



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

INTERIOR DESIGN & DECORATION

(Engineering Trade)



(Revised in 2018)

CRAFTSMEN TRAINING SCHEME (CTS)

Skill India

NSQF LEVEL - 4

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Developed By

Ministry of Skill Development and Entrepreneurship

Directorate General of Training

CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE

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The DGT sincerely acknowledges contributions of the Industries, State Directorates, Trade Experts, Domain Experts 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.

Date of Trade Committee Meeting: 06.06.2017 at CSTARI, Kolkata.			
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List of the organizations validated the course curricula of Interior Design & Decoration trade revised on 03rd May 2017 at CSTARI, Kolkata

S No.	Organization
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1. COURSE INFORMATION

During one year duration of “Interior Design & Decoration” trade a candidate is trained on professional skill, professional knowledge and Employability skill. 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 related to the trade are categorized in two semesters each of six months duration. The semester wise course coverage is categorized as below:-

1st Semester – In the first semester 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 will be able to draw various drawing & designs of Interior design. The trainee will be able to analyze the furniture with exact sizing by layout drawing according to place and apply various designs in drawing. The trainee can apply various tools and analyze the design & position of furniture etc. with better layout. The trainee will be able to identify and classify various types of drawing , scale, analyze and prepare drawing according to place. The trainee will be able to make small residential drawing plan with schedule sizes of furniture & apply color scheme. The trainee will be able to draw perspective view and they will be able to prepare Power Point Presentation with various design process. Trainee learns about Auto Cad & basic computer knowledge.

2nd Semester – In the second semester trainee learns about 2D & 3D Software designs etc. The trainee can perform different designs on planning along with Auto Cad software. The trainee 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. The trainee will be able to analyze & uses of paint, polish and varnish. The trainee will be 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 end of each semester which gives them more practical exposure and helps to build up confidence level.

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 Labour market. The vocational training programmes are running under aegis of National Council of Vocational Training (NCVT). Craftsman Training Scheme (CTS) and Apprenticeship Training Scheme (ATS) are two pioneer programmes under NCVT for propagating 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 (02 semester) 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 & science and Employability Skill) impart requisite core skills, knowledge, and life skills. After passing out the training programme, the trainee is awarded National Trade Certificate (NTC) by NCVT 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 CARRIER PROGRESSION PATHWAYS:

- 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.

2.3 COURSE STRUCTURE:

Table below depicts the distribution of training hours across various course elements during a period of one year (02 semesters):

Sl. No.	Course Element	Notional Training Hours
1	Professional Skill (Trade Practical)	1232
2	Professional Knowledge (Trade Theory)	264
3	Workshop Calculation & Science	88
4	Employability Skills	110
5	Library & Extracurricular activities	66
6	Project work	160
7	Revision & Examination	160
	Total	2080

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 the 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. 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 NTC will be conducted by NCVT at the end of each semester as per the 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 before giving marks for practical examination.

2.4.1 PASS REGULATION

The minimum pass percentage for Practical is 60% & minimum pass percentage for Theory subjects is 40%. For the purposes of determining the overall result, 50% weightage is applied to the result of each semester examination.

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 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 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. • Below 70% tolerance dimension 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% tolerance dimension achieved while undertaking different work with those demanded by the component/job. • A good level of neatness and consistency in the finish

	<ul style="list-style-type: none"> • Little support in completing the project/job.
(c) Weightage in the range of above 90% to be allotted during assessment	
<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% tolerance dimension 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.



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Brief description of Job roles:

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

Reference NCO-2015: 3432.0100, 3432.0200, 2163.0400

4. GENERAL INFORMATION

Name of the Trade	INTERIOR DESIGN & DECORATION
NCO - 2015	3432.0100, 3432.0200, 2163.0400
NSQF Level	Level - 4
Duration of Craftsmen Training	1 Year (2 Semesters)
Entry Qualification	Passed 10 th class under 10+2 System with Science & Mathematics or its equivalent
Unit Strength (No. Of Students)	20 (Max. supernumeraries seats: 6)
Space Norms	Practical room = 80 sq. m, Theory room = 40 sq. m Computer lab = 36 sq. m
Power Norms	10 KW
Instructors Qualification for	
1. Interior Design & Decoration	<p>Degree in Interior Design & Decoration/ Architecture / Civil Engg. from recognized Engineering College/ university with one year experience in relevant field.</p> <p style="text-align: center;">OR</p> <p>Diploma in Interior Design & Decoration/ Architecture/ Civil Engg. from recognized board of technical education 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 3 years post qualification experience in the relevant field.</p> <p>Desirable: - Preference will be given to a candidate with CIC (Craft Instructor Certificate) in Interior Design & Decoration trade.</p> <p><i>Out of two Instructors required for the unit of 2 (1+1), one must have Degree/Diploma and other must have NTC/NAC qualifications.</i></p>
2. Workshop Calculation & Science	<p>Degree in Engineering with one year experience.</p> <p style="text-align: center;">OR</p> <p>Diploma in Engineering with two years experience.</p> <p>Desirable: Craft Instructor Certificate in RoD & A course under NCVT.</p>
3. Employability Skill	<p>MBA OR BBA with two years experience OR Graduate in Sociology/ Social Welfare/ Economics with two-year experience OR Graduate/ Diploma with two-year experience and trained in Employability Skills from DGT institutes.</p> <p style="text-align: center;">AND</p>

	Must have studied English/ Communication Skills and Basic Computer at 12 th / Diploma level and above. OR Existing Social Studies Instructors duly trained in Employability Skills from DGT institutes.				
List of Tools & Equipment	As per Annexure-I				
Distribution of training on hourly basis: (Indicative only)					
Total Hrs/ Week	Trade Practical	Trade Theory	Work shop Cal. & Sc.	Employability Skills	Extra-curricular Activity
40 Hours	28 Hours	6 Hours	2 Hours	2 Hours	2 Hours



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5. NSQF LEVEL COMPLIANCE

NSQF level for **Interior Design & Decoration** trade under CTS: **Level 4.**

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
- e. Responsibility

The broad learning outcome of Interior Design & Decoration trade under CTS mostly matches with the Level descriptor at Level- 4.

The NSQF level-4 descriptor is given below:

Level	Process Required	Professional Knowledge	Professional Skill	Core Skill	Responsibility
Level 4	Work in familiar, predictable, routine, situation of clear choice	Factual knowledge of field of knowledge or study	Recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts	Language to communicate written or oral, with required clarity, skill to basic Arithmetic and algebraic principles, basic understanding of social political and natural environment	Responsibility for own work and learning

6. LEARNING/ ASSESSABLE OUTCOME

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

6.1 GENERIC LEARNING OUTCOME

1. Recognize & comply safe working practices, environment regulation and housekeeping.
2. Understand and explain different mathematical calculation & science in the field of study including basic electrical. [*Different mathematical calculation & science, Algebra, Geometry & Mensuration, Trigonometry, Heat & Temperature, Electricity*]
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, Different Projections, Assembly drawing, Sectional views, Estimation of material*]
4. Read and apply engineering drawing for different application in the field of interior design work.
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 execute the work related to the occupation.

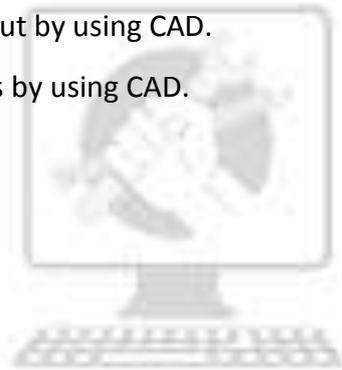
6.2 SPECIFIC LEARNING OUTCOME

Semester – I

9. Appraise and understand importance of interior designing & drawing instruments, drawing sheets, Lettering.
10. Draft the Geometrical shapes and projection with the help of engineering scale and free hand sketches.
11. Draft the design with the help of colour scheme and apply with rules and calculations.
12. Draw furniture designing & detailing
13. Draw residential plan with necessary working drawing.
14. Draw different types of staircase.
15. Basic knowledge of structural part of building.
16. Draw doors and windows & details.
17. Draw one and two point's perspective view.
18. Prepare the power point presentation with animation.

Semester – II

19. Create object on 3D using tool bars, commands.
20. Draw different types of false ceiling by using CAD.
21. Draw different types of flooring by using CAD.
22. Draw different types of carpentry joints by using CAD.
23. Analyse and uses of paints, polish and varnish.
24. Draw different types of partition wall by using CAD.
25. Draw plumbing and drainage detail & sanitary fittings by using CAD.
26. Draw lighting and electrical layout plan by using CAD.
27. Draw air conditioning layout by using CAD.
28. Draw commercial interiors by using CAD.



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7. LEARNING OUTCOME WITH ASSESSMENT CRITERIA

GENERIC LEARNING/ ASSESSABLE OUTCOME	
LEARNING / ASSESSABLE OUTCOME	ASSESSMENT CRITERIA
1. Recognize & comply safe working practices, environment regulation and housekeeping.	1.1 Follow and maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements.
	1.2 Recognize and report all unsafe situations according to site policy.
	1.3 Identify and take necessary precautions on fire and safety hazards and report according to site policy and procedures.
	1.4 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.
	1.7 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.
	1.8 Identify and observe site evacuation procedures according to site policy.
	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.
	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 and 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, heat & temperature.
	2.2 Measure dimensions as per drawing.
	2.3 Use scale/ tapes to measure as per specified map.
	2.4 Comply given tolerance.
	2.5 Prepare list of appropriate materials by interpreting detail drawings and determine quantities of such materials.

electrical. <i>[Different mathematical calculation & science, Algebra, Geometry & Mensuration, Trigonometry, Heat & Temperature, Electricity]</i>	2.6 Ensure dimensional accuracy by using different instruments.
	2.7 Explain basic electricity, insulation & earthing.
3. Interpret specifications, different engineering drawing and apply for different application in the field of work. <i>[Different engineering drawing-Geometrical construction, Dimensioning, Layout, Method of representation, Symbol, Different Projections, Assembly drawing, Sectional views, Estimation of material]</i>	3.1 Read & interpret the information on drawings and apply in executing practical work.
	3.2 Read & analyse the specification to ascertain the material requirement, tools, and assembly /maintenance parameters.
	3.3 Encounter drawings with missing/unspecified key information and make own calculations to fill in missing dimension/parameters to carry out the work.
4. Read and apply engineering drawing for different application in the field of interior design work.	4.1 Understand the basic concept of engineering drawing read and apply in interior field.
	4.2 Select appropriate measuring scale for drawing & designing.
	4.3 Measure dimension of the components/objects & draw in given drawing / designs in the field of interior design work.
5. Explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.	5.1 Explain the concept of productivity and quality tools and apply during execution of job.
	5.2 Understand the basic concept of labour welfare legislation and adhere to responsibilities and remain sensitive towards such laws.
	5.3 Knows benefits guaranteed under various acts
6. Explain energy	6.1 Explain the concept of energy conservation, global warming,

conservation, global warming and pollution and contribute in day to day work by optimally using available resources.	pollution and utilize the available recourses optimally & remain sensitive to avoid environment pollution.
	6.2 Dispose waste following standard procedure.
7. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.	7.1 Explain personnel finance and entrepreneurship.
	7.2 Explain role of Various Schemes and Institutes for self-employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for financing/ non financing support agencies to 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 execute the work related to the occupation.	8.1 Use documents, drawings and recognize hazards in the 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 Execute the task effectively.

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SPECIFIC LEARNING / ASSESSABLE OUTCOMES	
SEMESTER-I	
LEARNING/ ASSESSABLE OUTCOMES	ASSESSMENT CRITERIA
9. Appraise and understand importance of interior designing & drawing instruments, drawing sheets, Lettering.	9.1 Appraise the importance of interior designing in socio economic point of view.
	9.2 Identify the requirement of designing to modernize and also link it with our past eras with change of habit and use.
	9.3 Compare and relate interior designing with other industries.
	9.4 Functional and operational knowledge of tools equipments and drawing materials and its operations.
	9.5 Employ & use the lettering.
10. Draft the Geometrical shapes and projection with the help of engineering scale and free hand sketches.	10.1 Explain the ISI and code of practice for interior design & drawing.
	10.2 Understand & apply engineering scale in drawing.
	10.3 Draw Geometrical shapes of solids.
	10.4 Draw projections and view.
	10.5 Apply different techniques of free hand sketches.
11. Draft the design with the help of colour scheme and apply with rules and calculations.	11.1 Recognize the elements and principle of designing in interior.
	11.2 Apply arithmetic aptitude for Interior drawing.
	11.3 Recognize and apply colour sets and graphics symbols.
	11.4 Prepare the space utility planning.
12. Draw furniture designing & detailing	12.1 Homologation of different types of furniture.
	12.2 Design furniture with space utilisation.
13. Draw residential plan with necessary working drawing.	13.1 Make outline of dimensions, circulation flow and layout.
	13.2 Execute ideas in interior plan.
	13.3 Demonstrate planning elements.
14. Draw different types of staircase.	14.1 Distinguish different types of staircase.
	14.2 Draw staircase drawing with sectional detail.
15. Basic knowledge of structural part of building.	15.1 Appraise different types of load bearing portion of a structure.

16. Draw doors and windows & details.	16.1 Appraise and apply different types of doors, windows and ventilators.
	16.2 Draw door & windows with sectional detail.
	16.3 Illustrate the requirement of the doors & window locations.
17. Draw one and two point's perspective view.	17.1 Illustrate & draw the different types of perspective views.
18. Prepare the power point presentation with animation.	18.1 Demonstrate and apply different types of command on Power Points Presentation.
	18.2 Prepare the PPT with animation
SEMESTER-II	
19. Create object on 3D using tool bars, commands.	19.1 Demonstrate and apply the different types of command on 3D.
	19.2 Demonstrate use of tool bars, commands, menus, formatting layers, and styles etc.
	19.3 Prepare drawing in 3D software.
20. Draw different types of false ceiling by using CAD.	20.1 Illustrate application of different types of ceiling and levels.
	20.2 Execute the layout and material knowledge.
21. Draw different types of flooring by using CAD.	21.1 Appraise the flooring material according to place/site requirement.
	21.2 Recognize and apply flooring material according to colour scheme, thickness and graphic symbols.
22. Draw different types of carpentry joints by using CAD.	22.1 Appraise the requirement and importance of joints in furniture or other places.
	22.2 Draw joint details.
23. Analyse and uses of paints, polish and varnish.	23.1 Illustrate & recognize paints, polish, varnishes and their uses, types, method.
	23.2 Appraise techniques which are used.
24. Draw different types of partition wall by using CAD.	24.1 Explain different types of wall, partition wall.
	24.2 Recognize material property those are used in partition.
	24.3 Prepare working drawing of partition wall.
25. Draw plumbing and	25.1 Appraise the plumbing and sanitation and their

drainage detail & sanitary fittings by using CAD.	purpose/Requirement.	
	25.2	Illustrate types of plumbing & sanitation system.
	25.3	Recognize sanitary fittings and apply on the layout.
	25.4	Make a plumbing drawing and sanitary drawing of a house drainage plan.
26. Draw lighting and electrical layout plan by using CAD.	26.1	Explain the importance of lighting in interior designing.
	26.2	Illustrate the types of lighting arrangement.
	26.3	Illustrate the use of lights & lamps & use of the same at proper places.
	26.4	Apply the lights and accessories with all specification in false ceiling layout plan.
27. Draw air conditioning layout by using CAD.	27.1	Understanding the necessities of air conditioning.
	27.2	Functional knowledge of types of air conditioning.
	27.3	Recognizing and applying of the proper air conditioning system suitable for a space.
28. Draw commercial interiors by using CAD.	28.1	Appraise dimension, circulation and layout.
	28.2	Execute ideas arithmetically in plan.
	28.3	Demonstrate planning elements.
	28.4	Draw Free hand sketches and 3D views.

Skill India
कौशल भारत - कुशल भारत

SYLLABUS FOR INTERIOR DESIGN & DECORATION

First Semester – 06 Months

Week No.	Learning Outcome	Professional Skills (Trade Practical) With Indicative Hours	Professional Knowledge (Trade Theory)
1	Appraise and understand importance of interior designing & drawing instruments, drawing sheets, Lettering.	<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) 	<p>Importance & necessity of interior designing.</p> <p>Interior design as a profession</p> <p>Modern interior design feature</p> <p>Importance of trade</p> <p>Demonstrate tools and equipments</p> <p>Importance of the trade in the industry</p> <p>Drawing instrument, equipments and raw material their used.</p> <p>Instruments, equipments like drafting board, T scale mini drafter (M.D.), Set Square etc.</p>
2-4	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. (16 hrs) 10. Draw the simple composition of geometrical object with help of scale. (23 hrs) 11. Draw the simple exercise using lines in different angles. (08 hrs) 12. Draft the plan, elevation & sectional elevation & isometric view of geometrical solids. Regular, Irregular shapes. (16 hrs) <ol style="list-style-type: none"> i. Cube ii. Cuboids iii. Triangular prism iv. Cylinder 	<p>Elements of Interior Design:</p> <p>Introduction to Indian Standards Institution</p> <p>Code of practice for general interior drawing.</p> <p>Introduction & Importance of lines</p> <ol style="list-style-type: none"> i. Continuous thick & thin line ii. Dashed thin line iii. Cutting plan line iv. Long & short break line v. Chain thick line <p>Basic knowledge of geometrical shapes & lines.</p> <p>Definition of projection</p> <p>Types of projection</p> <p>Parallel projection</p> <ol style="list-style-type: none"> i. Oblique ii. Orthographic iii. Axonometric iv. Isometric

		<ul style="list-style-type: none"> v. Pyramid vi. Hexagonal prism vii. Hexagonal Pyramid viii. Cone <p>13. Practice on types of dimension (05 hrs)</p> <ul style="list-style-type: none"> i. Aligned system ii. Unidirectional system <p>14. Free hand sketches of graphic symbols. (10 hrs)</p>	<p>Definition: -</p> <ul style="list-style-type: none"> i. Layout of plan ii. Elevation (Front & side elevation) iii. Sectional Elevation
5-6	Draft the design with the help of color scheme and apply with rules and calculations	<p>Functional designing of interiors:</p> <p>15. How to make design: - (15 hrs)</p> <ul style="list-style-type: none"> i. Flow of circulation chart 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> <ul 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, electrical, landscape. (13 hrs)</p> <p>18. Rendering with pencil and pencil colour. (08 hrs)</p>	<p>Principle of Design: Introduction of basic interior design.</p> <ul 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> <ul style="list-style-type: none"> i. triad color scheme: <ul style="list-style-type: none"> a) primary. b) secondary. c) tertiary. ii. related color scheme: <ul style="list-style-type: none"> a) Analogues. b) Monochromatic. c) Achromatic. Neutral. iii. contrasting: <ul style="list-style-type: none"> a) Complementary. b) Split complementary. c) Double split complementary. <p>Cool color, warm color.</p> <p>Understand the psychological affects by different colors on different person and places.</p> <p>Introduction of Graphic symbols in interior.</p>
7-9	Draw furniture designing & detailing	<p>Furniture design and detail:</p> <p>19. Residential furniture (40 hrs) Table, chair, sofa, cabinet, bed, wardrobe, dining table.</p> <p>20. Commercial furniture (44 hrs): Executive table/office table, reception table, cabinet storage</p>	<p>Furniture design: Furniture styles:</p> <ul style="list-style-type: none"> i. Traditional/classic style. ii. Ethnic style. iii. Contemporary style. <p>Types of furniture:</p> <ul style="list-style-type: none"> i. Daily uses furniture ii. Loose carpentry furniture.

		Note: Necessary practical training will be carried out on site.	<ul style="list-style-type: none"> iii. Fixed carpentry furniture. iv. Multi-utility storage v. Open & closed storage Importance of anthropometric and ergonomics.
10-14	Draw residential plan with necessary working drawing.	Drafting of Residential Plan (Any Room): <ul style="list-style-type: none"> 21. Concept plan with circulation flow. (15 hrs) 22. Basic furniture layout plan with working drawing. (30 hrs) 23. Wall elevation with dimension and specification. (30 hrs) 24. Necessary details. (40 hrs) 25. Rendering the plan & elevations. (25 hrs) 	Planning of Interiors: Space selection for circulation and furniture. Selection of furniture. Uses of furniture templates.
15	Draw different types of staircase.	<ul style="list-style-type: none"> 26. Prepare drawing with technical details of the R.C.C. Stair case. (18 hrs) <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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.
16	Basic knowledge of structural part of building.	Preparing drawing: <ul style="list-style-type: none"> 28. Basic concept of section of a building through toilet & balcony introducing the beam & column. (28 hrs) 	Basic knowledge & importance in PPT/video presentation <ul style="list-style-type: none"> i. Mezzanine floor <ul style="list-style-type: none"> a) Temporary b) Semi permanent ii. Stone masonry & types iii. Brick masonry & types iv. Lintels & types v. Arches & types and terminology vi. Sunshade
17-18	Draw doors and windows & details.	29. Model of Door window: - Demonstrate doors and windows with the help of	Wooden Doors & Windows Introduction of hardware fitting in door & windows with dimension

		<p>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>Types of Doors</p> <ol style="list-style-type: none"> i. Batten and laded door ii. Framed and pencilled 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</p> <p>Definition of technical terms of doors & window</p> <p>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</p> <p>a) hinges, b) bolts, c) handles d) locks</p>
19-20	Draw one and two points perspective view.	<p>Preparation of drawing</p> <p>32. Draft one point perspective view with approximate method (any room). (36 hrs)</p> <p>33. Render the perspective view with any medium. (20 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 <p>(Describe the one point perspective with approximate method)</p> <p>Definition</p> <ol style="list-style-type: none"> i. Ground plane ii. Station point iii. Picture plane iv. Horizontal plane v. Ground line vi. Horizontal line or eye level

			Vanishing point
21-22	Prepare power point presentation with animation.	<p>Computer</p> <p>34. Prepare the power point still presentation. (26 hrs)</p> <p>35. Prepare the power point animated presentation. (30 hrs)</p>	Knowledge of Computer. Microsoft Power point, commands and their uses.
23-24	<p>(i) Project Work (Any one)</p> <p>a) Exercise on creativity in using waste materials</p> <p>b) Model making for developing skill of various shapes & colors etc.</p> <p>c) Plan elevation and views - one room interior.</p> <p>d) Make a Furniture file with different types of furniture & furniture style. With plan, elevation & section (Any 3 furniture)</p> <p>(ii) Compulsory Project Work</p> <p>a) Market survey for finishing material, fitting & fixtures. Wallpaper, Fabric & other wall covering, paints & polish, floor finishes, carpets & rug, Resilient floor covering, Upholstery material, window treatments & hardware, wood & related product like ply, veneer etc., Glasses and types, metals ex., wrought iron, copper, bronze, brass, stainless steels, PVC, lights, sanitary fittings and accessories, false ceiling and materials. (Manual OR Power Point Presentation)</p> <p>b) Modular kitchen survey, planning of kitchen, sectional elevation, with materials & specification.</p> <p>(iii) Industrial Visit [Visit to different places for interior work and to different sites where interiors works are in progress & Necessary practical training will be carried out on site.]</p>		
25	Revision		
26	Examination		

Note: -

- 1- Introduction of CAD in Trade Theory and Practice on CAD with basic command in Trade Practical 2 hrs. per week are to be imparted throughout the semester.
- 2- Expert lecture may be organized at regular interval and when required.
- 3- More emphasis to be given on video/real-life pictures during theoretical classes. Some real-life pictures/videos on the topics taught in this semester may be shown to the trainees to give a feel of industry & their future assignment.

SYLLABUS FOR INTERIOR DESIGN & DECORATION

Second Semester – 06 Months

Week No.	Reference Learning Outcome	Professional Skills (Trade Practical) With Indicative Hours	Professional Knowledge (Trade Theory)
27-31	Create object on 3D using tool bars, commands.	3D Software training- 36. Installation of 3D software. (08 hrs) i. Elementary commands and menus of 3D software. (25 hrs) ii. Drawing practice on 3D software. (62 hrs) iii. Practice on 3D still. (45 hrs)	Preliminary Drawing in 3D i) 3D commands and use of different menus. ii) Concept of 3D drawing. iii) Concept of rendering.
32-33	Draw different types of false ceiling by using CAD.	Preparing of drawing 37. Design a false ceiling in a room. (28 hrs) 38. 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
34-35	Draw different types of flooring by using CAD.	Preparing of drawing 39. Design a flooring pattern with finishing material (Marble, Vitrified tile, PVC. Laminated). (30 hrs) 40. Specify the starting point of flooring (13 hrs) 41. Specify the dimension & sizes. (13 hrs)	Types of floor finishing i. Stone ii. Marble iii. Mosaic Vinyl iv. Vitrified tiles v. Ceramic tiles vi. PVC vii. Carpet viii. Laminated ix. Glass
36-37	Draw different types of	Drafting simple joints used in furniture	Carpentry joints Types of joints

	carpentry joints by using CAD.	<p>42. Drafting details drawing of different types of joints. (28 hrs)</p> <p>43. Draft a sheet of door/ window/ chair/ table/ bed (any one) (28 hrs)</p>	<ul style="list-style-type: none"> 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 <p>Joints used in furniture Joints used in doors/ windows/ ventilators.</p> <p>Model of Carpentry joints: - Demonstration of staircase with the help of respective models.</p>
38	Analyse and uses of paints, polish and varnish.	<p>Generate Power Point Presentation for Paint, Polish and Varnish -</p> <p>44. Practicing processes & techniques of paints, polishing & varnishing on surfaces. (18 hrs)</p> <p>45. Recognize the tool & equipment and their uses. (05 hrs)</p> <p>46. 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>Paints and polishing/varnishing: What is paint Types of paints</p> <ul style="list-style-type: none"> i. Synthetic enamel ii. Acrylic Emulsion iii. distemper iv. Epoxy v. Nitro Cellulose vi. Metallic vii. Texture viii. Lime wash ix. Exterior paint <p>Painting techniques</p> <ul style="list-style-type: none"> i. By Brush ii. By Roller iii. By spray gun <p>Paintings defeats and remedies.</p> <p>Introduction of polish and varnish: Method of preparation and types of polish on wood. Types of varnishes:</p> <ul style="list-style-type: none"> i. Oil ii. Spirit iii. Turpentine iv. Melamine v. PU (polyurethane)

39-40	Draw different types of partition wall by using CAD.	<p>47. Design the full height and low height partition wall with different construction and finishing materials. (28 hrs)</p> <p>48. Draft Plan, sectional plan, front elevation and section with specification and dimension. (28 hrs)</p>	<p>Partition wall: Introduction of partition wall Property of a good partition wall Types of partition wall</p> <ol style="list-style-type: none"> i. Brick partition ii. Glass partition iii. Timber or wooden partition iv. Aluminium partition
41	Draw plumbing and drainage details and sanitary fittings by using CAD.	<p>49. Layout the plumbing/drainage /Sanitary plan and sectional elevation. (12 hrs)</p> <p>50. Make Top plan, side elevation, and front elevation of all sanitary plumbing fittings with dimension. (16 hrs)</p>	<p>Plumbing: Purpose and principle of house drainage. Types of Drainage plumbing system</p> <ol style="list-style-type: none"> i. One pipe system ii. Single stack system iii. Single stack (partially ventilated system) iv. Two pipe system <p>Sanitation: 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
42-43	Draw lighting and electrical	51. Layout plan of false ceiling with lighting position, dimensions and	<p>Lighting: Introduction of natural and</p>

	layout plan by using CAD.	<p>specifications. (28 hrs)</p> <p>52. Layout of electrical plan & elevation along with switch board, electrical fittings & light fittings on wall with dimension. Introducing LAN/CCTV/Biometric/Speaker/Smoke Detector (28 hrs)</p> 	<p>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 vi. LED <p>Electrical accessories</p> <ol style="list-style-type: none"> i. Switches & sockets with box ii. DB (distribution board) & MCB iii. Lamp holders iv. Ceiling roses
44	Draw air conditioning layout by using CAD.	53. Layout plan of Air Conditioning with specification. (28 hrs)	<p>Air conditioning:</p> <p>Introduction of Air Conditioning</p> <p>Principle of Air Conditioning</p> <p>Types of Air Conditioning</p> <ol style="list-style-type: none"> i. Window Air Conditioning ii. Split Air Conditioning iii. Centralised Air Conditioning iv. Cassette Air Conditioning
45-49	Draw commercial interiors by using CAD.	<p>Office design project: -</p> <p>54. Layout plan (28 hrs)</p> <p>55. Elevations. (28 hrs)</p> <p>56. Necessary working details to execute the project smoothly. (28 hrs)</p>	<p>Planning of commercial interiors: -</p> <p>Introduction of office building.</p> <p>Offices-</p> <ol style="list-style-type: none"> i. Interior

		hrs) 57. Free hand sketch for necessary details. (28 hrs) 58. Rendered 3D view. (28 hrs)	designer/Architect ii. Lawyer office iii. Administration Room iv. Hotel waiting lounge Office design guidelines and office space standard.
50	Project Work: - One room estimation of interiors works. Industrial Visit [Visit to different places for interior work and to different sites where interiors works are in progress & Necessary practical training will be carried out on site.]		
51	Revision		
52	Examination		

Note: -

1. Guest faculty/expert trainer may be engaged to impart training 3D software.
2. More emphasis to be given on video/real-life pictures during theoretical classes. Some real-life pictures/videos on the topics taught in this semester may be shown to the trainees to give a feel of industry & their future assignment.
3. Some of the sample project works (indicative only) are given against each semester.
4. Instructor may design their own project and also inputs from local industry may be taken for designing such new project.
5. The project should broadly cover maximum skills in the particular trade and must involve some problem solving skill. Emphasis should be on Teamwork: Knowing the power of synergy/ collaboration, work to be assigned in a group (Group of at least 4 trainees). The group should demonstrate Planning, Execution, Contribution and Application of Learning. They need to submit Project report.
6. If the instructor feels that for execution of specific project more time is required than he may plan accordingly to produce components/ sub-assemblies in appropriate time i.e., may be in the previous semester or during execution of normal trade practical.

9. SYLLABUS - CORE SKILLS

9.1 WORKSHOP CALCULATION & SCIENCE

Semester-I Duration: 06 Months		
Topic No.	Workshop Calculation	Workshop Science
1	Unit: Systems of unit- FPS, CGS, MKS/SI unit, unit of length, Mass and time, Conversion of units	Material Science : properties - Physical & Mechanical, Types – Ferrous & Non-Ferrous, difference between Ferrous and Non-Ferrous metals
2	Fractions : Fractions, Decimal fraction, L.C.M., H.C.F., Multiplication and Division of Fractions and Decimals, conversion of Fraction to Decimal and vice versa. Simple problems using Scientific Calculator.	Introduction of Iron, Steel, difference between Iron and Steel, stainless steel, Non-Ferrous metals, Non- Ferrous Alloys.
3	- Geometrical construction & theorem : Division of line segment, parallel lines, similar angles, perpendicular lines, isosceles triangle and right angled triangle.	Mass, Weight and Density : Mass, Unit of Mass, Weight, difference between mass and weight, Density, unit of density, specific gravity of metals.
4	Square Root : Square and Square Root, method of finding out square roots, Simple problem using calculator.	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,
5	Ratio & Proportion : Simple calculation on related problems.	Transmission of heat, conduction, convection, radiation. - Thermal Conductivity, Heat loss and heat gain.
6	Percentage : Introduction, Simple calculation. Changing percentage to decimal and fraction and vice-versa.	Temperature measuring instruments - Thermometer, pyrometer, Specific heats of solids & liquids.
7	Algebra : Addition, Subtraction, Multiplication, Division, Algebraic formula, Linear equations (with two variables).	Basic Electricity: Introduction, use of electricity, Types of current - AC, DC, their comparison, voltage, resistance, their units. Conductor, insulator.
8	Mensuration : Area and perimeter of square, rectangle, parallelogram,	Types of connections – series, parallel, electric power, Horse power, energy, unit of

	triangle, circle, semi circle, Volume of solids – cube, cuboid, cylinder and Sphere. Surface area of solids – cube, cuboid, cylinder and Sphere.	electrical energy.
Semester-II Duration: 06 Months		
Topic No.	Workshop Calculation	Workshop Science
9	Trigonometry: Trigonometrical ratios, measurement of angles. Trigonometric tables. - Finding the value of unknown sides and angles of a triangle by Trigonometrical method. Calculation on Height and distance by trigonometry. Application of trigonometry in calculation.	- Forces definition. - Compressive, tensile, shear forces and simple problems. -Stress, strain, ultimate strength, factor of safety.
10	- Area of cut-out regular surfaces: circle and segment and sector of circle.	- Sound, characteristics of sound.
11	- Area of irregular surfaces. - Application related to shop problems.	Light : laws of reflection, refraction - simple problems.
12	- Volume of cut-out solids: hollow cylinders, frustum of cone, block section. - Material weight and cost problems related to trade.	- Friction- co-efficient of friction, application and effects of friction in Workshop practice. Centre of gravity and its practical application.
13	Graph: - Read images, graphs, diagrams - bar chart, pie chart. - Graphs: abscissa and ordinates, graphs of straight line, related to two sets of varying quantities.	- Magnetic substances- natural and artificial magnets. - Method of magnetization. Use of magnets.
14	Estimate for simple interiors residential, commercial. Floor, Windows, Doors, Lighting, Plumbing etc.	- Electrical insulating materials. - Basic concept of earthing.

9.2 EMPLOYABILITY SKILLS

CORE SKILL – EMPLOYABILITY SKILL	
First Semester	
1. English Literacy	
Duration : 20 hrs	
Marks : 09	
Pronunciation	Accentuation (mode of pronunciation) on simple words, Diction (use of word and speech)
Functional Grammar	Transformation of sentences, voice change, change of tense, spellings.
Reading	Reading and understanding simple sentences about self, work and environment
Writing	Construction of simple sentences Writing simple English
Speaking/ Spoken English	Speaking with preparation on self, on family, on friends/ classmates, on known people, picture reading, gain confidence through role-playing and discussions on current happening job description, asking about someone's job, habitual actions. Cardinal (fundamental) numbers ordinal numbers. Taking messages, passing on messages and filling in message forms, greeting and introductions, office hospitality, resumes or curriculum vitae essential parts, letters of application reference to previous communication.
2. IT Literacy	
Duration : 20 hrs	
Marks : 09	
Basics of Computer	Introduction, computer and its applications, Hardware and peripherals, Switching on-Starting and shutting down computer.
Computer Operating System	Basics of Operating System, WINDOWS, 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 common applications.
Word Processing and Worksheet	Basic operating of Word Processing, Creating, opening and closing documents, Use of shortcuts, Creating and Editing Text, Formatting the text, Insertion & creation of tables. Printing document. Basics of Excel worksheet, understanding basic commands, creating simple worksheets, understanding sample worksheets, use of simple formulas and functions, Printing of simple excel sheets.
Computer Networking and Internet	Basic of computer Networks (using real life examples), Definitions of Local Area Network (LAN), Wide Area Network (WAN), Internet, Concept of Internet (Network of Networks),

	<p>Meaning of World Wide Web (WWW), Web browser, Website, 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.</p> <p>Information Security and antivirus tools, Do's and Don'ts in Information Security, Awareness of IT - ACT, types of cyber crimes.</p>	
3. Communication Skills		<p>Duration : 15 hrs Marks : 07</p>
Introduction to Communication Skills	<p>Communication and its importance Principles of Effective communication Types of communication - verbal, non verbal, written, email, talking on phone. Non-verbal communication- characteristics, components-Para-language Body language Barriers to communication and dealing with barriers. Handling nervousness/ discomfort.</p>	
Listening Skills	<p>Listening-hearing and listening, effective listening, barriers to effective listening, guidelines for effective listening. Triple- A Listening - Attitude, Attention & Adjustment. Active Listening Skills.</p>	
Motivational Training	<p>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.</p>	
Facing Interviews	<p>Manners, etiquettes, dress code for an interview. Do's & Don'ts for an interview.</p>	
Behavioral Skills	<p>Problem solving, confidence building, attitude.</p>	
Second Semester		
4. Entrepreneurship Skills		<p>Duration : 15 hrs Marks : 06</p>
Concept of Entrepreneurship	<p>Entrepreneur - Entrepreneurship - Enterprises: Conceptual issue Entrepreneurship vs. management, Entrepreneurial motivation. Performance & Record, Role & Function of entrepreneurs in relation to the enterprise & relation to the economy, Source of business ideas, Entrepreneurial opportunities, and the process of setting up a</p>	

	business.
Project Preparation & Marketing Analysis	Qualities of a good Entrepreneur, SWOT and Risk Analysis. Concept & application of PLC, Sales & distribution management. Difference between small scale & large scale business, Market survey, Method of marketing, Publicity and advertisement, Marketing mix.
Institution's Support	Preparation of project. Role of various schemes and Institutes for self-employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for financing/ non-financing support agencies to familiarize with the Policies/ Programmes & procedure & the available scheme.
Investment Procurement	Project formation, feasibility, Legal formalities i.e., Shop Act, Estimation & costing, Investment procedure - Loan procurement - Banking processes.
5. Productivity	
	Duration : 10 Hrs. Marks : 05
Benefits	Personal/ Workman - Incentive, Production linked Bonus, Improvement in living standard.
Affecting Factors	Skills, Working Aids, Automation, Environment, Motivation - How it improves or slows down productivity.
Comparison with Developed Countries	Comparative productivity in developed countries (viz. Germany, Japan and Australia) in selected industries e.g. Manufacturing, Steel, Mining, Construction etc. Living standards of those countries, wages.
Personal Finance Management	Banking processes, Handling ATM, KYC registration, Safe cash handling, Personal risk and insurance.
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 hygiene, 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 & Transportation of sick person.

Basic Provisions	Idea of basic provision legislation of India. Safety, health, welfare under legislative of India.
Ecosystem	Introduction to Environment. Relationship between society and environment, 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, Conservation and Harvesting of water.
Environment	Right attitude towards environment, Maintenance of in-house environment.
7. Labour Welfare Legislation	
	Duration : 05 hrs Marks : 03
Welfare Acts	Benefits guaranteed under various acts- Factories Act, Apprenticeship Act, Employees State Insurance Act (ESI), Payment Wages Act, Employees Provident Fund Act, The Workmen's Compensation Act.
8. Quality Tools	
	Duration : 10 hrs. Marks : 05
Quality Consciousness	Meaning of quality, Quality characteristic.
Quality Circles	Definition, Advantage of small group activity, Objectives of quality circle, Roles and function of quality circles in organization, Operation of quality circle. Approaches to starting quality circles, Steps for continuation quality circles.
Quality Management System	Idea of ISO 9000 and BIS systems and its importance in maintaining qualities.
House Keeping	Purpose of House-keeping, Practice of good housekeeping.
Quality Tools	Basic quality tools with a few examples.

INTERIOR DESIGN & DECORATION			
LIST OF TOOLS AND EQUIPMENT (For batch of 20 candidates)			
A. FURNITURE FOR THEORY & PRACTICAL			
S No.	Name of the Tool & Equipments	Specifications	Quantity
1.	Modular writing tray chairs with adjustable pad for theory class room		**22 no.
2.	Drawing Boards fixed over adjustable stand	700mm x 500mm	**20+1 sets
3.	Draughtsman stool with back (revolving type)	Seat – 450mm (W) x 450mm (D) x 50mm (thick) Back rest – 400mm (W) x 350 (Ht.) Seat Ht. Range – 600mm x 762.5mm	**22 no.
4.	Students Lockers	with 8 compartments	3 no.
5.	Chest of Drawers	Wooden	4 no.
6.	Steel book case	with lockable glass shutters	1 no.
7.	Instructor's table	with glass top	2 no.
8.	Revolving Chair for Class room		2 no.
9.	Instructor's revolving with arm chair		2 no.
10.	Visitor's revolving chair		2 no.
11.	Steel Almirah		2 no.
12.	Magnetic White Board with felt board & accessories		2 nos.
13.	Pin-up board (with or without stand)		4 no.
14.	Working table	Size 1250mm x 950mm	2 nos.
15.	Tracing Table with Plain glass	1250mm x 900mm	1 no.
16.	Air conditioner (split unit) for theory and practical room	2.0 tons	4 nos.
17.	Claw hammer		5 nos.
18.	Spirit level	30 cm	5 nos.
19.	Metallic tape	30 meter long	2 nos.

20.	Display board covered with glass or acrylic sheet		2 nos.
21.	Green board		1 no.
22.	Lux meter (to measure light)		1 no.
23.	Environmental multi meter (to measure temperature, humidity, air velocity)		1 no.
**numbers may be increased on on-roll trainee's strength & additional unit (if any)			
B. FURNITURE FOR CAD LAB			
24.	Personal Computer	with LCD monitor & DVD re-writer along with Latest compatible OS and MS Office	**20 No.
25.	Laptop	with latest configuration (vista & above) pre-loaded with operating system and MS Office	2 No.
26.	Drafting Software like AutoCAD, or equiv.		**20 No.
27.	3D modeling software like Max, Revit etc.		**20 No.
28.	Anti Virus Software		As required
29.	Other software's - CORAL, PHOTOSHOP etc.		As required
30.	Steel almirah	Small Size	2Nos.
31.	3D Plotter		1 No.
32.	Laser Jet Printer with Latest Configuration (A4 size)		1 No.
33.	Color Scanner cum printer with Latest Configuration (A3 size)		1 No.
34.	UPS on line		1 No.
35.	Computer work station (module type)		**20 Nos.
36.	Printer Table (module type)		2 No.
37.	Operator's revolving chair		22 No.
38.	Instructor's Lab table		1 No.
39.	Instructor's revolving chair with arm		3 No.
40.	Book shelf with glass shutters		1 No.
41.	Air conditioner (split type) for	2.0 tons	2 No.

	CAD lab		
42.	LAN connectivity		As per requirement
43.	Internet connection Wi-Fi		1 No.
44.	Visualizer with accessories (with latest configuration)		1 No.
45.	Vacuum Cleaner		1 No.
46.	Fire Extinguisher		1 No.
47.	Cabinet with drawer		2 Nos.
48.	Shoe rack		1 No.
49.	Wall clock		3 Nos.
**it may be as per requirement i.e. equal to no of trainees. Mouse & Keyboard should be treated as Raw Material.			
C. AUDIO VISUAL AIDS			
50.	LED Projector latest model with white screen		1 No.
51.	Interactive Board with complete accessories		1 No.
D. CONSUMABLE ITEMS FOR ONE BATCH			
52.	Adjustable set square with beveled edge	30 cm	20 + 1 sets
53.	Compass with Long arm & pen holder		20 + 1 No.
54.	Protractor	15 cm	20 + 1 No.
55.	Calligraphy pens /Graphic Pens / Ink / Stencil		As per requirement
56.	Roll-n-draw roller scale	30 cm long	20+1Nos.
57.	Triangular Scale (feet/ inch, metric)	30 cm	20 + 1 No.
58.	Clutch pencil	0.5mm , 0.2 mm , 2mm./drawing pencil (H, HB, B)	20 + 1 No.
59.	Pencil Sharpener, Adjustable		5No.
60.	M.D / Parallel Bar / T scale - 750 mm long		20 +1 No.
61.	Plastic French Curve with ink edge - set of 12		4 sets
62.	Furniture template 1:50, 1:100,1:200		20+1Nos.
63.	Circular and oval template		20+1Nos.
64.	Pen Drive		As per requirement

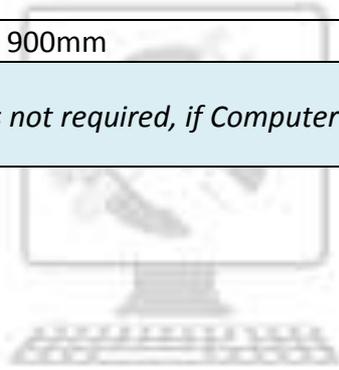
65.	Directional Magnetic Compass		20+1 Nos.
66.	Metric Tape-5M		20+1 Nos.
67.	Calculator Scientific		05 nos
68.	Beam Compass with pen holder (rotring/ steadler made)		02 No.
69.	Flexi curve	80 cm	04 No.
70.	Erasing shield small & Big sizes		20 + 1 Nos.
71.	Measure Distance Meter LCD Digital Laser Pointer Measurer Tool		02 No.
72.	Electronic Glue gun		05 No.
73.	Hand drill machine		05 No.
E. MODELS AS TEACHING AIDS			
74.	Geometrical shapes		As per requirement
75.	Staircase single floor ht. with landing		As per requirement
76.	Door Windows with frame		As per requirement
77.	Wooden Carpentry Joints		As per requirement
Carpentry & Painting Tools : As required			

Note:

1. All the hand tools mentioned under Sl. No. 52 to 64 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. For faculty members Raw Materials like Pen Drive, Pocket Hard Disk, Memory Card, Re-writable CDs & DVD etc., may be provided.
5. Due to the rapid changes in the technologies frequent modernization of equipment & technologies is necessary.
6. Training programs for instructor should be organized in the new fields added in the curriculum for the proper implementation of the same.

TOOLS & EQUIPMENTS FOR EMPLOYABILITY SKILLS		
S 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	20 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.



Skill India
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FORMAT FOR INTERNAL ASSESSMENT

Name & Address of the Assessor:			Year of Enrollment:											
Name & Address of ITI (Govt./Pvt.):			Date of Assessment:											
Name & Address of the Industry:			Assessment location: Industry / ITI											
Trade Name:		Semester:		Duration of the Trade/course:										
Learning Outcome:														
S No.	Maximum Marks (Total 100 Marks)		15	5	10	5	10	10	5	10	15	15	Total Internal Assessment Marks	Result (Y/N)
	Candidate Name	Father's /Mother's Name	Safety Consciousness	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		
1														
2														