIS codes for wood, adhesives, finishes, and materials to meet industry benchmarks • Adhere to BIS quality control measures in carpentry processes for consistently high-quality products • Implement BIS standards for various carpentry processes, including cutting, shaping, and finishing 	01:00	01:00	0:00	AVs, Demonstration, Individual & group activities, role play, etc.	Classroom aids, Handbooks, BIS Codes
2	Entrepreneurship Fundamentals	<ul style="list-style-type: none"> • Discuss fundamental entrepreneurship principles and their application in the carpentry context • Explain methods to recognize and assess potential business opportunities within the woodworking industry 	01:00	02:00	0:00	Demonstrate, Group activities, Role play, etc.	Classroom aids, Handbooks

		<ul style="list-style-type: none"> • Discuss stages of the entrepreneurship journey in the carpentry business • Explain components and importance of a comprehensive carpentry portfolio • Discuss effective customer interaction and client servicing skills relevant to a woodworking business • Employ entrepreneurship principles in carpentry, applying concepts like business planning and risk assessment • Recognize and assess business opportunities, identifying market needs and evaluating feasibility • Display skills to identify and navigate through different stages of the entrepreneurship journey in the carpentry business • Develop a professional portfolio demonstrating carpentry expertise for potential clients • Execute effective customer interaction skills, communicating professionally and fostering satisfaction 					
3	Design, Innovation, and Materials	<ul style="list-style-type: none"> • Describe current design elements and trends in carpentry • Explain the importance of incorporating sustainable materials in carpentry projects • Discuss market trends and modify designs based on considerations • Explain technology tools relevant to carpentry design • Discuss communication techniques for conveying carpentry design concepts persuasively 	01:30	04:00	0:00	Demonstrate, Group activities, Role play, etc.	Classroom aids, Handbooks, Design Dockets

		<ul style="list-style-type: none"> • Research and apply current design trends in carpentry, integrating contemporary features for aesthetic appeal • Demonstrate the compatibility to integrate sustainable materials into carpentry projects • Modify designs based on market trends and customer preferences for relevance and appeal • Utilize technology tools for effective carpentry designs, optimizing workflows and visualizing concepts • Communicate and present design concepts persuasively, engaging stakeholders effectively 					
4	Finance and Business Growth	<ul style="list-style-type: none"> • Explain financial planning principles, including budgeting, forecasting, and projections • Discuss funding and investment options for carpentry businesses, demonstrating research skills • Describe business proposal components, industry standards, and presentation techniques • Develop a comprehensive financial plan for a carpentry business, showcasing proficiency in budgeting and forecasting • Research funding and investment opportunities for business growth, identifying suitable options • Create a business proposal exceeding industry standard, attracting potential investors 	02:00	04:00	0:00	AVs, Demonstration, Individual & group activities, role play, etc.	Classroom aids, Handbooks, Sample Business and financial Proposal templates
5	Communication and Pitching	<ul style="list-style-type: none"> • Describe effective communication principles for client interaction and relationship management • Discuss presentation techniques and public speaking strategies for engaging communication 	01:30	06:00	0:00	AVs, Demonstration, Individual & group	Classroom aids, Handbooks

		<ul style="list-style-type: none"> • Explain components of a compelling business pitch, target audience analysis, and persuasive strategies • Showcase skills in client communication and relationship management within the carpentry business context • Display efficient presentation techniques, engaging diverse audiences through clear and compelling presentations • Demonstrate skills to deliver compelling business pitches tailored to specific target groups 				activities, role play, etc.		
6	Business Sustainability and Growth Strategies	<ul style="list-style-type: none"> • Discuss research methodologies, market analysis, and strategic planning for business expansion • Explain effective networking strategies, relationship-building, and partnership development • Outline components of a comprehensive long-term growth plan for the carpentry business • Conduct research on expansion opportunities and collaboration strategies, identifying viable prospects • Engage in networking activities and establish beneficial partnerships for sustainability and growth • Develop a dynamic long-term growth plan for the carpentry business, incorporating strategic planning and risk management 	02:00	04:00	0:00	AVs, Demonstration, Individual & group activities, role play, etc.	Classroom aids, Handbooks, Sample Business growth plan templates	
		Total – Duration (Hours)	09:00	21:00	0:00			
		Grand Total Duration (Hours)	30:00					

Advanced Digital Skills

Sn	Module Name	Learning Outcomes	Training Duration (Hours)			Delivery Methodology	Tool/Equipment Required
			Theory	Practical	OJT		
1	Advanced features of using mobile phones (Smart Phones)	<ul style="list-style-type: none"> Learn to securely use the mobile phone by locking/unlocking phone/apps using various options like face recognition, fingerprint, etc. Learn to use different mobile apps, QR code scanners, editing tools, Google assistant, meeting apps like Teams, etc. Learn to access and manage documents stored in different folders in phone. E.g. File folder, download folder etc. Manage phone memory and data usage Learn to access, store, and share documents using Google Drive on your phone 	01:30	01:30	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection
2	Using advanced Internet and mobile applications (Apps)	<ul style="list-style-type: none"> Learn how to keep mobile apps secure Learn to secure apps installed on phone Learn about the rules and regulations of different mobile apps Understand to increase the business outreach via using different mobile application features Learn about the tailor-made apps suitable for various business applications like calculation apps, inventory management apps etc. 	03:00	04:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection
3	Privacy and security related	<ul style="list-style-type: none"> Understand privacy and manage profiles Understand about Spam calls Learn about safe browsing practices 	02:00	03:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer,

	to Internet and mobile phones	<ul style="list-style-type: none"> Learn about the importance of reporting online harassment and cyberbullying Learn about the advancement in technology using Gen-AI tools 					Projector, Mobile phone, Internet connection	
		Total – Duration (Hours)	06:30	08:30	0:00			
		Grand Total Duration (Hours)	15:00					

Advanced Financial Skills

Sn	Module Name	Learning Outcomes	Training Duration (Hours)			Delivery Methodology	Tool/Equipment Required
			Theory	Practical	OJT		
1	Importance of Being Financial Literate	<ul style="list-style-type: none"> Identify long-term and short-term assets, liabilities, investments, etc. Use types of payment methods such as Cheques, UPI, RTGS, NEFT etc. Use mobile applications and online platforms to track expenses and manage financial goals (YONO) Understand the benefits of various Government schemes such as Pradhan Mantri Jan Dhan Yojana, Jeevan Jyoti Bima Yojana, Suraksha Bima Yojana, Sukanya Samridhhi Yojana, National Pension Scheme (NPS), Atal Pension Yojna (APY) 	01:00	01:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection
2	Managing bank account	<ul style="list-style-type: none"> Differentiate various banking services offered by bank such as transfer-receipt of money, deposit-withdrawal etc. Use and Operate ATM, Deposit Cash/ Cheque through machines or manually Visit local bank branch to operate and manage bank accounts Handle mobile banking and net banking to operate and manage bank accounts Aware of safety measurement to be taken while managing bank accounts 	01:00	01:15	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection
3	Managing Loans	<ul style="list-style-type: none"> Differentiate various types and features of secured and unsecured loans 	01:15	01:30	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer,

		<ul style="list-style-type: none"> Select appropriate type of loan as per need, purpose, and loan terms and conditions Identify appropriate loan repayment structure based on the interest rate and duration Have knowledge of legal procedure for resolving delay/ default in payment of loan instalment 					Projector, Mobile phone, Internet connection	
4	Basic Understanding of taxes	<ul style="list-style-type: none"> Differentiate types of taxes such as Income tax, Goods and Services Tax (GST), etc. Explain simple terms related to taxation such as taxable income, tax rates, Tax Deductible at Source (TDS), Value of Goods etc. Have clarity on important concepts and applicability of income tax and GST Understand the Basic guidelines for filing income tax and GST returns, including deadlines 	01:30	02:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection	
5	Using advanced features of Digital Payment Applications	<ul style="list-style-type: none"> Able to install and configure Digital Payment Applications Use advanced features of Digital Payment Applications such as wallets, bill payments, recharge etc. Complete transactions using Digital Payment Applications such as UPI, RTGS, NEFT, IMPS etc. 	01:15	02:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection	
6	Awareness and Prevention of Financial Frauds	<ul style="list-style-type: none"> Able to identify common online financial frauds and spams and associated potential risks Use safe and ethical practices for securing online transactions 	00:30	00:45	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection	
		Total – Duration (Hours)	06:30	08:30	0:00			
		Grand Total Duration (Hours)	15:00					

Advanced Marketing and Outreach Skills

Sn	Module Name	Learning Outcomes	Training Duration (Hours)			Delivery Methodology	Tool/Equipment Required
			Theory	Practical	OJT		
1	Marketing and Customer Insights	<ul style="list-style-type: none"> Conduct marketing activities for artesian products Evaluate customer feedback to improve product offerings and marketing strategies 	01:00	02:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection
2	Quality Assurance and Certification in Craftsmanship	<ul style="list-style-type: none"> Obtain relevant quality certifications such as e ISI mark, Agmark and Hallmark Manage product quality as per quality standards 	01:00	01:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection
3	Brand Development and Promotion Strategies	<ul style="list-style-type: none"> Understand brand identity to enhance sales and promotion Promote products through social media and digital marketing Leverage National Marketing Committee support in operations and logistics 	01:00	02:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection
4	E-Commerce Management for Artisans	<ul style="list-style-type: none"> Onboarding e-commerce platform Understand process of cataloguing the products and services of Vishwakarma's Apply strategies for e-commerce linkage with GeM, Khadi India, MSME Mart 	01:00	02:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection
5	Building Trade Network for Craft Business	<ul style="list-style-type: none"> Use digital marketing for wider reach and publicity of the Vishwakarma Scheme 	01:00	01:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer,

		<ul style="list-style-type: none"> Identify and collaborate with relevant Industry Bodies Create links with suitable exporters and traders operating under the sector 					Projector, Mobile phone, Internet connection	
6	Trade Fairs and Exhibitions	<ul style="list-style-type: none"> Participate in trade fairs, exhibitions related to the products Set up collective display of PM Vishwakarma Products to associations of the artisan groups 	01:00	01:00	0:00	Classroom	White board, marker, duster, handbooks, Screen, Computer, Projector, Mobile phone, Internet connection	
		Total – Duration (Hours)	06:00	09:00	0:00			
		Grand Total Duration (Hours)	15:00					

Trainer and Assessor Requirements

1.	<p>Trainer’s Qualification and experience in the relevant sector (in years)</p>	<p>Domain Trainer:</p> <ul style="list-style-type: none"> a) <i>ITI Instructors from Directorate General of Training (DGT) ecosystem who have preferably worked in the industry and have technical know-how about the operations of the modern listed tools in relevant trades</i> b) <i>Certified trainers from the NCVET recognized Awarding Bodies</i> c) <i>Working professionals from the industry or clusters who have good knowledge and experience about the working/ operations of the listed modern tools in the relevant trades</i> <p>Life Skills Trainer:</p> <ul style="list-style-type: none"> a) <i>ITI Instructors from Directorate General of Training (DGT) ecosystem*</i> b) <i>Certified trainers from the recognized Awarding Bodies*</i> <p>*Mandatory Training of Trainers (ToT) of existing certified trainers on entrepreneurship skills modules</p> <p>District-wise list of trainers/ Assessors is to be identified and made available</p>
2.	<p>Assessor’s Qualification and experience in relevant sector (in years)</p> <p>(Preference – Vishwakarma Trainer in relevant trades will be onboarded on assessments for becoming Certified Assessors / Certified Assessors in relevant trade. Certified assessor will also take the Life Skills Module assessment.)</p>	<p>Assessor:</p> <ul style="list-style-type: none"> a) <i>Certified Assessors of the recognized Assessment Agencies</i> b) <i>Certified trainers may also get certified as an Assessor to conduct assessments in relevant trades (A Trainer can also act as an Assessor for a different location)</i>

Glossary & Acronyms

Glossary

Acronym	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.

Acronyms

Term	Description
NCrF	National Credit Framework
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On -the -Job Training