



GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
DIRECTORATE GENERAL OF TRAINING

COMPETENCY BASED CURRICULUM

CARPENTER

(Duration: One Year)

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL- 4



SECTOR –CONSTRUCTION



Directorate General of Training

CARPENTER

(Engineering Trade)

(Revised in 2019)

Version: 1.2

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL - 4

Developed By

Ministry of Skill Development and Entrepreneurship

Directorate General of Training

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1. COURSE INFORMATION

During one-year duration of “Carpenter” trade, a candidate is trained on Professional Skill, Professional Knowledge and Employability Skill related to job role. In addition to this, a candidate is entrusted to undertake project work, extracurricular activities and on-the-job training to build up confidence. The broad components covered under Professional skill subject are as below: -

The trainee learns about elementary first aid, firefighting, environment regulation and housekeeping etc. The trainee identifies timber/ wood, apply measuring, marking and testing instrument and other holding and supporting hand tools. He will be able to use various saws and portable power saw machines for Ripping, cross cutting, Oblique sawing and curve cutting etc. He will be able to analyze the surface finish with exact sizing by planning operation and apply various shaving tools or portable power planning machine. The trainee can apply various paring tools and analyze and choose the positioning and employ holding device for chiselling with better finish. He will be able to identify and classify various types of joints, analyze and prepare correct joint at correct position, related with strength and appearance. He will be able to make small wooden job as per drawing with schedule sizes of timber or alternatives of timber i.e. FRP, MDF, FOAM using various hardware, analyze and use various carving tools and convert a wooden block/ piece into a decorative article. The trainee will be able to preserve wooden item through surface finishing with various processes such as painting, polishing, varnishing etc.

The trainee learns ripping, cross cutting, curve cutting etc. on band saw/ circular saw machine and grinding and setting of blade/ cutter. He can perform different operations on planning machine along with sharpening blades. (Range of operations – Surfacing, thickening, chamfering, edge bending etc.). The trainee can work on pedestal grinder (Range of operations – grinding of mushroom head, cutting edge of tools, drills, etc.). He can make holes of different sizes in correct location on woodwork, can perform different operations on wood turning lathe along with sharpening of cutting tools. The trainee can do different operations on Tenon and mortise machine, Sanding machine. He will be able to prepare different types of pattern, core box, core print etc. for moulding application with proper allowances and colour codes. Can produce component involving different operations of fitting and sheet metal work and check for functionality. The trainee will be able to prepare various roof truss, door and windows frame and shutters, assembling & fixing (wooden/ aluminium or PVC), Paint various door, windows frame, stair and furniture (wooden or aluminium), Prepare various type of wooden floor, partition wall etc. He will be able to check, identify, analyze and repair the wooden job.

The trainee also undergoes two weeks project work at the end of year which gives them more practical exposure and helps to build up confidence level.

Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.

5.1 LEARNING OUTCOME (TRADE SPECIFIC)

1. Identify timber/wood, apply measuring, marking and testing instrument and other holding and supporting hand Tools following safety precautions.
2. Identify and apply various saws and portable power saw machines for Ripping, cross cutting, oblique sawing and curve cutting etc.
3. Analyze the surface finish with exact sizing by planning, operation, identifying and applying various shaving tools or portable power planning machine.
4. Identify and apply various paring tools, analyze and choose the positioning and employ holding device for chiselling with better finish.
5. Identify and classify various types of joints, analyze and prepare correct joint at correct position, related with strength and appearance.
6. Make small wooden job as per drawing with schedule sizes of timber or alternatives of timber i.e. FRP, MDF, FOAM using various hardware.
7. Analyze and identify various carving tools and convert a wooden block/ piece into a decorative article.
8. Demonstrate preservation of wooden item through surface finishing with various processes such as painting, polishing, varnishing etc.
9. Demonstrate ripping, cross cutting, curve cutting etc. on band saw/ circular saw machine and grinding and setting of blade/ cutter.
10. Demonstrate different operations on Jointer/surface Planer/Thickness planer machine along with sharpening blades. (Range of operations – Surfacing, thickening, chamfering, edge bending etc.)
11. Demonstrate working on pedestal grinding (Range of operations – grinding of mushroom head, cutting edge of tools, drills, etc.)
12. Demonstrate working on pedestal /portable drilling machine, use of different types of drill bits, make holes of different sizes in correct location on woodwork.
13. Demonstrate different operations on wood turning lathe along with sharpening of cutting tools.
14. Demonstrate different operations on Tenon and mortise machine.
15. Demonstrate different operations on Sanding machine.
16. Identify and prepare different types of pattern, core box, core print etc. for moulding application with proper allowances and colour codes.
17. Produce component involving different operations of fitting work and check for functionality.

18. Produce component involving different operations of sheet metal work and check for functionality.
19. Prepare various roof truss, door and windows frame and shutters, assembling & fixing (wooden/ aluminium or PVC).
20. Paint various door, windows frame, stair and furniture (wooden or aluminium).
21. Prepare various type of wooden floor, partition wall etc.
22. Check, identify, analyze and repair the wooden job.