INTERIOR DESIGNER & DECORATOR

COMPETENCY BASED CURRICULUM

(Duration: 2 Yrs.)

APPRENTICESHIP TRAINING SCHEME (ATS)

NSQF LEVEL-5



SECTOR – CONSTRUCTION



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





INTERIOR DESIGNER & DECORATOR

(Revised in 2018)

APPRENTICESHIP TRAINING SCHEME (ATS)



Developed By

Ministry of Skill Development and Entrepreneurship Directorate General of Training

CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE

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SI. No.	Name & Designation Shri/Mr./Ms.	Organization	Mentor Council Designation
Exper	t group on restructuring of Appren	ticeship Training Modules	
1.	Mrs. Hari Chanda Pal	NVTI , NOIDA	V.I. , I.D.D
2.	Mrs. Lalita Pali (lecturer)	Meerabai Institute of Technology	HOD (Retired)
3.	Mrs. Arti suri	Freelancing	Interior
			Designer
4.	Mrs. Kavitha Shanker (vocational	NVTI Noida	Artichect
	Instructor)		
5.	Mr. Satish Kumar (Vocational	NVTI Noida	Artichect
	Instructor)		
6.	Mr. Rakesh Limbha	Limbha & Associates	Proprietor
7.	Mr. Sachin Kharbanda	Divine Interior	Proprietor
8.	Mr. Dinesh Dutt	Limbha & Associates	Artichect
9.	Mr. Brijesh Kumar	Asid consultants	Interior
			Designer
10.	Mrs. Neha Jain	YWCA Connaught place	Interior
			Designer

कौशल भारत - कुशल भारत

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1.1 Apprenticeship Training Scheme under Apprentice Act 1961

The Apprentices Act, 1961 was enacted with the objective of regulating the programme of training of apprentices in the industry by utilizing the facilities available therein for imparting on-the-job training. The Act makes it obligatory for employers in specified industries to engage apprentices in designated trades to impart Apprenticeship Training on the job in industry to school leavers and person having National Trade Certificate(ITI pass-outs) issued by National Council for Vocational Training (NCVT) to develop skilled manpower for the industry. There are four categories of apprentices namely; trade apprentice, graduate, technician and technician (vocational) apprentices.

Qualifications and period of apprenticeship training of **trade apprentices** vary from trade to trade. The apprenticeship training for trade apprentices consists of basic training followed by practical training. At the end of the training, the apprentices are required to appear in a trade test conducted by NCVT and those successful in the trade tests are awarded the National Apprenticeship Certificate.

The period of apprenticeship training for graduate (engineers), technician (diploma holders and technician (vocational) apprentices is one year. Certificates are awarded on completion of training by the Department of Education, Ministry of Human Resource Development.

1.2 Changes in Industrial Scenario

Recently we have seen huge changes in the Indian industry. The Indian Industry registered an impressive growth during the last decade and half. The number of industries in India have increased manifold in the last fifteen years especially in services and manufacturing sectors. It has been realized that India would become a prosperous and a modern state by raising skill levels, including by engaging a larger proportion of apprentices, will be critical to success; as will stronger collaboration between industry and the trainees to ensure the supply of skilled workforce and drive development through employment. Various initiatives to build up an adequate infrastructure for rapid industrialization and improve the industrial scenario in India have been taken.

1.3 Reformation

The Apprentices Act, 1961 has been amended and brought into effect from 22nd December, 2014 to make it more responsive to industry and youth. Key amendments are as given below:

- Prescription of number of apprentices to be engaged at establishment level instead of trade-wise.
- Establishment can also engage apprentices in optional trades which are not designated, with the discretion of entry level qualification and syllabus.
- Establishments have been permitted to outsource basic training in an institute of their choice.
- The burden of compliance on industry has been reduced significantly.



2.1 GENERAL

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

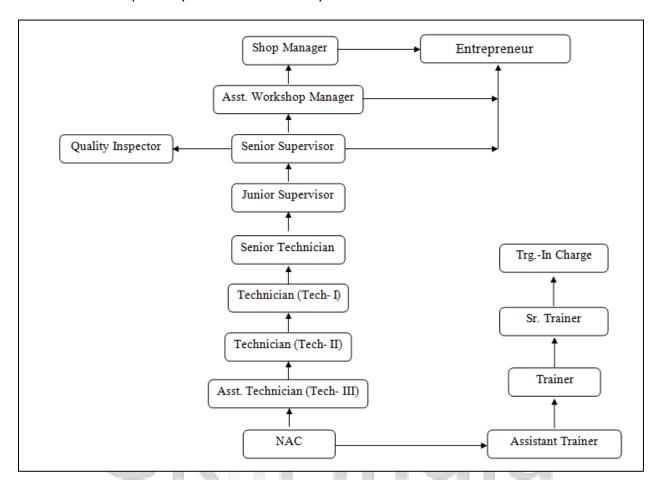
Interior Designer & Decorator trade under ATS is one of the most popular courses delivered nationwide through different industries. The course is of two years (02 Blocks) duration. It mainly consists of Domain area and Core area. In the Domain area Trade Theory & Practical impart professional - skills and knowledge, while Core area - Workshop Calculation and science and Employability Skills imparts requisite core skills & knowledge and life skills. After passing out the training programme, the trainee is being awarded National Apprenticeship Certificate (NAC) by NCVT having worldwide recognition.

Broadly candidates need to demonstrate that they are able to:

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

2.2 CAREER PROGRESSION PATHWAYS:

• Indicative pathways for vertical mobility.



2.3 COURSE STRUCTURE:

Table below depicts the distribution of training hours across various course elements during a period of two years (*Basic Training and On-Job Training*): -

Total training duration details: -

Time	1-3	4-12	13-15	16-24
(in months)				
Basic Training	Block- I		Block – II	
Practical Training		Block – I		Block – II
(On - job training)				

A. Basic Training

For 02 yrs. Engg. Course :-(**Total 06 months:** 03 months in 1styr. + 03 months in 2nd yr.) For 01 yr. Engg. course :-(**Total 03 months:** 03 months in 1styr.)

Sl. No.	Course Element		Total Notional	Training Hours
			For 02 yrs.	For 01 yr.
			course	course
1	Professional Skill (Trade Practical)		550	275
2	Professional Knowledge (Trade Theory)		240	120
3	Workshop Calculation & Science		40	20
4	Engineering Drawing	4.	60	30
5	Employability Skills	1237	110	55
	Total (including Internal A	ssessment)	1000	500

B. On-Job Training:-

For 02 yrs. Engg. Course :- (**Total 18 months:** 09 months in 1st yr. + 09 months in 2nd yr.)

Notional Training Hours for On-Job Training: 3120 Hrs.

For 01 yr. Engg. course :-(Total 12 months)

Notional Training Hours for On-Job Training: 2080 Hrs.

C. Total training hours:-

633141			1144
Duration	Basic Training	On-Job Training	Total
		-0	
For 02 Engg. yrs.	1000 hrs.	3120 hrs.	4120 hrs.
course			
For 01 yr. Engg. course	500 hrs.	2080 hrs.	2580 hrs.

2.4 ASSESSMENT & CERTIFICATION:

The trainee will be tested for his skill, knowledge and attitude during the period of course and at the end of the training programme as notified by Govt of India from time to time. The Employability skills will be tested in first two semesters only.

- a) The **Internal assessment** 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 (section-2.4.2). The marks of internal assessment will be as per the template (Annexure II).
- b) The final assessment will be in the form of summative assessment method. The All India Trade Test for awarding NAC will be conducted by NCVT on completion of course as per guideline of Govt of India. The pattern and marking structure is being notified by govt of India 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 (section-2.4.2) before giving marks for practical examination.

2.4.1 PASS REGULATION

The minimum pass percent for Practical is 60% & minimum pass percent for Theory subjects 40%. The candidate pass in each subject conducted under all India trade test.

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 team work, avoidance/reduction of scrap/wastage and disposal of scarp/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 of internal assessments are to be preserved until forthcoming semester 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 with occasional guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of an acceptable standard of craftsmanship.	 Demonstration of good skill in the use of hand tools, machine tools and workshop equipment Below 70% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards. A fairly good level of neatness and consistency in the finish Occasional support in completing the project/job.
(b)Weightage in the range of above75% - 90	0% to be allotted during assessment
For this grade, the candidate, with little guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of a reasonable standard of craftsmanship. (c) Weightage in the range of above 90% to	 Good skill levels in the use of hand tools, machine tools and workshop equipment 70-80% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards. A good level of neatness and consistency in the finish Little support in completing the project/job
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.	 High skill levels in the use of hand tools, machine tools and workshop equipment Above 80% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards. A high level of neatness and consistency in the finish. Minimal or no support in completing the project.

Brief description of Job roles:

Interior Designer

Interior Designer plans, designs, and furnishes interiors of residential, commercial, or industrial buildings. Formulates design which is practical, aesthetic, and conducive to intended purposes, such as raising productivity, selling merchandise, or improving life style. May specialize in a particular field, style, or phase of interior design. 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 utilisation 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 for boats, planes, buses, trains, and other enclosed spaces.

Decorator

Decorator; Designer creates artistic and ornamental designs in colour for interior and exterior decorations and displays and arranges in attractive manner wares, products, furniture etc. 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. 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 specialisation.

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Furniture Designer

Furniture Designer designs furniture line or individual pieces for manufacture according to knowledge of design trends, offerings or competition, capability of production facilities and characteristics of company's traditional market. Studies market trends and customer needs and discusses design suggestions with production management and trade channels. Evaluates proposals and prepares freehand sketches of promising designs. Obtains approval from customer, design committee or company management and originates scale drawing of approved designs, using drawing instruments. Traces drawing on tracing cloth, preparatory to production of blue print; Prepares or directs preparation of blueprints containing manufacturing specifications, such as dimensions, kind of wood and upholstery fabrics to be

used in manufacturing furniture line or article. May plan modifications for completed furniture to conform to changes in design trends and increase customer acceptance.

Bathroom and Kitchen Designer

Bathroom and Kitchen Designer is responsible for design of bathrooms and kitchens in a housing setups.

Decorators and Commercial Designers, Other

Decorators and Commercial Designers, other include other associate professionals who apply artistic techniques to product design, interior decoration and sales promotion not elsewhere classified.

Reference NCO-2015:

- (i) 3432.0100 Interior Designer
- (ii) 3432.0200 Decorator
- (iii) 2163.0400 Furniture Designer
- (iv) 3432.0501 Bathroom and Kitchen Designer

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(v) 3432.9900 – Decorators and Commercial Designers, Other



NSQF level for Interior Designer & Decorator trade under ATS: Level 5

As per notification issued by Govt. of India dated- 27.12.2013 on National Skill Qualification Framework total 10 (Ten) Levels are defined.

Each level of the NSQF is associated with a set of descriptors made up of five outcome statements, which describe in general terms, the minimum knowledge, skills and attributes that a learner needs to acquire in order to be certified for that level.

Each level of the NSQF is described by a statement of learning outcomes in five domains, known as level descriptors. These five domains are:

- a. Process
- b. professional knowledge,
- c. professional skill,
- d. core skill and
- e. Responsibility.



The Broad Learning outcome of Interior Designer & Decorator trade under ATS mostly matches with the Level descriptor at Level-5.

The NSQF level-5 descriptor is given below:

Level	Process Required	Professional Knowledge	Professional Skill	Core Skill	Responsibility
Level 5	Job that	Knowledge of	A range of	Desired	Responsibility
	requires well	facts,	cognitive and	mathematical	for own work
	developed	principles,	practical skills	skill,	and
	skill, with clear	processes and	required to	understanding	Learning and
	choice of	general	accomplish	of social,	some
	procedures in	concepts, in a	tasks and solve	political and	responsibility
	familiar	field of	problem by	some skill of	for other's
	context.	work	selecting and	collecting and	works and
		or study	applying basic	organizing	learning.
			methods, tools,	information,	
			materials and	communication.	
			information.		

5. GENERAL INFORMATION

Name of the Trade	INTERIOR DESIGNER & DECORATOR	
NCO-2015	3432.0100, 3432.0200, 2163.0400, 3432.0501, 3432.9900	
NSQF Level	Level – 5	
Duration of Apprenticeship		
Training (Basic Training + On-Job Training)	Two years (02 Blocks each of one year duration).	
Duration of Basic Training	a) Block –I: 3 months	
	b) Block – II: 3 months	
	Total duration of Basic Training: 6 months	
Duration of On-Job Training	a) Block–I: 9 months	
	b) Block–II: 9 months	
Frature Occalistications	Total duration of Practical Training: 18 months	
Entry Qualification	Passed 10 th Class under 10+2 system of Education or its equivalent	
Selection of Apprentices	The apprentices will be selected as per Apprenticeship Act amended time to time.	
Instructors Qualification for Basic Training	As per ITI instructors qualifications as amended time to time for the specific trade.	
Infrastructure for Basic	As per related trades of ITI	
Training		
Examination	The internal examination/ assessment will be held on completion of each block.	
	Final examination for all subjects will be held at the end of	
	course and same will be conducted by NCVT.	
Rebate to Ex-ITI Trainees	01 year	
CTS trades eligible for	Interior Designer & Decorator	
Interior Designer &		
Decorator Apprenticeship		

Note:

- Industry may impart training as per above time schedule for different block, however this is not fixed. The industry may adjust the duration of training considering the fact that all the components under the syllabus must be covered. However the flexibility should be given keeping in view that no safety aspects is compromised.
- For imparting Basic Training the industry to tie-up with ITIs having such specific trade and affiliated to NCVT.

6.1 GENERIC LEARNING OUTCOME

The following are minimum broad Common Occupational Skills/ Generic Learning Outcome after completion of the Interior Designer & Decorator course of 02 years duration under ATS.

Block I & II -

- 1. Recognize & comply safe working practices, environment regulation and housekeeping.
- Understand and explain different mathematical calculation & science in the field of study including basic electrical. [Different mathematical calculation & science -Work, Power & Energy, Algebra, Geometry & Mensuration, Trigonometry, Heat & Temperature, Levers & Simple machine, graph, Statistics, Centre of gravity, Power transmission, Pressure]
- 3. Interpret specifications, different drawing and apply for different application in the field of work. [Different drawing-Geometrical construction, Dimensioning, Layout, Method of representation, Symbol, scales, Different Projections, Machined components & different thread forms, Assembly drawing, Sectional views, Estimation of material, Electrical & electronic symbol]
- 4. Select and ascertain measuring instrument and measure dimension of components and record data.
- 5. Explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.
- 6. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.
- 7. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.
- 8. Plan and organize the work related to the occupation.

6.2 SPECIFIC LEARNING OUTCOME

Block - I

- 1. Identify safety precaution on the shop floor.
- 2. Draw Free hand sketching of geometrical figure furniture and door Design, Window design.
- 3. Explain simple problem on projecting of point's lines surfaces and solids.
- 4. Define Theories of colors for various color scheme.
- 5. Draw different types of arches & lintels.

- 6. Plan and draw Sections & Elevation of Residential building single story with sketches and line diagram.
- 7. Design and draw of furniture like sofa, bed, TV unit's dining table office furniture etc.
- 8. Draw Perspective views of interiors including coloring practice and Shading.
- 9. Design and draw pelmet and types of door window details.
- 10. Make Drawings of flooring Patterns.
- 11. Draw Isometric view of interiors like Kitchen, Drawing, and Dinning & Bathrooms
- 12. Design Staircase types & Calculation and draw complete details including handrails
- 13. Design Residential Building rooms' services and utilities ex-kitchen, toilet etc.
- 14. Draw interior layout for various purposes (living, dining, drawing, bed rooms).
- 15. Select items as per Design which is used in interiors.
- 16. Identify Indoor / Outdoor Plants in which is used in interiors.

Block - II

- 17. Design and draw lighting plan with the help of tracing sheet.
- 18. Design and draw various false ceiling, flooring, partition & Paneling etc.
- 19. Explain varnishes, polishing, painting classification and uses.
- 20. Draw working drawing of various drawings and sanitary proposal Connected with building.
- 21. Operate Computer and able to draw various drawing using Autocad.
- 22. Prepare estimate of all types of Residential Building.
- 23. Design and draw working drawings of Commercial building.
- 24. Explain standard office procedure drawings.
- 25. Design and draw different types of furniture.
- 26. Identify and use different types of materials used in buildings i.e. flooring ,walls, ceiling etc.
- 27. Draw building plumbing electrical fittings etc.
- 28. Prepare working drawing of different types building by AutoCAD.
- 29. Select space programming circulation and design.
- 30. Carry out Case Study of hotels and corporate interiors.
- 31. Visit the historical Residential, hotels, Commercial Places.
- 32. Design display portion ex. Window and island display.
- 33. Identify how to deals with the customers.
- 34. Identify and use printout drawings of all types of sizes A1 A2 A3 A4.

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

7. LEARNING OUTCOME WITH ASSESSMENT CRITERIA

GENERIC LEARNING OUTCOME			
LEARNING OUTCOMES	ASSESSMENT CRITERIA		
Recognize & comply safe working practices, environment regulation and	1. 1. Follow and maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements.		
housekeeping.	Recognize and report all unsafe situations according to site policy.		
	 Identify and take necessary precautions on fire and safety hazards and report according to site policy and procedures. 		
	 Identify, handle and store / dispose off dangerous/unsalvageable goods and substances according to site policy and procedures following safety regulations and requirements. 		
	1. 5. Identify and observe site policies and procedures in regard to illness or accident.		
	1. 6. Identify safety alarms accurately.		
	 Report supervisor/ Competent of authority in the event of accident or sickness of any staff and record accident details correctly according to site accident/injury procedures. 		
SI/	1. 8. Identify and observe site evacuation procedures according to site policy.		
OK.	1. 9. Identify Personal Productive Equipment (PPE) and use the same as per related working environment.		
	1. 10. Identify basic first aid and use them under different circumstances.		
काशल	1. 11. Identify different fire extinguisher and use the same as per requirement.		
	1. 12. Identify environmental pollution & contribute to avoidance of same.		
	1. 13. Take opportunities to use energy and materials in an environmentally friendly manner		
	1. 14. Avoid waste and dispose waste as per procedure		
	1. 15. Recognize different components of 5S and apply the same in the working environment.		
2. Understand, explain different mathematical calculation & science in the field of study including basic	2.1 Explain concept of basic science related to the field such as Material science, Mass, weight, density, speed, velocity, heat & temperature, force, motion, pressure, heat treatment, centre of gravity, friction.		

electrical and	
apply in day to day	2.2 Measure dimensions as per drawing
work.[Different mathematical	2.3 Use scale/ tapes to measure for fitting to specification.
calculation & science -Work, Power & Energy, Algebra,	2.4 Comply given tolerance.
Geometry & Mensuration, Trigonometry, Heat & Temperature, Levers & Simple	2.5 Prepare list of appropriate materials by interpreting detail drawings and determine quantities of such materials.
machine, graph, Statistics, Centre of gravity, Power	2.6 Ensure dimensional accuracy of assembly by using different instruments/gauges.
transmission, Pressure]	2.7 Explain basic electricity, insulation &earthing.
3. Interpret specifications, different engineering drawing	3. 1. Read & interpret the information on drawings and apply in executing practical work.
and apply for different application in the field of work. [Different engineering	 Read & analyse the specification to ascertain the material requirement, tools, and machining /assembly /maintenance parameters.
drawing-Geometrical construction, Dimensioning, Layout, Method of	3. 3. Encounter drawings with missing/unspecified key information and make own calculations to fill in missing dimension (passameters to carry out the work).
representation, Symbol, scales, Different Projections,	missing dimension/parameters to carry out the work.
Machined components & different thread forms, Assembly drawing, Sectional views, Estimation of material, Electrical & electronic symbol]	11 India
4. Select and ascertain measuring instrument and	4.1 Select appropriate measuring instruments such as micrometers, verniercalipers, dial gauge, bevel
measure dimension of	protector and height gauge (as per tool list).
components and record data.	4.2 Ascertain the functionality & correctness of the instrument.
	4.3 Measure dimension of the components & record data to analyse the with given drawing/measurement.
	<u>. </u>
5. Explain the concept in productivity, quality tools,	5.1 Explain the concept of productivity and quality tools and apply during execution of job.
and labour welfare legislation and apply such in day to day work to improve productivity	5.2 Understand the basic concept of labour welfare legislation and adhere to responsibilities and remain sensitive towards such laws.
& quality.	5.3 Knows benefits guaranteed under various acts

6. Explain Explain the concept of energy conservation, global energy conservation, global warming warming, pollution and utilize the available recourses and pollution and contribute optimally & remain sensitive to avoid environment in day to day work by pollution. optimally using available 6.2 Dispose waste following standard procedure. resources. 7. Explain personnel finance, 7. 1. Explain personnel finance and entrepreneurship. entrepreneurship and 7. 2. Explain role of Various Schemes and Institutes for selfmanage/organize related task employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for in day to day work for financing/ non financing support agencies personal & societal growth. familiarizes with the **Policies** /Programmes & procedure & the available scheme. 7. 3. Prepare Project report to become an entrepreneur for submission to financial institutions. 8. Plan and organize the work 8. 1. Use documents, drawings and recognize hazards in the related to the occupation. work site. 8. 2. Plan workplace/ assembly location with due consideration to operational stipulation 8. 3. Communicate effectively with others and plan project tasks 8. 4. Assign roles and responsibilities of the co-trainees for execution of the task effectively and monitor the same.

SPECIFIC OUTCOME

Block-I & II (Section:10)

Assessment Criteria i.e. the standard of performance, for each specific learning outcome mentioned under **block** – **I** & **block** – **II** (section: 10) must ensure that the trainee achieves well developed skill with clear choice of procedure in familiar context. Assessment criteria should broadly cover the aspect of **Planning** (Identify, ascertain, estimate etc.); **Execution** (perform, illustration, demonstration etc. by applying 1) a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information 2) Knowledge of facts, principles, processes, and general concepts, in a field of work or study 3)Desired Mathematical Skills and some skill of collecting and organizing information, communication) and **Checking/ Testing** to ensure functionality during the assessment of each outcome. The assessments parameters must also ascertain that the candidate is responsible for own work and learning and some responsibility for other's work and learning.

BASIC TRAINING (Block – I)

Duration: (03) Three Months

Week No.	Professional Skills (Trade Practical)	Professional Knowledge (Trade Theory)
1	 Importance of safety and general precaution observed in the trade. Importance of the trade in the development of industrial economy of the country. 	Familiarization with the institute. Importance of trade training. Instrument used in the trade. Type of work done/jobs by the trainees in the institute.
2	 Introduction of Interior Design 3. Drawing instruments, equipment's and materials their used, care and maintenance. 4. Introduction to Indian standard institution. 	Identifying of drawing instruments layout of drawing sheets by doing small exercises in interior. Use of drawing instruments Tee square/ MD and drawing boards printing of letters and numbers.
3	Colors 5. Primary, Secondary & Tertiary Color.	Graphics used for interior. Graphics symbols for Door, windows and furniture of different material.
4	 Graphics & Anthropometric 6. Rendering, Symbols & Designing of Interior. 7. Standard sizes & Height for various interior designs like (Kitchen, toilet, Bed Room ,Living Room Dinning etc. 	Making detail drawing of different types of Carpentry joints.
5-6	Bricks / Stone / R.C.C 8. Definition of Foundation, Damp Proof Course.	Detail of wall footing, R.C.C footing. Types of bricks, & bonds,
7	Doors / Windows 9. Types of doors, windows and ventilators with uses.	Drawing of different types of doors, windows and ventilators.
8	Lintel and Arches use in interior 10. Different types of lintel and arches.	Details of Lintel and Arches Drawing of different types of lintel and arches.
9-10	Types of Staircases 11. Types of staircases.	Preparing drawings of details of parts of wooden stair including handrail design. Types of staircase straight, open newel, dog legged, geometrical, bifurcated and

		spiral Plans & Ele.	
11-12	Principle of perspective	Functional design	
		How to make Design – Flow of	
	12. Principal of isometric view &	Circulation chart , bubble diagram	
	perspective view of furniture which	programming, planning and designing of	
	is used in interiors	spaces with furniture layout, basic layout	
		of furniture space planning and layout.	
13	Internal Assessment/Examination 03days		

Note: - More emphasis to be given on video/real-life pictures during theoretical classes. Some real-life pictures/videos of related industry operations may be shown to the trainees to give a feel of Industry and their future assignment.





BASIC TRAINING (Block – II)

Duration: (03) Three Months

Week	Professional Skills (Trade Practical)	Professional Knowledge (Trade					
No.	Troressional Skins (Trade Tractical)	Theory)					
1-2	False Ceiling & Partition	False Ceiling & Partition					
	13. Materials used for false ceiling.	Making drawing of false ceiling and					
	14. Types of partition wall- wooden, glass.	Partition of low height.					
	15. Materials used for Partition.						
3	Flooring & Paneling	Flooring & Paneling					
	16. Types of floor finishing- method of	Drawing details -tiled, timber, pattern,					
	constructing, mosaic, brick tiled etc.	stone, mosaic, glass, carpets.					
	used in floors.	Details of wooden Panelling					
4	Paints & Polishing	Paints & Polishing					
	17. Polishes - method of preparation-	Design the Painting of walls, ceiling					
	different types classification and their	with color, Design the painting of					
	application on woods.	doors and windows					
5-7	Plumbing	Interior services: Planning of					
	18. Water supply pipe lines house	plumbing.					
	drainage, sanitary fittings	Preparation of drawing showing					
	Lighting	various pipe joints for underground					
	19. Types and system of lighting. Safety	drainage, method of sanitary fittings in					
	precautions.	buildings, manholes, septic tanks etc.					
	Air conditioner	Lighting: Types of Lighting system in					
	20. Types of air Conditioning	different spaces of interiors					
		Note:- Necessary practical training will					
		be carried out on site.					
8-10	Planning of Residential interior	Plan Layout: Introduction of					
	21. Residential Project – planning of	Residential project – detail layout plan,					
	residential building in small scale.	elevations, one point perspective and					
	22. Estimate and costing of different types	two point perspective like Bed Room,					
	of material	Drawing Room, Kitchen, Bathroom &					
		Staircase					
11	Fabrics:	Fabrics : Practice Types of curtains ,					
	23. Types of curtains , Pelmets with	Pelmets					
	specifications						
12	Preliminary Drawing in CAD	CAD training-					
	24. CAD commands and use of different	Drawing practice on CAD software.					
	menus						
13	Internal Assessment/E	xamination 03days					

Note: - More emphasis to be given on video/real-life pictures during theoretical classes. Some real-life pictures/videos of related industry operations may be shown to the trainees to give a feel of Industry and their future assignment.

9.1 WORKSHOP CALCULATION SCIENCE & ENGINEERING DRAWING

	Block – I					
SI.	Workshop Calculation and Science (Duration: - 20 hrs.)					
No.						
1.	Units & Measurements- FPS, CGS, MKS/SI unit, unit of length, Mass and time.					
	Fundamentals and derived units Conversion of units and applied problems.					
2.	Material Science: properties -Physical & Mechanical, Types -Ferrous & Non-Ferrous,					
	difference between Ferrous and Non-Ferrous metals					
3.	Mass . Weight and Density:					
	Mass, Unit of Mass, Weight, difference between mass and weight, Density, unit of					
	density,					
4. Speed and Velocity: Rest and motion, speed, velocity, difference between speed						
	velocity, acceleration, retardation.					
	Average Velocity, Acceleration & Retardation. Related problems.					
	Circular Motion: Relation between circular motion and Linear motion, Centrifugal					
	force, Centripetal force					
5.	Ratio & Proportion :					
	Simple calculation on related problems.					
	- Percentage: Introduction, Simple calculation.					
6.	Work, Power and Energy: work, unit of work, power, unit of power, Horse power of					
	engines, mechanical efficiency, energy, use of energy, potential and kinetic energy,					
	examples of potential energy and kinetic energy.					
	- Meaning of H.P., I.H.P., B.H.P., and F.H.P. and CC and Torque.					



	Block – II
SI. No.	Workshop Calculation and Science (Duration: - 20 hrs.)
1.	Algebra:
	Addition, Subtraction, Multiplication, Division, Algebraic formula, Linear equations
	(with two variables).
2.	Heat & Temperature:
	Heat and temperature, their units, difference between heat and temperature, boiling
	point, melting point, scale of temperature, relation between different scale of
	temperature, Thermometer, pyrometer, transmission of heat, conduction, convection, radiation.
3.	Mensuration: Area and perimeter of square, rectangle, parallelogram, triangle, circle,
	semi circle, Volume of solids - cube, cuboid, cylinder and Sphere.
	Surface area of solids -cube, cuboid, cylinder and Sphere.
	Volume of cut-out solids: hollow cylinders, frustum of cone, block section. Volume of
4.	simple solid blocks. Basic Electricity: Introduction, use of electricity, how electricity is produced, Types of
4.	current AC, DC, their comparison, voltage, resistance, their units. Conductor,
	insulator, Types of connections - series, parallel, electric power, Horse power, energy,
	unit of electrical energy. Concept of earthling.
5.	Simple machines Transmission of power: -Transmission of power by belt, pulleys &
	gear drive.
	Heat treatment process: - Heat treatment and advantages. Annealing, Normalizing,
	Hardening, Tempering.
6.	Trigonometry:
	Trigonometrical ratios, measurement of angles. Trigonometric tables.
	Finding the value of unknown sides and angles of a triangle by Trigonometrical
	method.
	Finding height and distance by trigonometry.
	Application of trigonometry in shop problems. (viz. taper angle calculation).
	Calculate the area of triangle by using trigonometry and application of Pythagoras theorem.
7.	Concept of pressure - Definition:-Force, Pressure, and their units, atmospheric
	pressure, gauges used for measuring pressure, problems.
	Introduction to pneumatics & hydraulics systems
8.	Simple exercises related to trade related Test Papers. Solution of NCVT test papers.

9.2 EMPLOYABILITY SKILLS

(**DURATION: - 110 HRS.**)

·	Block – I					
	(Duration – 55 hrs.)					
1. English Literacy	(Farance Connect)	Duration : 20 Hrs. Marks : 09				
Pronunciation	Accentuation (mode of pronunciation) on simple (use of word and speech)	words, Diction				
Functional Grammar	Transformation of sentences, Voice change, Spellings.	, Change of tense,				
Reading	Reading and understanding simple sentences a environment	about self, work and				
Writing	Construction of simple sentences Writing simple English					
Speaking / Spoken English	n friends/ classmates, bugh role-playing and iption, asking about indamental) numbers sages on and filling in hospitality, Resumes plication reference to					
2. I.T. Literacy		Duration: 20 Hrs. Marks: 09				
Basics of Computer	Introduction, Computer and its application peripherals, Switching on-Starting and shutting d	ns, Hardware and own of computer.				
Computer Operating System	Basics of Operating System, WINDOWS, The user interface of Windows OS, Create, Copy, Move and delete Files and Folders, Use of External memory like pen drive, CD, DVD etc, Use of Commo applications.					
Word processing and Worksheet	Basic operating of Word Processing, Creating, opening and closi Documents, use of shortcuts, Creating and Editing of Text, Formatti the Text, Insertion & creation of Tables. Printing document. Basics of Excel worksheet, understanding basic commands, creati simple worksheets, understanding sample worksheets, use of simple formulas and functions, Printing of simple excel sheets.					
Computer Networking	Basic of computer Networks (using real life exa	mples), Definitions of				

and Internet	Local Area Network (LAN), Wide Area Network (WAN), Internet, Concept of Internet (Network of Networks), Meaning of World Wide Web (WWW), Web Browser, Web Site, Web page and Search Engines. Accessing the Internet using Web Browser, Downloading and Printing Web Pages, Opening an email account and use of email. Social media sites and its implication. Information Security and antivirus tools, Do's and Don'ts in Information Security, Awareness of IT - ACT, types of cyber crimes.								
3. Communication Skill	s	Duration: 15 Hrs. Marks: 07							
Introduction to Communication Skills	Communication and its importance Principles of Effective communication Types of communication - verbal, non verbal, on phone. Non verbal communication -characteristics language Body language Barriers to communication and dealing with barr Handling nervousness/ discomfort.	s, components-Para-							
Listening Skills	Listening-hearing and listening, effective lister effective listening guidelines for effective lister Triple- A Listening - Attitude, Attention & Adjustr Active Listening Skills.	ning.							
Motivational Training	Characteristics Essential to Achieving Success. The Power of Positive Attitude. Self awareness Importance of Commitment Ethics and Values Ways to Motivate Oneself Personal Goal setting and Employability Planning	त ह्त							
Facing Interviews	Manners, Etiquettes, Dress code for an interview Do's & Don'ts for an interview.	,							
Behavioral Skills	Problem Solving Confidence Building Attitude								
Block – II Duration – 55 hrs.									
4. Entrepreneurship Sk	ills	Duration: 15 Hrs. Marks: 06							

Concept of Entrepreneurship									
Project Preparation & Marketing analysis									
Institutions Support	Preparation of Project. Role of Various Schemes a employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Ide financing support agencies to familiarizes /Programmes & procedure & the available scheme	a for financing/ non with the Policies							
Investment Procurement	Project formation, Feasibility, Legal formaliti Estimation & Costing, Investment procedure - Banking Processes.								
5. Productivity		Duration: 10 Hrs. Marks: 05							
Benefits	Personal / Workman - Incentive, Production linked Improvement in living standard.	d Bonus,							
Affecting Factors	Skills, Working Aids, Automation, Environment, Motivation - How improves or slows down.								
Comparison with developed countries	Comparative productivity in developed cour Japan and Australia) in selected industries e.g. Nining, Construction etc. Living standards of those	Nanufacturing, Steel,							
Personal Finance Management	Banking processes, Handling ATM, KYC reginant handling, Personal risk and Insurance.	stration, safe cash							
6. Occupational Safety,	Health and Environment Education	Duration: 15 Hrs. Marks: 06							
Safety & Health	Introduction to Occupational Safety and Health importance of safety and health at workplace.								
Occupational Hazards	Basic Hazards, Chemical Hazards, Vibroacoustic Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards. Occupational health, Occupational hygienic, Occupational Diseases/ Disorders & its prevention.								
Accident & safety	Basic principles for protective equipment. Accident Prevention techniques - control of accidents and safety								

_	measures.								
First Aid	Care of injured & Sick at the workplaces, First-Aid sick person.	l & Transportation of							
Basic Provisions	Idea of basic provision legislation of India.								
	safety, health, welfare under legislative of India.								
Ecosystem	stroduction to Environment. Relationship between Society and nvironment, Ecosystem and Factors causing imbalance.								
Pollution	Pollution and pollutants including liquid, gaseous, solid and hazardous waste.								
Energy Conservation	Conservation of Energy, re-use and recycle.								
Global warming	Global warming, climate change and Ozone layer	depletion.							
Ground Water	Hydrological cycle, ground and surface water Harvesting of water.	, Conservation and							
Environment	ance of in -house								
7. Labour Welfare Legis	lation	Duration: 05 Hrs. Marks: 03							
Welfare Acts	Benefits guaranteed under various acts- Factories Act, Employees State Insurance Act (ESI), Pa Employees Provident Fund Act, The Workmen's co	ayment Wages Act,							
8. Quality Tools		Duration: 10 Hrs. Marks: 05							
Quality Consciousness	Meaning of quality, Quality characteristic.	रत							
Quality Circles Definition, Advantage of small group activity, objectives of quality Circle, Roles and function of Quality Circles in Organization, Operator of Quality circle. Approaches to starting Quality Circles, Steps continuation Quality Circles.									
Quality Management System	Idea of ISO 9000 and BIS systems and its imporqualities.	tance in maintaining							
House Keeping	Purpose of House-keeping, Practice of good Housekeeping.								
Quality Tools	Basic quality tools with a few examples.								

10. DETAILS OF COMPETENCIES (ON-JOBTRAINING)

BROAD LEARNING TO BE COVERED IN INDUSTRY FOR INTERIOR DESIGNER & DECORATOR TRADE:

- 1. Safety and best practices /Basic Industrial Culture (5S, KAIZEN, etc.)
- 2. Record keeping and documentation
- 3. Design and draw different types of drawings Residential and Commercial. Identify and use different types of materials.
- 4. Make all drawings on Auto Cad software.
- 5. Deal the customers effectively.

Note: Actual training will depend on the existing facilities available in the establishments.

The **competencies/ specific outcomes** on completion of On-Job Training are detailed below: -

Block - I

- 1. Identify safety precaution on the shop floor.
- 2. Draw Free hand sketching of geometrical figure furniture and door Design, Window design.
- 3. Explain simple problem on projecting of point's lines surfaces and solids.
- 4. Define Theories of colors for various color scheme.
- Draw different types of arches & lintels.
- 6. Plan and draw Sections & Elevation of Residential building single story with sketches and line diagram.
- 7. Design and draw of furniture like sofa, bed, TV unit's dining table office furniture etc.
- 8. Draw Perspective views of interiors including coloring practice and Shading.
- 9. Design and draw pelmet and types of door window details.
- 10. Make Drawings of flooring Patterns.
- 11. Draw Isometric view of interiors like Kitchen, Drawing, and Dinning & Bathrooms
- 12. Design Staircase types & Calculation and draw complete details including handrails
- 13. Design Residential Building rooms' services and utilities ex-kitchen, toilet etc.
- 14. Draw interior layout for various purposes (living, dining, drawing, bed rooms).
- 15. Select items as per Design which is used in interiors.
- 16. Identify Indoor / Outdoor Plants in which is used in interiors.

Block - II

- 17. Design and draw lighting plan with the help of tracing sheet.
- 18. Design and draw various false ceiling, flooring, partition & Paneling etc.
- 19. Explain varnishes, polishing, painting classification and uses.
- 20. Draw working drawing of various drawings and sanitary proposal Connected with building.

- 21. Operate Computer and able to draw various drawing using Autocad.
- 22. Prepare estimate of all types of Residential Building.
- 23. Design and draw working drawings of Commercial building.
- 24. Explain standard office procedure drawings.
- 25. Design and draw different types of furniture.
- 26. Identify and use different types of materials used in buildings i.e. flooring ,walls, ceiling etc.
- 27. Draw building plumbing electrical fittings etc.
- 28. Prepare working drawing of different types building by AutoCAD.
- 29. Select space programming circulation and design.
- 30. Carry out Case Study of hotels and corporate interiors.
- 31. Visit the historical Residential, hotels, Commercial Places.
- 32. Design display portion ex. Window and island display.
- 33. Identify how to deals with the customers.
- 34. Identify and use printout drawings of all types of sizes A1 A2 A3 A4.

Note:

- 1. Industry must ensure that above mentioned competencies are achieved by the trainees during their on job training.
- 2. In addition to above competencies/ outcomes industry may impart additional training relevant to the specific industry.



INFRASTRUCTURE FOR PROFESSIONAL SKILL & PROFESSIONAL KNOWLEDGE

INTERIOR DESIGNER & DECORATOR												
	LIST OF TOOLS AND EQUIPMENT for Basic Training (For 20 Apprentices)											
A. TRA	INEES TOOL KIT (For each additional unit tra	inees tool kit is required a	dditionally)									
S No.	Name of the Item	Specification	Quantity									
A : TRA	AINEES TOOL KIT:-											
1.	Modular writing pad chairs with adjustable pad for theory class room		20+1 No.									
2.	Drawing Boards measuring	1250mm x900mm fixed over adjustable stand	20+1Sets									
2.	Draughtsman stool with back (revolving type)	V	20+1 No.									
3.	Students Lockers	with 8 compartments	3 No.									
4.	Wooden Chest of Drawers		4 No.									
5.	Steel book case (with lockable glass shutters)		1 No.									
6.	Instructor's table with glass top	33A	2 No.									
7.	Revolving Chair for Class room		2 No.									
8.	Instructor's revolving with arm chair		2 No.									
9.	Visitor's revolving chair	10	2 No.									
10.	Steel Almirah	2 No.										
11.	Magnetic White Board with felt board & accessories	IUIC	2 Nos.									
12.	Pin-up board (with or without stand)		4 No.									
13.	Working table size	1250x950	2nos									
14.	Tracing Table with Plain glass	1250x900	1 no									
15.	Air conditioner •	2.0 tons (split unit) for theory and practical room	4 nos.									
16.	Claw hammer		5 Nos.									
17.	Spirit level	30 cm.	5 Nos.									
18.	Metallic tape	30 meter long	2 Nos.									
19.	Display board covered with glass or acyclic sheet		2 Nos.									
20.	Green board		1 No.									
21.	Lux meter (to measure light)											
22.	Environmental multi meter (to measure temperature, humidity, air velocity)											
	temperature, numberly, an velocity)											

FURNI	TURE FOR CAD LAB	
1.	Personal Computer with LCD monitor &	20+1 No.
	DVD re-writer along with Latest	
	compatible OS	
2.	Notebook PC	2 No.
3.	Drafting Software like AutoCAD, or equiv.	20+1 No.
4.	3D modeling software like Max, Revit etc.	20+1 No.
5.	Anti-Virus Software	As required
6.	Other software's – CORAL, PHOTOSHOP	As required
	etc.	
7.	Steel admiral small size	2Nos.
8.	Plotter (A0 size)	1 No.
9.	Laser Jet color printer (A3 size)	1 No.
10.	Inkjet/ Laser Jet Printer (A4 size)	1 No.
11.	Color Scanner/printer with Latest	1 No.
	Configuration (A3 size)	
12.	UPS on line	1 No.
13.	Computer work station (module type)	20+1 Nos.
14.	Printer Table (module type)	2 No.
15.	Operator's revolving chair	21 No.
16.	Instructor 's Lab table	1 No.
17.	Instructor's revolving chair with arm	3 No.
18.	Book shelf with glass shutters	1 No.
19.	Air conditioner 2.0 tons (split type) for CAD	2 No.
	lab	
20.	LAN connectivity	As per
		requirement
21.	Internet connection Wi – Fi	1 No.
22.	Visualizer with accessories	1 No.
23.	Vacuum Cleaner	1 No.
24.	Fire Extinguisher	1 No.
25.	Cabinet with drawer	2 Nos.
26.	Shoe rack	
27.	Wall clock	3 Nos.

	Tools & Equipments for Employability Skills									
SI. No.	Name of the Equipment	Quantity								
1.	Computer (PC) with latest configurations and Internet connection with standard operating system and standard word processor and worksheet software	10 Nos.								
2.	UPS - 500VA	10 Nos.								
3.	Scanner cum Printer	1 No.								
4.	Computer Tables	10 Nos.								
5.	Computer Chairs	21 Nos.								
6.	LCD Projector	1 No.								
7.	White Board 1200mm x 900mm	1 No.								

Note: - Above Tools & Equipments not required, if Computer LAB is available in the institute.



FORMAT FOR INTERNAL ASSESSMENT

Name & Address of the Assessor :							Year	Year of Enrollment :							
Name & Address of ITI (Govt./Pvt.) :							Date	Date of Assessment :							
Naı	me & Address of the Inc	lustry :				157		Asse	Assessment location: Industry / ITI						
Tra	de Name :		Seme	ester:				Dura	Ouration of the Trade/course:						
Learning Outcome:															
	Maximum Marks (Tot	al 100 Marks)		15	5	10	5	10	10	5	10	15	15	ınt	
SI. No	Candidate Name	Father's/Moth Name	ner's	Safety <mark>consciou</mark> sness	Workplace hygiene	Attendance/ Punctuality	Ability to follow Manuals/ Written instructions	Application of Knowledge	Skills to handle tools & equipment	Economical use of materials	Speed in doing work	Quality in workmanship	VIVA	Total internal assessment Marks	Result (Y/N)
1		471	471511				9								
2															