



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

COMPETENCY BASED CURRICULUM

INTERIOR DESIGN & DECORATION

(Duration: One Year)

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL- 4



SECTOR – CONSTRUCTION



Directorate General of Training

INTERIOR DESIGN & DECORATION

(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 the one-year duration of “Interior Design & Decoration” trade a candidate is trained on professional skill, professional knowledge and Employability skill related to the job role. In this trade we don't just teach Interior Design, we encourage each and every student to access and nurture their own natural sense of flair and creativity. We also help them to know that how can they create new ideas, thoughts and also to execute them in real form. In addition to this a candidate is entrusted to undertake project work, extracurricular activities and on job training to build up confidence. The broad components covered under Professional Skill subject are as below:-

During one year duration trainee learns about elementary first aid, fire fighting, environment regulation and housekeeping etc. The trainee gains knowledge for using drawing instrument and other supporting tools. The trainee draws various drawings of Interior design. The trainee learns to apply various tools and plan the design & position of furniture etc. with suitable layout. He/ she will be able to identify and classify various types of drawing, scale, analyze and prepare drawing according to place. The trainee learns to make small residential drawing plan with schedule sizes of furniture & apply color scheme. The trainee will be able to draw perspective view and prepare Power Point Presentation with various design process. The trainee can perform different designs on planning along with Auto Cad software.

The trainee learns 2D Software designs. He/she can make drawing of different sizes in correct scale on computer with the help of design software. The trainee can perform different operations on software along with different designs i.e. false ceiling, flooring, carpentry joints, partition wall, etc. The trainee will be able to draw various door & window frame and door - window designs. The trainee will be able to draw different types of layout designs for plumbing, lighting, Air Conditioning, etc. He/ she will be able to analyze & uses of paint, polish and varnish. The trainee will draw various type of small commercial planning with color scheme. The trainee will be able to check, identify, analyze, and draw the Interior jobs.

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

2.1 GENERAL

The Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers a range of vocational training courses catering to the need of different sectors of economy/ Labour market. The vocational training programmes are delivered under the aegis of Directorate General of Training (DGT). Craftsman Training Scheme (CTS) with variants and Apprenticeship Training Scheme (ATS) are two pioneer schemes of DGT for strengthening vocational training.

Interior Design & Decoration trade under CTS is one of the popular courses delivered nationwide through a network of ITIs. The course is of one-year duration. It mainly consists of Domain area and Core area. In the Domain area (Trade Theory & Practical) imparts professional skills and knowledge, while Core area (Workshop Calculation & science and Employability Skill) imparts requisite core skills, knowledge, and life skills. After passing out the training programme, the trainee is awarded National Trade Certificate (NTC) by DGT which is recognized worldwide.

Trainee broadly needs to demonstrate that they are able to:

- Read & interpret technical parameters/documentation, plan work, identify necessary materials and tools;
- Perform task with due consideration to safety rules, accident prevention regulations and environmental protection stipulations;
- Apply professional knowledge, core skills & employability skills while performing the job.
- Check the task/assembly as per drawing for functioning, identify and rectify errors in task/assembly.
- Document the technical parameters related to the task undertaken.

2.2 PROGRESSION PATHWAYS:

- Can join industry as Technician and will progress further as Senior Technician, Supervisor and can rise up to the level of Manager.
- Can become Entrepreneur in the related field.
- Can join Apprenticeship programme in different types of industries leading to National Apprenticeship certificate (NAC).
- Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming instructor in ITIs.
- Can join Advanced Diploma (Vocational) courses under DGT as applicable.

2.3 COURSE STRUCTURE:

Table below depicts the distribution of training hours across various course elements during a period of one year:

S No.	Course Element	Notional Training Hours
1	Professional Skill (Trade Practical)	1120
2	Professional Knowledge (Trade Theory)	240
3	Workshop Calculation & Science	80
4	Employability Skills	160
	Total	1600

2.4 ASSESSMENT & CERTIFICATION

The trainee will be tested for his skill, knowledge and attitude during the period of course through formative assessment and at the end of the training programme through summative assessment as notified by the DGT from time to time.

a) The **Continuous Assessment** (Internal) during the period of training will be done by **Formative Assessment Method** by testing for assessment criteria listed against learning outcomes. The training institute have to maintain individual *trainee portfolio* as detailed in assessment guideline. The marks of internal assessment will be as per the formative assessment template provided on www.bharatskills.gov.in

b) The final assessment will be in the form of summative assessment. The All India Trade Test for awarding NTC will be conducted by **Controller of examinations, DGT** as per the guidelines. The pattern and marking structure is being notified by DGT from time to time. **The learning outcome and assessment criteria will be basis for setting question papers for final assessment. The examiner during final examination will also check** individual trainee's profile as detailed in assessment guideline before giving marks for practical examination.

2.4.1 PASS REGULATION

For the purposes of determining the overall result, weightage of 100% is applied for six months and one-year duration courses and 50% weightage is applied to each examination for two years courses. . The minimum pass percent for Trade Practical and Formative assessment is 60% & for all other subjects is 33%. There will be no Grace marks.

2.4.2 ASSESSMENT GUIDELINE

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking assessment. Due consideration should be given while assessing for teamwork, avoidance/reduction of scrap/wastage and disposal of scrap/wastage as per procedure, behavioral attitude, sensitivity to environment and regularity in training. The sensitivity towards OSHE and self-learning attitude are to be considered while assessing competency. Assessment will be evidence based, comprising the following:

- Job carried out in labs/workshop
- Record book/ daily diary
- Answer sheet of assessment
- Viva-voce
- Progress chart
- Attendance and punctuality
- Assignment
- Project work

Evidences and records of internal (Formative) assessments are to be preserved until forthcoming examination for audit and verification by examination body. The following marking pattern to be adopted while assessing:

Performance Level	Evidence
(a) Weightage in the range of 60 -75% to be allotted during assessment	
For performance in this grade, the candidate should produce work which demonstrates attainment of an acceptable standard of craftsmanship with occasional guidance, and due regard for safety procedures and practices.	<ul style="list-style-type: none"> • Demonstration of good skill in the use of hand tools, machine tools and workshop equipment. • 60-70% accuracy achieved while undertaking different work with those demanded by the component/job. • A fairly good level of neatness and consistency in the finish. • Occasional support in completing the project/job.
(b) Weightage in the range of above 75% - 90% to be allotted during assessment	
For this grade, a candidate should produce work which demonstrates attainment of a reasonable standard of craftsmanship, with little guidance, and regard for safety procedures and practices.	<ul style="list-style-type: none"> • Good skill levels in the use of hand tools, machine tools and workshop equipment. • 70-80% accuracy achieved while undertaking different work with those demanded by the

	<p>component/job.</p> <ul style="list-style-type: none"> • A good level of neatness and consistency in the finish • Little support in completing the project/job.
<p>(c) Weightage in the range of above 90% to be allotted during assessment</p>	
<p>For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.</p>	<ul style="list-style-type: none"> • High skill levels in the use of hand tools, machine tools and workshop equipment. • Above 80% accuracy achieved while undertaking different work with those demanded by the component/job. • A high level of neatness and consistency in the finish. • Minimal or no support in completing the project.

Interior Designer; planning designs, and furnishes interiors of residential, commercial, or industrial buildings. Interior designer to understand civil requirement & serve offer to do clean & functional environment Interior designer can design and estimate various types of residential & commercial interiors with color scheme. Interior designer can read and draw interior drawings using appropriate measuring instruments and know the sequence of operations, Selects suitable materials as per design for formal and informal interiors with an aesthetic value. Creates own designs to satisfy clients requirements and taste etc. showing style, shape, size and other characteristics or products. Makes sketches and diagrams or design keeping into consideration purpose, cost and preferences of client. Estimates material requirements and costs, and presents design to client for approval. Confers with client to determine factors affecting planning interior environments, such as budget, architectural preferences, and purpose and function. Advises client on interior design factors, such as space planning, layout and utilization of furnishings and equipment, and colour co-ordination. Selects or designs and purchases furnishings, art works, and accessories. Subcontract fabrication, installation, and arrangement of carpeting, fixtures, accessories, draperies, paint and wall coverings, art work, furniture, and related items. Render design ideas in form of paste-ups or drawings. Plans and designs interior environments also for boats, planes, buses, trains, and other enclosed spaces. Designers can used different interior software's for making plan & designs.

Decorator; Decorators coordinate the architect & civil engineer. Decorator is executing the concept of designing of interior designer. They have to know management, time line part, material part, consult the designer regarding the fabrication, design the aesthetic part. They recommend the types of paints, polishes, suitable air conditioners, approved by ISI for interior and exterior applicability. They are recommending the types of indoor plants and suggest ways to take care & maintenance Arranges decorative material, furniture, wares, products etc. in artistic manner. May specialize in setting and decorating stages and may be known as Set Decorator. May be known as Interior Decorator, Decorative Designer, Window Display Designer, Display Artist, etc., according to field of specialization.

Furniture Designer; designs furniture line or individual pieces for manufacture according to knowledge of design trends. Studies market trends and customer needs and discusses design suggestions with production management and trade channels. Design & execute suitable furniture as per anthropometrics in different materials. Recognize and select the types of natural & man-made wood products used for interior designing taking into account of economical & environmental conditions Evaluates proposals and prepares freehand sketches of promising designs. Obtains approval from customer, design committee or company. Furniture design containing manufacturing specifications, such as dimensions, kind of wood and upholstery fabrics to be used in manufacturing furniture line or article. May plan

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modifications for completed furniture to conform to changes in design trends and increase customer acceptance.

Reference NCO-2015:

- a) 3432.0100 – Interior Designer
- b) 3432.0200 – Decorator
- c) 2163.0400 – Furniture Designer

4. GENERAL INFORMATION

Name of the Trade	Interior Design & Decoration
Trade Code	DGT/ 1037
NCO - 2015	3432.0100, 3432.0200, 2163.0400
NSQF Level	Level - 4
Duration of Craftsmen Training	One Year (1600 Hours)
Entry Qualification	Passed 10 th class examination with Science & Mathematics or its equivalent
Minimum Age	14 years as on first day of academic session.
Eligibility for P w D	LD, CP, LC, DW, AA, LV, DEAF, AUTISM, SLD, MD
Unit Strength (No. Of Students)	24 (There is no separate provision of supernumerary seats)
Space Norms	80 sq. m
Power Norms	10 KW
Instructors Qualification for	
(i) Interior Design & Decoration	<p>B.Voc/Degree in Interior Design & Decoration/ Architecture / Civil Engg. from AICTE/UGC recognized Engineering College/ university with one-year experience in relevant field.</p> <p style="text-align: center;">OR</p> <p>03 years Diploma in Interior Design & Decoration/ Architecture/ Civil Engg. from AICT/ recognized board of technical education or relevant Advanced Diploma (Vocational) from DGT with two years experience in relevant field.</p> <p style="text-align: center;">OR</p> <p>NTC/NAC passed in the Trade of “Interior Design & Decoration” With three years experience in the relevant field.</p> <p><u>Essential Qualification:</u></p> <p>Relevant National Craft Instructor Certificate (NCIC) in any of the variants under DGT.</p> <p><i>Note: - Out of two Instructors required for the unit of 2(1+1), one must have Degree/Diploma and other must have NTC/NAC qualifications. However, both of them must possess NCIC in any of its variants.</i></p>
(ii) Workshop Calculation & Science	<p>B.Voc/Degree in Engineering from AICTE/UGC recognized Engineering College/ university with one-year experience in the relevant field.</p> <p style="text-align: center;">OR</p>

	<p>03 years Diploma in Engineering from AICTE/ recognized board of technical education or relevant Advanced Diploma (Vocational) from DGT with two years' experience in the relevant field.</p> <p style="text-align: center;">OR</p> <p>NTC/ NAC in any one of the engineering trades with three years' experience.</p> <p><u>Essential Qualification:</u> National Craft Instructor Certificate (NCIC) in relevant trade</p> <p style="text-align: center;">OR</p> <p>NCIC in RoDA or any of its variants under DGT</p>			
(iii) Employability Skill	<p>MBA/ BBA / Any Graduate/ Diploma in any discipline with Two years' experience with short term ToT Course in Employability Skills from DGT institutes.</p> <p>(Must have studied English/ Communication Skills and Basic Computer at 12th / Diploma level and above)</p> <p style="text-align: center;">OR</p> <p>Existing Social Studies Instructors in ITIs with short term ToT Course in Employability Skills from DGT institutes.</p>			
(iv) Minimum Age for Instructor	21 Years			
List of Tools & Equipment	As per Annexure-I			
Distribution of training on hourly basis: (Indicative only)				
Total Hrs /week	Trade Practical	Trade Theory	Workshop Cal. & Sc.	Employability Skills
40 Hours	28 Hours	6 Hours	2 Hours	4 Hours

5. LEARNING OUTCOME

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 OUTCOMES (TRADE SPECIFIC)

1. Appraise the importance of interior designing & drawing instruments, drawing sheets, lettering following safety precautions.
2. Draft the Geometrical shapes and projection with the help of engineering scale and free hand sketches.
3. Draft the design with the help of colour scheme and apply with rules and calculations.
4. Draw furniture designing & detailing
5. Draw residential plan with necessary working drawing.
6. Draw different types of staircase.
7. Apply basic knowledge of structural part of building.
8. Draw doors and windows & details.
9. Draw one- and two-point's perspective view.
10. Prepare the power point presentation with animation.
11. Create object on 2D using tool bars, commands.
12. Draw different types of false ceiling by using CAD.
13. Draw different types of flooring by using CAD.
14. Draw different types of carpentry joints by using CAD.
15. Analyse and uses of paints, polish and varnish.
16. Draw different types of partition wall by using CAD.
17. Draw plumbing and drainage detail & sanitary fittings by using CAD.
18. Draw lighting and electrical layout plan by using CAD.
19. Draw air conditioning layout by using CAD.
20. Draw commercial interiors by using CAD.

6. ASSESSMENT CRITERIA

LEARNING OUTCOMES	ASSESSMENT CRITERIA
1. Appraise the importance of interior designing & drawing instruments, drawing sheets, lettering following safety precautions.	Appraise the importance of interior designing in socio economic point of view.
	Identify the requirement of designing to modernize and also link it with our past eras with change of habit and use.
	Compare and relate interior designing with other industries.
	Functional and operational knowledge of tools equipments and drawing materials and its operations.
	Employ & use the lettering.
2. Draft the Geometrical shapes and projection with the help of engineering scale and free hand sketches.	Explain the ISI and code of practice for interior design & drawing.
	Understand & apply engineering scale in drawing.
	Draw Geometrical shapes of solids.
	Draw projections and view.
	Apply different techniques of free hand sketches.
3. Draft the design with the help of colour scheme and apply with rules and calculations.	Recognize the elements and principle of designing in interior.
	Apply arithmetic aptitude for Interior drawing.
	Recognize and apply colour sets and graphics symbols.
	Prepare the space utility planning.
4. Draw furniture designing & detailing	Homologation of different types of furniture.
	Design furniture with space utilisation.
5. Draw residential plan with necessary working drawing.	Make outline of dimensions, circulation flow and layout.
	Execute ideas in interior plan.
	Demonstrate planning elements.
6. Draw different types of staircase.	Distinguish different types of staircase.
	Draw staircase drawing with sectional detail.
7. Apply basic knowledge of structural part of building.	Appraise different types of load bearing portion of a structure.
8. Draw doors and	Appraise and apply different types of doors, windows and

windows & details.	ventilators.
	Draw door & windows with sectional detail.
	Illustrate the requirement of the doors & window locations.
9. Draw one- and two-point's perspective view.	Illustrate & draw the different types of perspective views.
10. Prepare the power point presentation with animation.	Demonstrate and apply different types of command on Power Points Presentation.
	Prepare the PPT with animation
11. Create object on 2D using tool bars, commands.	Demonstrate and apply the different types of command on 2D.
	Demonstrate use of tool bars, commands, menus, formatting layers, and styles etc.
	Prepare drawing in 2D software.
12. Draw different types of false ceiling by using CAD.	Illustrate application of different types of ceiling and levels.
	Execute the layout and material knowledge.
13. Draw different types of flooring by using CAD.	Appraise the flooring material according to place/site requirement.
	Recognize and apply flooring material according to colour scheme, thickness and graphic symbols.
14. Draw different types of carpentry joints by using CAD.	Appraise the requirement and importance of joints in furniture or other places.
	Draw joint details.
15. Analyse and uses of paints, polish and varnish.	Illustrate & recognize paints, polish, varnishes and their uses, types, method.
	Appraise techniques which are used.
16. Draw different types of partition wall by using CAD.	Explain different types of wall, partition wall.
	Recognize material property those are used in partition.
	Prepare working drawing of partition wall.
17. Draw plumbing and drainage detail &	Appraise the plumbing and sanitation and their purpose/Requirement.

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sanitary fittings by using CAD.	Illustrate types of plumbing & sanitation system.
	Recognize sanitary fittings and apply on the layout.
	Make a plumbing drawing and sanitary drawing of a house drainage plan.
18. Draw lighting and electrical layout plan by using CAD.	Explain the importance of lighting in interior designing.
	Illustrate the types of lighting arrangement.
	Illustrate the use of lights & lamps & use of the same at proper places.
	Apply the lights and accessories with all specification in false ceiling layout plan.
19. Draw air conditioning layout by using CAD.	Understanding the necessities of air conditioning.
	Functional knowledge of types of air conditioning.
	Recognizing and applying of the proper air conditioning system suitable for a space.
20. Draw commercial interiors by using CAD.	Appraise dimension, circulation and layout.
	Execute ideas arithmetically in plan.
	Demonstrate planning elements.
	Draw Free hand sketches and 3D views.

SYLLABUS FOR INTERIOR DESIGN & DECORATION			
Duration	Reference Learning Outcome	Professional Skills (Trade Practical) With Indicative Hours	Professional Knowledge (Trade Theory)
Professional Skill 28 Hrs; Professional Knowledge 06 Hrs	Appraise the importance of interior designing & drawing instruments, drawing sheets, Lettering following safety precautions.	<ol style="list-style-type: none"> 1. Familiarization with the trade & institute. (02 hrs) 2. Importance of trade training. (03 hrs) 3. Uses of tools, equipments & instruments. (03 hrs) 4. Type of work done/ assignment by the trainees in the institute. (03 hrs) 5. Free hand sketches of objects. (04 hrs) 6. Recognize & Layout of drawing sheet including title card as an example portrait & landscape. (05 hrs) 7. Importance of Lettering with the help of single stroke Gothic Letter. (08 hrs) 	Importance & necessity of interior designing. Interior design as a profession Modern interior design feature Importance of trade Demonstrate tools and equipments Importance of the trade in the industry Drawing instrument, equipments and raw material their used. Instruments, equipments like drafting board, T scale mini drafter (M.D.), Set Square etc. (06 hrs.)
Professional Skill 56 Hrs; Professional Knowledge 12 Hrs	Draft the Geometrical shapes and projection with the help of engineering scale and free hand sketches.	<ol style="list-style-type: none"> 8. Draw different types of lines by Free hand. (06 hrs) 9. Introduce the scale MKS and FPS for making the drawing. (10 hrs) 10. Draw the simple composition of geometrical object with help of scale. (10 hrs) 11. Draw the simple exercise using lines in different angles. (06 hrs) 	Elements of Interior Design: Introduction to Indian Standards Institution Code of practice for general interior drawing. Introduction & Importance of lines <ol style="list-style-type: none"> i. Continuous thick & thin line ii. Dashed thin line iii. Cutting plan line iv. Long & short break line thick line Basic knowledge of

		<p>12. Draft the plan, elevation & sectional elevation & isometric view of geometrical solids. Regular, Irregular shapes. (10 hrs)</p> <ol style="list-style-type: none"> i. Cube ii. Cuboids iii. Triangular prism iv. Cylinder v. Pyramid vi. Hexagonal prism vii. Hexagonal Pyramid viii. Cone <p>13. Practice on types of dimension (04 hrs)</p> <ol style="list-style-type: none"> i. Aligned system ii. Unidirectional system <p>14. Free hand sketches of graphic symbols. (10 hrs)</p>	<p>geometrical shapes & lines. Definition of projection Types of projection Parallel projection</p> <ol style="list-style-type: none"> i. Oblique ii. Orthographic iii. Axonometric iv. Isometric <p>Definition: -</p> <ol style="list-style-type: none"> i. Layout of plan ii. Elevation (Front & side elevation) iii. Sectional Elevation (12 hrs.)
<p>Professional Skill 56 Hrs; Professional Knowledge 12 Hrs</p>	<p>Draft the design with the help of color scheme and apply with rules and calculations</p>	<p>Functional designing of interiors:</p> <p>15. How to make design: - (15 hrs)</p> <ol style="list-style-type: none"> i. Flow of circulation chart (Bubble diagram) ii. Concept of design, pattern, colour iii. Designing of space with furniture layout <p>16. Design knowledge of interior in residential & commercial. (20 hrs)</p> <ol style="list-style-type: none"> i. Basic layout plan. ii. Elevation. <p>17. Free hand sketches of Graphic symbols for door windows, furniture, plumbing & sanitary,</p>	<p>Principle of Design: Introduction of basic interior design.</p> <ol style="list-style-type: none"> i. Elements- example: line, etc. ii. Principle of design example: balance, emphasis etc. <p>Colors: Types of color schemes based on the color wheel.</p> <ol style="list-style-type: none"> i. triad colour scheme: <ol style="list-style-type: none"> a) Primary. b) Secondary. c) Tertiary. ii. related colour scheme: <ol style="list-style-type: none"> a) Analogues. b) Monochromatic. c) Achromatic.



		<p>electrical, landscape. (13 hrs)</p> <p>18. Rendering with pencil and pencil colour. (08 hrs)</p>	<p>d) Neutral.</p> <p>iii. contrasting:</p> <p>a) Complementary.</p> <p>b) Split complementary.</p> <p>c) Double split</p> <p>d) Complementary.</p> <p>e) Cool colour, warm colour.</p> <p>Understand the psychological affects by different colours on different person and places.</p> <p>Introduction of Graphic symbols in interior.</p> <p>(12 hrs.)</p>
<p>Professional Skill 56 Hrs;</p> <p>Professional Knowledge 12 Hrs</p>	<p>Draw furniture designing & detailing</p>	<p>Furniture design and detail:</p> <p>19. Residential furniture. (26 hrs) Table, chair, sofa, cabinet, bed, wardrobe, dining table.</p> <p>20. Commercial furniture. (30 hrs): Executive table/ office table, reception table, cabinet storage.</p> <p>Note: Necessary practical training will be carried out on site.</p>	<p>Furniture design:</p> <p>Furniture styles:</p> <p>i. Traditional/classic style.</p> <p>ii. Ethnic style.</p> <p>iii. Contemporary style.</p> <p>Types of furniture:</p> <p>i. Daily uses furniture</p> <p>ii. Loose carpentry furniture.</p> <p>iii. Fixed carpentry furniture.</p> <p>iv. Multi-utility storage</p> <p>v. Open & closed storage</p> <p>Importance of anthropometric and ergonomics.</p> <p>(12 hrs.)</p>
<p>Professional Skill 140Hrs;</p> <p>Professional Knowledge 30 Hrs</p>	<p>Draw residential plan with necessary working drawing.</p>	<p>Drafting of Residential Plan (Any Room):</p> <p>21. Concept plan with circulation flow (Bubble Diagram). (15 hrs)</p> <p>22. Basic furniture layout plan with working drawing. (30 hrs)</p> <p>23. Wall elevation with dimension and specification. (30 hrs)</p> <p>24. Necessary details. (40 hrs)</p> <p>25. Rendering the plan &</p>	<p>Planning of Interiors:</p> <p>Space selection for circulation and furniture.</p> <p>Selection of furniture.</p> <p>Uses of furniture templates.</p> <p>(30 hrs.)</p>



		elevations. (25 hrs)	
Professional Skill 28 Hrs; Professional Knowledge 06 Hrs	Draw different types of staircase.	26. Prepare drawing with technical details of the R.C.C. Stair case. (18 hrs) i. Straight Staircase. ii. Open newel Staircase. iii. Dog legged Staircase. iv. Bifurcated Staircase. 27. Calculation of Staircase (trade and riser). (10 hrs)	Stair case: Requirement and placement of good Staircase. Basic terminology of R.C.C. Staircase. Types of Staircase. i. Straight. ii. Quarter turn iii. Half turn (Dog legged) iv. Three quarter turn v. Bifurcated vi. Open newel. vii. Geometrical viii. Circular ix. Spiral. Model of Staircase: - Demonstration of R.C.C. Staircase with the help of respective models. (06 hrs.)
Professional Skill 28 Hrs; Professional Knowledge 06 Hrs	Apply basic knowledge of structural part of building.	Preparing drawing: 28. Basic concept of section of a building through toilet & balcony introducing the beam & column. (28 hrs)	Basic knowledge & importance in PPT/video presentation i. Mezzanine floor a) Temporary b) Semi permanent ii. Stone masonry & types iii. Brick masonry & types • Stretcher bond • Header bond • English bond • Flemish bond • Raking bond • Zigzag bond iv. Lintels & types v. Arches & types and terminology vi. Sunshade (06 hrs.)
Professional	Draw doors and windows & details.	29. Model of Door window: - Demonstrate doors and	Wooden Doors & Windows Introduction of hardware



<p>Skill 56 Hrs; Professional Knowledge 12 Hrs</p>		<p>windows with the help of respective models. (06 hrs)</p> <p>30. Preparing of plan, elevation & section of door (25 hrs)</p> <ol style="list-style-type: none"> i. Panelled door ii. Glazed or sash iii. Flush door <p>31. Preparing of plan, elevation & section of window. (25 hrs)</p> <ol style="list-style-type: none"> i. Casement window with ventilator (wooden) ii. Sash window (wooden) iii. Sliding window (aluminium) 	<p>fitting in door & windows with dimension</p> <p>Types of Doors</p> <ol style="list-style-type: none"> i. Batten and ledged door ii. Framed and panelled door iii. Glazed or sash door iv. Flush door v. Louvered door vi. Wire gauged door vii. Revolving viii. Sliding (Aluminium) ix. Swing door/ floor spring door <p>Placement of door & windows regarding circulation of space Definition of technical terms of doors & window Size of doors & windows, ventilators</p> <p>Types of windows</p> <ul style="list-style-type: none"> • Fixed window • Casement window • Sliding window • Sash window • Louvered window • Metal window • Bay window • Corner window • Dormer window • Gable window • Sky light window <p>Fixture and fastening a) hinges, b) bolts, c) handles d) locks (12 hrs.)</p>
<p>Professional Skill 56 Hrs; Professional Knowledge</p>	<p>Draw one and two points perspective view.</p>	<p>Preparation of drawing</p> <p>32. Draft one-point perspective view with approximate method (any room). (36 hrs)</p>	<p>Projection</p> <p>Perspective projection definition</p> <ol style="list-style-type: none"> i. 1 point ii. 2 point iii. 3 point

12 Hrs		33. Render the perspective view with any medium. (20 hrs)	(Describe the one-point perspective with approximate method) Definition i. Ground plane ii. Station point iii. Picture plane iv. Horizontal plane v. Ground line vi. Horizontal line or eye level Vanishing point (12 hrs.)
Professional Skill 56 Hrs; Professional Knowledge 12 Hrs	Prepare power point presentation with animation.	Computer 34. Prepare the power point still presentation. (26 hrs) 35. Prepare the power point animated presentation. (30 hrs)	Knowledge of Computer. Microsoft Power point, commands and their uses. (12 hrs.)
Professional Skill 140Hrs; Professional Knowledge 30 Hrs	Create object on 2D using tool bars, commands.	2D Software training- 36. Installation of 2D software. (08 hrs) 37. Elementary commands and menus of 2D software. (48 hrs) 38. Drawing practice on 2D software. (84 hrs)	Preliminary Drawing in 2D i) 2D commands and use of different menus. ii) Concept of 2D drawing. iii) Concept of rendering. (30 hrs.)
Professional Skill 56 Hrs; Professional Knowledge 12 Hrs	Draw different types of false ceiling by using CAD.	Preparing of drawing 39. Design a false ceiling in a room. (28 hrs) 40. Specify the level and section and finishing material (laminated, veneer, paints). (28 hrs)	Ceiling Definition of false ceiling to understand the job fabrication installation process of false ceiling with Gyp board / POP board / Ply / Wood Types of ceiling i. Grid ii. Coffered iii. Cove iv. Plain Finishing materials used for false ceiling. Laminated, veneer, stone, glass,

			acrylic sheet, MDF, paints, wall paper, fabric, stainless steel, wood. (12 hrs.)
Professional Skill 56 Hrs; Professional Knowledge 12 Hrs	Draw different types of flooring by using CAD.	Preparing of drawing 41. Design a flooring pattern with finishing material (Marble, Vitrified tile, PVC. Laminated). (30 hrs) 42. Specify the starting point of flooring (13 hrs) 43. Specify the dimension & sizes. (13 hrs)	Types of floor finishing i. Stone ii. Marble iii. Mosaic iv. Vinyl v. Vitrified tiles vi. Ceramic tiles vii. PVC viii. Carpet ix. Laminated x. Glass (12 hrs.)
Professional Skill 56 Hrs; Professional Knowledge 12 Hrs	Draw different types of carpentry joints by using CAD.	Drafting simple joints used in furniture 44. Drafting details drawing of different types of joints. (28 hrs) 45. Draft a sheet of door/ window/ chair/ table/ bed (any one) (28 hrs)	Carpentry joints Types of joints i. Butt joint ii. Mitre joint iii. Lap joint iv. Mortise and Tenon joint v. Tounge and groove joint vi. Housed joint vii. Cross joint Joints used in furniture Joints used in doors/ windows/ ventilators. Model of Carpentry joints: - Demonstration of staircase with the help of respective models. (12 hrs.)
Professional Skill 28 Hrs; Professional Knowledge 06 Hrs	Analyse and uses of paints polish and varnish.	Generate Power Point Presentation for Paint, Polish and Varnish - 46. Practicing processes & techniques of paints, polishing & varnishing on surfaces. (18 hrs) 47. Recognize the tool & equipment and their	Paints and polishing/varnishing: What is paint Types of paints i. Synthetic enamel ii. Acrylic Emulsion iii. distemper iv. Epoxy v. Nitro Cellulose



		<p>uses. (05 hrs)</p> <p>48. Estimate quantity of materials used on surface and labour cost. (05 hrs)</p> <p>NOTE: - necessary practical training will be carried out on site.</p>	<p>vi. Metallic</p> <p>vii. Texture</p> <p>viii. Lime wash</p> <p>ix. Exterior paint</p> <p>Painting techniques</p> <p>i. By Brush</p> <p>ii. By Roller</p> <p>iii. By spray gun</p> <p>Paintings defeats and remedies.</p> <p>Introduction of polish and varnish:</p> <p>Method of preparation and types of polish on wood.</p> <p>Types of varnishes:</p> <p>i. Oil</p> <p>ii. Spirit</p> <p>iii. Turpentine</p> <p>iv. Melamine</p> <p>v. PU (polyurethane)</p> <p>(06 hrs.)</p>
<p>Professional Skill 56 Hrs;</p> <p>Professional Knowledge 12 Hrs</p>	<p>Draw different types of partition wall by using CAD.</p>	<p>49. Design the full height and low height partition wall with different construction and finishing materials. (28 hrs)</p> <p>50. Draft Plan, sectional plan, front elevation and section with specification and dimension. (28 hrs)</p>	<p>Partition wall:</p> <p>Introduction of partition wall</p> <p>Property of a good partition wall</p> <p>Types of partition wall</p> <p>i. Brick partition</p> <p>ii. Glass partition</p> <p>iii. Timber or wooden partition</p> <p>iv. Aluminium partition</p> <p>(12 hrs.)</p>
<p>Professional Skill 28 Hrs;</p> <p>Professional Knowledge 06 Hrs</p>	<p>Draw plumbing and drainage details and sanitary fittings by using CAD.</p>	<p>51. Layout the plumbing/drainage /Sanitary plan and sectional elevation. (12 hrs)</p> <p>52. Make Top plan, side elevation, and front elevation of all sanitary plumbing fittings with dimension. (16 hrs)</p>	<p>Plumbing:</p> <p>Purpose and principle of house drainage.</p> <p>Types of Drainage plumbing system</p> <p>i. One pipe system</p> <p>ii. Single stack system</p> <p>iii. Single stack (partially ventilated system)</p> <p>iv. Two pipe system</p>

			<p>Sanitation:</p> <p>Traps</p> <ol style="list-style-type: none"> i. Gully trap ii. Intercepting trap iii. Grease trap iv. Floor trap or Nahni trap <p>Waste water disposal:</p> <ol style="list-style-type: none"> i. Inspection chamber ii. Septic tank <p>Pipes:</p> <ol style="list-style-type: none"> i. Soil pipe ii. Waste water pipe iii. Rain water pipe <p>Sanitation fitting:</p> <ol style="list-style-type: none"> i. Wash basin ii. Sink iii. Bath tub iv. Water closet v. Urinals vi. Flushing cisterns <p>(06 hrs.)</p>
<p>Professional Skill 56 Hrs; Professional Knowledge 12 Hrs</p>	<p>Draw lighting and electrical layout plan by using CAD.</p>	<p>53. Layout plan of false ceiling with lighting position, dimensions and specifications. (28 hrs)</p> <p>54. Layout of electrical plan & elevation along with switch board, electrical fittings & light fittings on wall with dimension. Introduction of LAN/ CCTV/ Biometric/ Speaker/ Smoke Detector (28 hrs)</p>	<p>Lighting:</p> <p>Introduction of natural and artificial light.</p> <p>Different types of lighting arrangements</p> <ol style="list-style-type: none"> i. Direct lighting <ul style="list-style-type: none"> • Angular lighting • Down lighting • Eyeball fitting • Track lighting • Shade lighting ii. Indirect lighting iii. Diffused lighting iv. Concealed lighting <p>Variety of lamps</p> <ol style="list-style-type: none"> i. Incandescent ii. Tungsten halogen iii. Florescent iv. Mercury v. Sodium vapour

			<ul style="list-style-type: none"> vi. LED <p>Electrical accessories</p> <ul style="list-style-type: none"> i. Switches & sockets with box ii. DB (distribution board) & MCB iii. Lamp holders iv. Ceiling roses <p>(12 hrs.)</p>
Professional Skill 28 Hrs; Professional Knowledge 06 Hrs	Draw air conditioning layout by using CAD.	55. Layout plan of window and Split air Conditioning with specification. (28 hrs)	<p>Air conditioning:</p> <p>Introduction of Air Conditioning Principle of Air Conditioning Types of Air Conditioning</p> <ul style="list-style-type: none"> i. Window Air Conditioning ii. Split Air Conditioning iii. Centralised Air Conditioning iv. Cassette Air Conditioning <p>(06 hrs.)</p>
Professional Skill 56 Hrs; Professional Knowledge 12 Hrs	Draw commercial interiors by using CAD.	<p>Office design project: -</p> <ul style="list-style-type: none"> 56. Layout plan (10 hrs) 57. Elevations. (10 hrs) 58. Necessary working details to execute the project smoothly. (14 hrs) 59. Free hand sketch for necessary details. (12 hrs) 60. Rendering with gradient & hatches. (10 hrs) 	<p>Planning of commercial interiors: -</p> <p>Introduction of office building.</p> <p>Offices-</p> <ul style="list-style-type: none"> i. Interior designer/Architect ii. Lawyer office iii. Administration Room iv. Hotel waiting lounge <p>Follow design guidelines and office space standard.</p> <p>(12 hrs.)</p>
<p>Project Work: - One room estimation of interiors works.</p> <p>Industrial Visit [Visit to different places for interior work and to different sites where interiors works are in progress & Necessary practical training to be carried out on site.]</p>			

SYLLABUS FOR CORE SKILLS
1. Workshop Calculation & Science (Common for one year course) (80 Hrs)
2. Employability Skills (Common for all trades) (160 Hrs)

Learning outcomes, assessment criteria, syllabus and Tool List of Core Skills subjects which is common for a group of trades, provided separately in www.bharatskills.gov.in

LIST OF TOOLS AND EQUIPMENT			
INTERIOR DESIGN & DECORATION (For batch of 24 candidates)			
A. FURNITURE FOR THEORY & PRACTICAL			
S No.	Name of the Tools & Equipment	Specifications	Quantity
1.	Modular writing tray chairs with adjustable pad for theory class room		24 nos.
2.	Drawing Boards fixed over adjustable stand	700mm x 500mm	24+1 set
3.	Draughtsman stool with back (revolving & adjustable type)	Seat – 450mm (W) x 450mm (D) x 50mm (thick) Back rest – 400mm (W) x 350mm (Ht.) Seat Ht. Range – 600mm x 762.5mm	24 nos.
4.	Students Lockers	with 8 compartments	3 nos.
5.	Chest of Drawers		2 nos.
6.	Steel book case with lockable glass shutters		1 no.
7.	Instructor's table with glass top	700mm(L) x 500mm(W)x750mm(H)	2 nos.
8.	Instructor's arm chair		2 nos.
9.	Visitor's chair		2 nos.
10.	Steel Almirah		2 nos.
11.	Magnetic White Board	3600mmx1200mm	2 nos.
12.	Pin-up board (with or without stand)		6 nos.
13.	Working table with glass top	Size 1250mm x 950mm	2 nos.
14.	Air conditioner (split unit) for theory and practical room	2.0 tons	As required
15.	Claw hammer		2 nos.
16.	Metallic tape	30 meter long	2 nos.
17.	Display board covered with glass or acrylic sheet		2 nos.
18.	Lux meter (to measure light) (Optional)		1 no.
B. FURNITURE FOR CAD LAB			
19.	Desktop Computer	CPU: 32/64 Bit i3/i5/i7 or latest processor, Speed: 3 GHz or Higher. RAM:-4 GB DDR-III or Higher, Wi-Fi	24 Nos.

		Enabled. Network Card: Integrated Gigabit Ethernet, with USB Mouse, USB Keyboard and Monitor (Min. 17 Inch. Licensed Operating System and Antivirus compatible with trade related software.	
20.	Laptop	with latest configuration pre-loaded with operating system	2 Nos.
21.	Drafting Software: AutoCAD	Educational Version (Free downloadable)	25 Nos.
22.	Anti Virus Software		As required
23.	Other software – Corel DRAW, PHOTOSHOP etc.		As required
24.	Steel almirah		2 Nos.
25.	A3 size Colored Laser Jet, duplex, Scanner cum printer (multifunctional)	Latest Configuration	1 No.
26.	UPS online		As required
27.	Computer Table		24 Nos.
28.	Trainees chair with arm		24 Nos.
29.	Instructor's Lab table		1 No.
30.	Instructor's chair with arm		2 Nos.
31.	Book shelf with glass shutters		1 No.
32.	Air conditioner (split type) for CAD lab	2.0 tons	2 Nos.
33.	LAN connectivity		As per requirement
34.	Internet connection Wi-Fi		1 No.
35.	Visualizer with accessories (with latest configuration)		1 No.
36.	Vacuum Cleaner		1 No.
37.	Fire Extinguisher		1 No.
38.	Shoe rack		1 No.
39.	Wall clock		1 Nos.
C. AUDIO VISUAL AIDS			
40.	LED Projector latest model with white screen		1 No.
41.	Interactive Board with complete accessories		1 No.

D. CONSUMABLE ITEMS FOR ONE BATCH			
42.	Adjustable set square with beveled edge	30 cm	24 + 1 sets
43.	Compass with Long arm & pen holder		24 + 1 No.
44.	Protractor	15 cm	24 + 1 No.
45.	Calligraphy pens /Graphic Pens / Ink / Stencil		As per requirement
46.	Roll-n-draw roller scale	30 cm long	24+1 Nos.
47.	Triangular Scale (feet/ inch, metric)	30 cm	24+1 Nos.
48.	Clutch pencil	0.5mm, 0.2 mm, 2mm./drawing pencil (H, HB, B)	24+1 Nos.
49.	Pencil Sharpener, Adjustable		5 Nos.
50.	M.D / Parallel Bar / T scale - 750 mm long		24+1 Nos.
51.	Plastic French Curve with ink edge - set of 12		4 sets
52.	Furniture template 1:50, 1:100,1:200		24+1Nos.
53.	Circular and oval template		24+1Nos.
54.	Pen Drive		As per requirement
55.	Directional Magnetic Compass		24+1 Nos.
56.	Metric Tape-5M	3mt., 5mt., long	24+1 Nos.
57.	Erasing shield small & Big sizes		24+1 Nos.
58.	Metallic tape/ Fiber Glass Measuring Tape	30mt., 60mt. long	02 No.
59.	Calculator Scientific		05 Nos.
60.	Beam Compass with pen holder (rotring/ steadler made)		02 Nos.
61.	Flexi curve	80 cm	04 Nos.
62.	Measure Distance Meter LCD Digital Laser Pointer Measurer Tool		02 Nos.
63.	Electronic Glue gun		05 Nos.
64.	Hand drill machine		02 Nos.
E. MODELS AS TEACHING AIDS			
65.	Geometrical shapes		As per requirement
66.	Staircase single floor ht. with		As per

Interior Design & Decoration

	landing		requirement
67.	Door Windows with frame		As per requirement
68.	Wooden Carpentry Joints		As per requirement
69.	Carpentry & Painting Tools		As required

Note:

1. *All the hand tools mentioned under Sl. No. 42 to 57 would be issued to Trainees once during their course and to be treated as consumables.*
2. *The quantities of hand Tools may be increased accordingly based on the No. of Trainees on roll (including the Strength of Additional Unit, if any).*
3. *In addition to the list, small measuring tapes, Drawing Sheet, Tracing Paper, Butter Sheet, Color Pencils, Pencil (of various grades), Pencil Leads, Cello tape, Eraser and any other Raw Materials would be issued as per the requirement and will be considered as consumable items.*
4. *Internet facility is desired to be provided in the class room.*

The DGT sincerely acknowledges contributions of the Industries, State Directorates, Trade Experts, Domain Experts, trainers of ITIs, NSTIs, faculties from universities and all others who contributed in revising the curriculum. Special acknowledgement is extended by DGT to the following expert members who had contributed immensely in this curriculum.

List of Expert Members contributed/ participated for finalizing the course curriculum of Interior Design and Decoration. The Trade Committee Meeting held on 03.05.2017 at CSTARI, Kolkata.			
S No.	Name & Designation Sh/Mr/Ms	Organization	Mentor Council Designation
1.	SANJAY KUMAR Joint Director of Trg.	CSTARI, Kolkata	Chairman
2.	SUMAN CHAKRABORTY, Interior Designer	DERA, 152/1, Santoshpur Avenue, Kolkata - 700075	Member
3.	PINAKI BYSACK, Interior Designer	Archon Enterprise, 14/3-A, Sovaram Bysack Street, Kolkata	Member
4.	MONTU SHAW, Interior Designer	BSS Design & Interior Pvt. Ltd., 191 B, Chetla hat Road, Kolkata	Member
5.	SIKHA PAL, Architect	Abode Consultant, Salt Lake, Kolkata	Member
6.	R.N. BANDYOPADHYAY, Consultant	TET & SD Dept. Govt. of West Bengal	Member
7.	HARI CHANDA DEVI PAL, Vocational Instructor	RVTI, Panipat	Member
8.	JYOTI TAMRAKAR, Vocational Instructor (IDD)	RVTI, Kolkata	Member
9.	L. K. MUKHERJEE Dy. Director of Trg.	CSTARI, Kolkata	Member
10.	NIRMALYA NATH Asst. Director of Trg.	CSTARI, Kolkata	Member
11.	R.N. MANNA, Training Officer	CSTARI, Kolkata	Member cum Co-coordinator

List of the organizations/Experts validated the course curricula of Interior Design & Decoration trade revised on 03rd May 2017 at CSTARI, Kolkata	
S No.	Organization/ Experts
1.	ESAR ENGINEERING CO. FE – 7, Salt Lake, Sector – III, Kolkata - 700106
2.	ARCHITECT KESHAV SINGH, 572, Sai Kripa Colony, Indore
3.	VIMA – The Dimension, Divya Pandey, Senior Architect
4.	Mrs. Snehal Mehta, MD & Chairman, NATIONAL INSTITUTE OF DESIGN, Ahmedabad - 09
5.	Mrs. Ratna Saxena, Interior Designer, RIMSNEY STYLO INTERIORS, Delhi - 92
6.	Mr. Vineet Kumar Arya, Lecturer, S.D. POLYTECHNIC, Muzaffarnagar
7.	Heena Ali Khan, Joint Secretary Pan Asia Academics, EXTERIOR INTERIOR LIMITED

ABBREVIATIONS

CTS	Craftsmen Training Scheme
ATS	Apprenticeship Training Scheme
CITS	Craft Instructor Training Scheme
DGT	Directorate General of Training
MSDE	Ministry of Skill Development and Entrepreneurship
NTC	National Trade Certificate
NAC	National Apprenticeship Certificate
NCIC	National Craft Instructor Certificate
LD	Locomotor Disability
CP	Cerebral Palsy
MD	Multiple Disabilities
LV	Low Vision
HH	Hard of Hearing
ID	Intellectual Disabilities
LC	Leprosy Cured
SLD	Specific Learning Disabilities
DW	Dwarfism
MI	Mental Illness
AA	Acid Attack
PwD	Person with disabilities

