# MULTIMEDIA & WEB PAGE DESIGNER

# **COMPETENCY BASED CURRICULUM**

(Duration: 1 Yr. and 3 months)

# **APPRENTICESHIP TRAINING SCHEME (ATS)**



**SECTOR – IT AND ITES** 



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





# MULTIMEDIA & WEB PAGE DESIGNER

(Revised in 2018)

**APPRENTICESHIP TRAINING SCHEME (ATS)** 

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Skill India कौशल भारत-कुशल भारत

**Developed By** 

Ministry of Skill Development and Entrepreneurship

Directorate General of Training

## **CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE**

EN-81, Sector-V, Salt Lake City, Kolkata – 700 091 The DGT sincerely expresses appreciation for the contribution of the Industry, State Directorate, Trade Experts and all others who contributed in revising the curriculum. Special acknowledgement to the following industries/organizations who have contributed valuable inputs in revising the curricula through their expert members:

- 1. Sami infotech , Nerul, Navi Mumbai
- 2. Christioni Sharpline Tech Pvt. Ltd, Navi Mumbai
- 3. Abvolt India Pvt Ltd, Vikroli, Mumbai
- 4. Global Technogies, Vashi, Navi Mumbai
- 5. Festo India Pvt. Ltd, Santcruz, Mumbai

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FFX

Co-ordinator for the course: Sh. Sh. N. Nath, ADT- CSTARI Kolkata.

SI.	Name & Designation	Organization	<b>Expert Group</b>
No.	Sh./Mr./Ms.		Designation
1.	L. K. Mukherjee, DDT	CSTARI Kolkata	Expert
2.	B. Das, ADT	CSTARI Kolkata	Expert
3.	Afreen Sayed, Director	Sami infotech, Navi mumbai	Expert
4.	Chandrashekhar V. Varorkar	Christioni Sharpline Tech Pvt. Ltd,	Expert
		Navi Mumbai	
5.	Ashish Kulkarni	Festo India Pvt. Ltd, Santcruz	Expert
		Mumbai	
6.	V.A. Kowshik	Festo India Pvt. Ltd, Santcruz	Expert
		Mumbai	
7.	K.K.Sing	Global Technogies, vashi, Navi	Expert
		Mumbai	
8.	Ilesh Shah	Abvolt India Pvt Ltd, vikroli	Expert
		Mumbai	
9.	K.V. Satyanarayena, TO	CSTARI Kolkata	Expert
10.	M.V. Pillai	AAA ,BTRI Ulhasnagar Dist Thane	Expert
11.	H. N. Bargal	DVET Mumbai	Expert
12.	Vishnu .D.Maske	Inst Copa , ITI Mumbai	Expert

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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 22<sup>nd</sup> 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.
- Scope has been extended also to non-engineering occupations.
- 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.

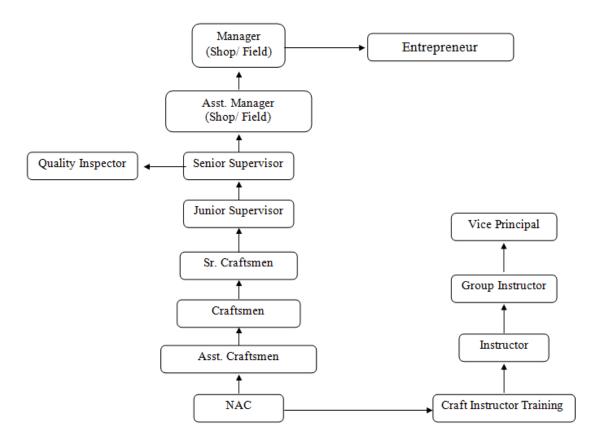
Multimedia & Web Page Designer trade under ATS is one of the most popular courses delivered nationwide through different industries. The course is of one year three months (01 Block of 15 months duration including basic training) duration. It mainly consists of Domain area and Core area. In the Domain area Trade Theory & Practical impart professional - skills and knowledge, while Core area - 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/assembly as per drawing for functioning, identify and rectify errors in job/assembly.
- Document the technical parameters related to the task undertaken.



- Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming instructor in ITIs.
- 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 one year (*Basic Training and On-Job Training*):-

## **Total training duration details: -**

Time	1-3	4 -15
(in months)		
Basic Training	Block- I	
Practical Training		Block – I
(On - job training)		

## A. Basic Training

For 02 yrs. Course (Non-Engg.):- **Total 03 months:** 03 months in 1<sup>st</sup>yr.only

For 01 yr. Course (Non-Engg):- Total 03 months: 03 months in 1st yr.

SI. No.	Course Element	Total Notional Training Hours (For 01 yr. Course)
1	Professional Skill (Trade Practical)	270
2	Professional Knowledge (Trade Theory)	120
3	Employability Skills	110
	Total (including Internal Assessment)	500

## B. On-Job Training:-

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

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

## C. Total training hours:-

Duration	Basic Training	On-Job Training	Total
For 02 yrs. Course (Non-Engg.)	500 hrs.	3640 hrs.	4140 hrs.
For 01 yr. Course (Non-Engg.)	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. 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 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	e 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.	<ul> <li>Demonstration of good skill in the use of hand tools, machine tools and workshop equipment</li> <li>Below 70% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards.</li> <li>A fairly good level of neatness and</li> </ul>

- consistency in the finishOccasional support in completing the
- Occasional support in completing the project/job.

## (b) Weightage in the range of above 75% - 90% 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.

- 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

## (c) Weightage in the range of above 90% to be allotted during assessment

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.

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## **Brief description of Job roles:**

Job roles of a Multimedia & Web Page Designer include analyzing functional and systems requirements, design, validating data acquisition and output media / formats, designing user interfaces, developing and maintaining websites, interactive applications, simulations, video/ audio streaming.

- Design and develop multimedia-based layouts, graphics, animation, video, and online tutorials for websites.
- Develops site navigation by categorizing content; funnelling traffic through content.
- Develops site content and graphics by coordinating with copywriters and graphic artists; designing images, icons, banners, audio enhancements, etc.
- Perform technical duties in the production of web-based video and audio projects, video streaming, and other multimedia productions.
- Prepares site by installing and configuring server software; installing programming language using authoring and formatting tools; ensuring cross-platform compatibility; establishing links.
- Establishes locatability by registering with search engines.
- Protects site by designing and installing security precautions.
- Troubleshoot, test, and analyze technical problem and determine solution
- Provide technical consultation.
- Work collaboratively with the web content manager, web developers, content writers, and other colleagues to develop creative multimedia materials for websites.
- Accomplishes information systems and organization mission by completing related results as needed.

## **Reference NCO 2015:**

- i. 2166.0201 Multimedia Artist and Animator/Animator
- ii. 2166.0300 Web Designer
- iii. 2513.0101 Web Developer

NSQF level for Multimedia & Web Page Designer trade under ATS: 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 and
- e. Responsibility.



The Broad Learning outcome of Multimedia & Web Page Designer trade under ATS 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,	Factual	Recall and	Language to	Responsibility
	predictable,	knowledge	demonstrate	communicate	for own work
	routine,	of field of	practical skill,	written or oral,	and learning.
	situation of clear	knowledge	routine and	with required	ı I
	choice.	or study	repetitive in	clarity, skill to	
			narrow range of	basic Arithmetic	
			application,	and algebraic	
			using	principles, basic	
			appropriate rule	understanding	
			and tool, using	of social political	
			quality	and natural	
			concepts	environment.	

# **5. GENERAL INFORMATION**

Name of the Trade	Multimedia and Web Page Designer	
NCO - 2015	2166.0201, 2513.0101, 2166.0300	
NSQF Level	Level – 4	
Duration of Apprenticeship		
Training	3 months + One year (01 Block of 15 months duration	
(Basic Training + On-Job	including basic training).	
Training)		
Duration of Basic Training	a) Block –I: 3 months	
	Total duration of Basic Training: 3 months	
Duration of On-Job Training	a) Block–I: 12 months	
	Total duration of Practical Training: 12 months	
Entry Qualification	Passed 10 <sup>th</sup> class examination or its equivalent.	
Selection of Apprenticeship	The apprentices will be selected as per Apprenticeship Act	
	amended time to time.	
Instructors Qualification for	As per ITI instructors qualifications as amended time to time	
Basic Training	for the specific trade.	
Infrastructure for basic	As per the related trade of ITI	
training	ASSESSED TO THE PARTY OF THE PA	
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	03 months-(03 months - BBBT and Advanced module in	
	Multimedia and Web Page Designing in COE of Information	
43.	Technology Sector)	
CTS trades eligible for	Multimedia Animation and Special Effects.	
Multimedia & Web Page	ALIXII - ANZIGI ALIXII	
Designer Apprenticeship	- J	

## 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 Computer Operator and Programming Assistant course of 01 year and 03 months duration under ATS.

#### Block - I:-

- 1. Recognize & comply safe working practices, environment regulation and housekeeping.
- 2. Explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.
- 3. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.
- 4. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.
- 5. Plan and organize the work related to the occupation.

## **6.2 SPECIFIC LEARNING OUTCOME**

#### Block - I

- 1. Creation of Web page using Integrated Development Environments (I.D.E.'s) like Macromedia Dreamweaver, application of Adobe Air Interface.
- 2. Development of Animated Web content and applications using Flash MX.
- Creation of animated 3D objects, Polygon Modelling, Mesh Modelling, Patch Modelling, NURBS Modelling, Animating Lights and Cameras, Dynamics page, Video Effects using 3DS MAX.
- 4. Practices on Character Animation, Free Transform Animation, Motion Capture Files, Creating Transition, Mesh Deformation with Skin and Physique Modifiers, Crowd Animation with System Delegate Objects, Cogitative Controller.
- 5. Sound Editing, Analog and Digital Sound, Sound Recording, Extracting, Sound Processing and Effects, Sound File Integration.
- 6. Combustion: 2D and 3D Compositing, Surface Properties, Alpha Channel with Masks, Alpha Channel with Keyer, Alpha Channel Paint, Creating Mattes and Masks, Key framing, Paint Tools, Advance Drawing Tools, Text and Text Effect, Video Filters, Using Discreet Keyer, Using Discreet Color Corrector, Using Discreet Video Tracking, Lights and Camera, Audio File, File Integration.

- 7. Practice on Maya software, navigation, polygon modelling, NURBS Modelling, Rendering.
- 8. Designing Web Pages with Forms and Form Controls using HTML tags. Creating Web Pages using CSS. Using WYSIWYG web design tools to design and edit web pages with various styles.
- 9. Java Script Working with Arrays, Control statements and Loops in JavaScript. Writing functions in JavaScript. Working with String, Math and Date functions in JavaScript. Switch, Loops, Breaks and Errors.
- 10. Using Java Script Objects. Working with JavaScript Libraries. Using simple Open source web server (like XAMPP) and FTP software (For ex. Filezilla).
- 11. Programming with VBA Writing programs involving Mathematical, Conversion, Date and String Functions in VBA. Writing programs involving Loops. Using VBA built in functions in programs. Using VBA built in functions in programs.
- 12. Creating and editing macros. Writing code to work with Excel VBA forms and
- 13. form controls like buttons, Checkboxes, Labels, Combo Box, Group Box, List Box, Option Button, Scroll Bar and Spin button. Modification of object properties.
- 14. A simple project to create an animated demo website.

**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

GE	NERIC LEARNING OUTCOME
LEARNING OUTCOMES	ASSESSMENT CRITERIA
1. Recognize & comply safe	1. 1. Follow and maintain procedures to achieve a safe
working practices,	working environment in line with occupational
environment regulation and	health and safety regulations and requirements.
housekeeping.	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.
43	1. 10. Identify basic first aid and use them under different
काशल	circumstances.  1. 11. Identify different fire extinguisher and use the same
9214141	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. Explain the concept in	2.1 Explain the concept of productivity and quality tools
productivity, quality tools,	and apply during execution of job.

and labour welfare legislation and apply such in day to day work to improve productivity & quality.	<ul><li>2.2 Understand the basic concept of labour welfare legislation and adhere to responsibilities and remain sensitive towards such laws.</li><li>2.3 Knows benefits guaranteed under various acts</li></ul>
3. Explain energy conservation, global warming and pollution and contribute in day to day work by	3.1 Explain the concept of energy conservation, global warming, pollution and utilize the available recourses optimally & remain sensitive to avoid environment pollution.
optimally using available resources.	3.2 Dispose waste following standard procedure.
resources.	
4. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.	<ul> <li>4. 1. Explain personnel finance and entrepreneurship.</li> <li>4. 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 &amp; procedure &amp; the available scheme.</li> <li>4. 3. Prepare Project report to become an entrepreneur for submission to financial institutions.</li> </ul>
5. Plan and organize the work	5. 1. Use documents, drawings and recognize hazards in the
related to the occupation.	work site.
Sk	5. 2. Plan workplace/ assembly location with due consideration to operational stipulation
917	<ol><li>S. 3. Communicate effectively with others and plan project tasks</li></ol>
कोशल	5. 4. Assign roles and responsibilities of the co-trainees for execution of the task effectively and monitor the same.

## SPECIFIC OUTCOME

## Block-I (Section:10 in the competency based curriculum)

Assessment Criteria i.e. the standard of performance, for each specific learning outcome mentioned under **Block** – **I**(section: 10) must ensure that the trainee works in familiar, predictable, routine, situation of clear choice. Assessment criteria should broadly cover the aspect of **Planning** (Identify, ascertain, etc.); **Execution** apply factual knowledge of field of knowledge, recall and demonstrate practical skill during performing the work in routine and repetitive in narrow range of application, using appropriate rule and tool, complying with basic arithmetic and algebraic principles and language to communicate in written or oral with required clarity; **Checking/ Testing** to ensure functionality during the assessment of each outcome. The assessments parameters must also ascertain that the candidate is responsible for his/her own work and learning.

# BASIC TRAINING (Block – I)

**Duration: (03) Three Months** 

Week No.	Professional Skills (Trade Practical)	Professional Knowledge (Trade Theory)
1.	Computer components and Windows Operating System  Disassembling, Identification of components and Reassembling a Desktop computer.  Familiarization with Windows O.S desktop, using icons, buttons and customizing the desktop.  Managing files and folders, using removable drives.  Viewing system properties and control panel details. Viewing and setting environmental variables.  Working with MS Paint. Computer Hardware basics and Software Installation  Viewing the BIOS and changing the Boot order.  Identify and rectify common hardware and software issues.  Installation of DVD, using different types of hard disks.  Bluetooth Configuration, DVD write techniques.	Introduction to Computers and Windows Operating System  History, Generations, Types, Advantages and Applications of Computers. Concepts of Hardware and Software. Computer Hardware basics. Introduction to various processors. Introduction to the functions of an Operating System, Popular Operating Systems in Use. Main features of Windows O.S Various Input/ Output devices in use and their features. Using Scanner, Printer and Webcam. Computer Hardware basics and Software Installation Introduction to the booting process, BIOS settings and their modification. Introduction to various types of memories and their features. Basic Hardware and software issues and their solutions. Formatting and Loading O.S and Application software and Antivirus.
2.	Image editing, Creating presentations & Using Open Office  Use of windows and open source image editing software like Open Office Draw, GIMP, Irfan View or a similar tool.  Creating Slide shows, Inserting	Image editing, Creating presentations & Using Open Office  Introduction to Open Office.  Introduction to the properties and editing of images.  Introduction to Power Point and

	<del>_</del>
objects.	its advantages.
Animating Slide transitions and Objects	Creating Slide Shows.  Sing the procentation and
Objects.	<ul> <li>Fine tuning the presentation and good presentation techniques.</li> </ul>
3 Database Management	
<ul> <li>Database Management</li> <li>Creating database and designing simple tables in Access.</li> <li>Enforcing Integrity Constraints ar modifying the properties of table and fields.</li> <li>Creating Relationships and joinin tables.</li> <li>Internet Concepts</li> <li>Browsing the Internet for informatio</li> <li>Creating and using e – mail for communication.</li> <li>Protecting the computer against various internet threats.</li> </ul>	and Databases. Overview of popular databases, RDBMS, OODB and NOSQL.  Rules for designing good tables. Integrity rules and constraints in a table.  Relationships in tables.
4-5 Designing Static Web Pages	Web Design Concepts
<ul> <li>Designing simple web pages with text, pictures, tables, lists, hyperlinks, frames, marquees etc. using HTML tags.</li> <li>Html 5</li> <li>Html History, What is Html, Tags, Documents, Browsers pitfalls.</li> <li>Html 5 new elements: Structural elements, New Input elements, New attributes.</li> <li>Canvas (The Future of Graphics on tweb): Basic shapes, Text and shadow Advance shapes, Basic animation, Canvas &amp; SVG, Canvas Pitfalls.</li> </ul>	<ul> <li>Concepts of Static and Dynamic Web pages.</li> <li>Introduction to HTML and various tags in HTML.</li> <li>Creating Forms with controls using HTML.</li> <li>Concepts of CSS and applying CSS to HTML</li> <li>Introduction to open source CMS viz,. Joomla, Wordpress etc. and Web authoring tools viz.</li> </ul>

- Video and Audio: Add video to web page, Control video with java script, visualisation of multimedia in computer?
- **Geolocation:** Introduction, Geolocation API.
- HTML5 APIs: HTML5 JavaScript APIs: overview, Web Sockets, Web Workers, Indexed DB, Drag-and-Drop, web Notifications.

#### **Bootstrap**

- Introduction to Bootstrap
- Bootstrap Grid System
- Bootstrap Grid System Advanced.
- Creating Layouts with Bootstrap
- Bootstrap CSS Understanding the CSS
- CSS Customization / Skins
- Responsive Web design with Bootstrap
- Single Page Responsive site with Bootstrap
- Introduction to LESS and SASS
- Customizing Bootstrap3 with LESS
- Bootstrap Layout Components :
- Glyphicons
- Dropdowns
- Button Groups
- Button Dropdowns
- Input Groups
- Navs
- Navbar
- Breadcrumbs
- Pagination
- Labels
- Badges
- Jumbotron
- Page header
- Thumbnails
- Alerts
- Progress bar
- Media object
- List group

- Sheets? CSS Syntax, Creating an External CSS, Linking to a CSS, Adding Comments and Notes to a CSS, Creating an Internal Style Sheet, ID and Class, Inline Styling.
- Working With Text in CSS:
   Emphasizing Text (Bold and (italic), Decoration, Indentation, Transformation, Text Alignment, Fonts, Font Sizes, Letter Spacing (Kerning), Line Spacing (Leading), Text Color, Margins, Padding, Borders, Styling Links, free Number and Bullet Styles, Sizing Elements, Text Wrapping, Shadowing.
- Creating Backgrounds in CSS:
   Colours, Images, Fixed Images.
- Images in CSS: Opacity, Floating Images, Image Galleries, Image Sprites.
- Box Model in CSS: What is a box model, Margin, Padding, Border, outline.
- Working With Elements in CSS:
   Display and Visibility, Grouping and Nesting, Dimensions of Elements, Positioning, Floating, Pseudo-Classes/ Pseudo-Elements.
- Adding a Navigation Bar in CSS:
   Vertical Navigation Bar,
   Horizontal Navigation Bar —
   Inline, Horizontal Navigation Bar
   – Floating.
- CSS Tables: Borders Collapsed Borders, Table Width and Cell Height, Table Colour, Table Text Element, Table Padding.
- Working With Transforms in CSS: Definition of Transforms, 2D Transforms, 3D Transforms.
- Transitions and Animations in CSS: Transitions, Animations.

- Panels
- Responsive emded
- Wells
- Bootstrap Plug-ins:
- Transition
- Modal
- Dropdown
- Scrollspy
- Tab
- Tooltip Affix
- Popover
- Alert
- Button
- collapse
- Carousel

## Java Script

6-7

- Familiarization with JavaScript elements.
- Embedding JavaScript in HTML to display information in web pages.
   Documentation and Formatting.
- Using JavaScript Variables, Data types, Constants and Operators.

## Programming with VBA

- Familiarization with the VBA Editor.
- Writing simple programs involving VBA Data types, Variables, Operators and Constants.
- Working with string variables in VBA.
- Creating and Manipulating Arrays in VBA.
- Working with conditional statements like If. Else if, Select Case statements in VBA.
- Creating Message boxes and Input boxes in VBA.
- Creating Functions and Procedures. Passing Parameters and Using Returned Data.

## **Angular Js**

- Introduction
- Environment Setup
- MVC Architecture
- First Application
- Directives
- Expressions
- Controllers
- Filters
- Tables
- HTML DOM
- Modules
- Forms
- Includes
- AJAX
- Views
- Scope

## Java Script

- Algorithms and flowcharts.
- Introduction to Web Servers and their features.
- Introduction to Programming and Scripting Languages.
- Introduction to JavaScript and its application for the web.
- JavaScript Basics Data types, Variables, Constants. Conversion between data types.
- The Arithmetic, Comparison,
   Logical and String Operators in
   JavaScript. Operator precedence.
- Arrays in JavaScript concepts, types and usage.
- Program Control Statements and loops in JavaScript.
- Introduction to Functions in JavaScript.
- Built in JavaScript functions overview.
- The String data type in JavaScript. Introduction to String, Math and Date Functions.
- Concepts of Pop Up boxes in

Introduction to the Document	8-9	Introduction to Flash • Practice on Tool Features, User interface,	<ul> <li>Introduction to the Document Object Model.</li> <li>Introduction to VBA, Features and Applications.</li> <li>Introduction to VBA features and applications.</li> <li>VBA Data types, Variables and Constants.</li> <li>Operators in VBA and operator precedence.</li> <li>Mathematical Expressions in VBA.</li> <li>Introduction to Strings in VBA.</li> <li>Introduction to Arrays in VBA.</li> <li>Conditional processing in VBA, using the IF, Else if, Select Case Statements.</li> <li>Loops in VBA Introduction to VBA.</li> <li>VBA message boxes and input boxes.</li> <li>Introduction to Creating functions and Procedures in VBA.</li> <li>Using the built in functions.</li> <li>Creating and editing macros.</li> <li>Introduction to Object Oriented Programming Concepts. Concepts of Classes, Objects, Properties and Methods.</li> <li>Events and Event driven programming concepts.</li> <li>The user forms and control in Excel VBA.</li> <li>Properties, events and methods associated with the Button, Check Box, Label, Combo Box, Group Box, Option Button, List Box, Scroll Bar and Spin button controls.</li> <li>Overview of ActiveX Data objects.</li> <li>Debugging Techniques.</li> <li>Introduction to Flash</li> <li>About Flash and General over view</li> </ul>
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Image Editing Tool and Graphics, Editing Tool integration, Authoring Tool Video Technology, UI components

- Practice on Creating and Importing Graphics Assets, Working with different graphic Practice on formats -Importing bitmap graphics, Working with layers and layer folder, Using the drawing tools, Using object and merge drawing, Working with the color panels, Creating and using Graphic symbols, Using the Library panel
- Practice on Text Effectively- Text tool,
   Adding and formatting static text,
   Changing font rendering methods,
   Adding input text fields, Embedding
   fonts in input text fields, Using for best
   practices Practice on Creation of
   Animations -Working with the
   timeline, Using key frames, blanks key
   frames and frames, Creating motion
   tweens, Creating shape tweens,
   Creating transition effects, Using
   animation best practices
- Practice on Basic Action Script Using Script Assist, Adding actions to a frame, Creating and using Button symbols

## **Introduction to 3ds MAX**

- Practice on creating projects and Scenes
- Practice on Transform tool basics,
   Pivot points, Grouping and parenting,
   Modelling with primitives
- Practice on User Interface Setting up project, Views/panels, Hotbox, Viewing Geometry, Channel Box, Layer Box, Attributes Editor, QWERTY Navigation, Working with the camera, Over view of MEL, Outliner/ Hyper graph, Grouping / parenting Shelf Marking Menus
- Practice on Modeling Curve Tools/ snapping, Revolving, History,

- Stage and Work area of Flash, using guides, grid & rulers.
- Using frames and key frames,
   Working with time line.
- Using layers to create a layer, to create a layer folder, to show or hide a layer or folder, to view the contents of the layer as outlines, to change the layer height in the timeline, to change the order of the layers or folders. Using Guide layers.
- Drawing in Flash to raw with a pencil tool, to paint with a brush tool, to draw with pen tool.
- Using colors in Flash, to use a gradient fill. Importing Artwork, Video and Audio.
- Different file formats in Video &
  Audio. Flash

Compatible Audio & Video file formats

## **Introduction to 3ds Max**

3D Animation Techniques
Fundamentals & concepts
User Interface
Modeling
Lighting /Rending
Character Setup & Animation
Dynamics.

Duplicating, Working with NURBS, Detaching surfaces, Grouping/ Duplicating, Working with polygons, Subdivisional surfaces, Split polygon Tool, Lofting, Extruding

- Practice on MODELING
- Practice on POLYGON TOOLS
- Practice on WITH PROXY
- Practice on NORMALS, Lighting /Rendering
- Practice on Hyper shade, Materials, Apply Materials, Making Shader Networks, Combining Ramps, Layered Textures, Intro to lights, Making Bump Maps, Working with Shadows, UV Mapping, Specular Maps, Paints FX, Render View, Camera Settings, Render Globals, TOON SHADER

## 10-11 CHARACTER ANIMATION-

Introduction to Character Animation,
Animating Two Leg Creatures, Defining
Footsteps, Free Transform Animation,
Motion Capture Files, Creating Transition,
Mesh Deformation with Skin and Physique
Modifiers, Crowd Animation with System
Delegate Objects, Cogitative Controller,
Assignments, Projects.

## **SOUND FORGE**

Introduction to Sound Editing, Analog and Digital Sound, Sound Recording using CD and Mike, Extracting Sound Processing and Effects, Sound File Integration, Assignments Projects.

COMBUSTION Introduction to 2D and 3D Compositing, Surface Properties, Alpha Channel with Masks, Alpha Channel with Keyer, Alpha Channel Paint, Creating Mattes and Masks, Key framing, Paint Tools, Advance Drawing Tools, Text and Text Effect, Video Filters, Using Discreet Keyer, Using Discreet Color Corrector, Using Discreet Video Tracking, Lights and Camera, Audio File, File Integration, Assignments, Projects.

#### **CHARACTER ANIMATION-**

Introduction to Character Animation, Animating Two Leg Creatures, Defining Footsteps, Free Transform Animation, Motion Capture Files, Creating Transition, Mesh Deformation with Skin and Physique Modifiers, Crowd Animation with System Delegate Objects, Cogitative Controller, Assignments, Projects.

## **SOUND FORGE**

Introduction to Sound Editing, Analog and Digital Sound, Sound Recording using CD and Mike, Extracting Sound Processing and Effects, Sound File Integration, Assignments Projects.

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		Color Corrector, Using Discreet Video Tracking, Lights and Camera, Audio File, File Integration, Assignments,
		Projects.
12	Introduction to MAYA	Introduction to Maya
	Practice on navigation with view port,	Navigating with view port, view port
	view port menu, forms and grids, selecting	menu, forms and grids, selecting
	objects, move rotate and scale,	objects, move rotate and scale,
	manipulating pivote, channel box,	manipulating pivote, channel box,
	attributed editor, Marking menu	attributed editor, Marking menu
	Practice on Polygon modeling :	Polygon modeling : Ploygon
	Ploygon components, soft selection,	components, soft selection, extrude
	extrude tools, extruding curves, polygon	tools, extruding curves, polygon
	vevels, subdivide surface, character body,	vevels, subdivide surface, character
	Practice on NURBS Modeling	body, NURBS Modeling
	NURBS primitive NURBS carv tools, Text	Introduction to NURBS, NURBS
	creations, NURBS revolve, NURBS loft,	primitive NURBS carv tools, Text
	NURBS extrude, NURBS planner Practice	creations, NURBS revolve, NURBS
	on Organising Maya scene, out liner,	loft, NURBS extrude, NURBS planner
	group object, hierarchies, duplicating	Organising Maya scene, out liner,
	objects, hypergraph, hide/show object,	group object, hierarchies, duplicating
	players Practice on using Materials	-objects, hyper graph, hide/show
	Render Material, basics of material,	object, players Materials Render
	applying of maps, BIP map picture, hyper	Material, basics of material, applying
	shade, mental ray material, bump	of maps, BIP map picture, hyper
	mapping, ramp shader, 3d paint tools	shade, mental ray material, bump
	Animation, time line animation, adjusting	mapping, ramp shader, 3d paint
	key, editing key, graph editor, dope sheet,	tools Animation, time line animation,
	break down keys, path animation, play	adjusting key, editing key, graph
	blast, constrains, animation cycles, adding	editor, dope sheet, break down keys,
	sound. Practice on Rendering	path animation, play blast,
	Lights, depth map shadow, rate race	constrains, animation cycles, adding
	shadows, basics of camera, depth of field,	sound. Rendering Lights, depth map
	mental ray, software rendering, reflection	shadow, raterace shadows, basics of
	and refraction, IPR rendering, lighting to	camera, depth of field, mental ray,
	scene, Batch rendering	software rendering, reflection and
		refraction, IPR rendering, lighting to
		scene Batch rendering
13	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.

# 9.1 EMPLOYABILITY SKILLS

(DURATION: - 110 HRS.)

	Plack I
	Block — I (Duration — 110 hrs.)
1. English Literacy	(Duration – 110 ilis.)
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	Speaking with preparation on self, on family, on friends/ classmates,
English	onknow, 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 messages on and filling in message forms Greeting and introductions office hospitality, Resumes or curriculum vita essential parts, letters of application reference to previous communication.
2. I.T. Literacy	
Duration: 20 Hrs.	Marks : 09
Basics of Computer	Introduction, Computer and its applications, Hardware and peripherals, Switching on-Starting and shutting down 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 Common applications.
Word processing and	Basic operating of Word Processing, Creating, opening and closing
Worksheet	Documents, use of shortcuts, Creating and Editing of 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 formulae and functions. Printing of simple worksheets.
Computer	formulas and functions, Printing of simple excel sheets.  Basic of computer Networks (using real life examples), Definitions of
Computer Networking and	Local Area Network (LAN), Wide Area Network (WAN), Internet,
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 cybercrimes.
3. Communication Sk	
Duration: 15 Hrs.	Marks: 07
Introduction to	Communication and its importance
Communication	Principles of Effective communication
Skills	Types of communication - verbal, nonverbal, written, email, talking
	on phone.
	Nonverbal communication -characteristics, components-Para-
	language
	Body language
	Barriers to communication and dealing with barriers.
	Handling nervousness/ discomfort.
Listening Skills	Listening-hearing and listening, effective listening, barriers to
	effective listening guidelines for effective listening.
	Triple- A Listening - Attitude, Attention & Adjustment.
	Active Listening Skills.
Motivational	Characteristics Essential to Achieving Success.
Training	The Power of Positive Attitude.
	Self-awareness
	Importance of Commitment
	Ethics and Values
	Ways to Motivate Oneself
	Personal Goal setting and Employability Planning.
Facing Interviews	Manners, Etiquettes, Dress code for an interview Do's & Don'ts for an interview.
Behavioral Skills	Problem Solving
Denavioral Skills	Confidence Building
9214	Attitude
	ricitode
4. Entrepreneurship S	Skills
Duration: 15 Hrs.	Marks : 06
Concept of	Entrepreneur - Entrepreneurship - Enterprises:-Conceptual issue
Entrepreneurship	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, the process of setting up a business.
<b>Project Preparation</b>	Qualities of a good Entrepreneur, SWOT and Risk Analysis. Concept &
& Marketing analysis	application of PLC, Sales & distribution Management. Different
	Between Small Scale & Large Scale Business, Market Survey, Method
	of marketing, Publicity and advertisement, Marketing Mix.
Institutions 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 familiarizes 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.
<b>5. Productivity</b> 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 improves or slows down.
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.
<b>6. Occupational Safet</b> Duration: 15 Hrs.	y, Health and Environment Education  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 & Transportation of sick person.
Basic Provisions	Idea of basic provision legislation of India. Safety, health, welfare under legislative of India.
<del> </del>	Introduction to Environment. Relationship between Society and

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.										
<b>Ground Water</b>	Hydrological cycle, ground and surface water, Conservation and Harvesting of water.										
Environment	Right attitude towards environment, Maintenance of in -house environment.										
7. Labour Welfare Leg	gislation										
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.										
<b>8. Quality Tools</b> Duration: 10 Hrs.	Marks : 05										
Quality	Meaning of quality, Quality characteristic.										
Consciousness											
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.										
<b>Quality Management</b>	Idea of ISO 9000 and BIS systems and its importance in maintaining										
System	qualities.										
House Keeping	Purpose of House-keeping, Practice of good Housekeeping.										
Quality Tools	Basic quality tools with a few examples.										

# 10. DETAILS OF COMPETENCIES (ON-JOB TRAINING)

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

#### Block - I

- 1. Creation of Web page using Integrated Development Environments(I.D.E.'s) like Macromedia Dreamweaver, application of Adobe Air Interface.
- 2. Development of Animated Web content and applications using Flash MX.
- Creation of animated 3D objects, Polygon Modelling, Mesh Modelling, Patch Modelling, NURBS Modelling, Animating Lights and Cameras, Dynamics page, Video Effects using 3DS MAX.
- 4. Practices on Character Animation, Free Transform Animation, Motion Capture Files, Creating Transition, Mesh Deformation with Skin and Physique Modifiers, Crowd Animation with System Delegate Objects, Cogitative Controller.
- 5. Sound Editing, Analog and Digital Sound, Sound Recording, Extracting, Sound Processing and Effects, Sound File Integration.
- 6. Combustion: 2D and 3D Compositing, Surface Properties, Alpha Channel with Masks, Alpha Channel with Keyer, Alpha Channel Paint, Creating Mattes and Masks, Key framing, Paint Tools, Advance Drawing Tools, Text and Text Effect, Video Filters, Using Discreet Keyer, Using Discreet Color Corrector, Using Discreet Video Tracking, Lights and Camera, Audio File, File Integration.
- 7. Practice on Maya software, navigation, polygon modelling, NURBS Modelling, Rendering.
- 8. Designing Web Pages with Forms and Form Controls using HTML tags. Creating Web Pages using CSS. Using WYSIWYG web design tools to design and edit web pages with various styles.
- Java Script Working with Arrays, Control statements and Loops in JavaScript. Writing functions in JavaScript. Working with String, Math and Date functions in JavaScript. Switch, Loops, Breaks and Errors.
- 10. Using Java Script Objects. Working with JavaScript Libraries. Using simple Open source web server (like XAMPP) and FTP software (For ex. Filezilla).
- 11. Programming with VBA Writing programs involving Mathematical, Conversion, Date and String Functions in VBA. Writing programs involving Loops. Using VBA built in functions in programs. Using VBA built in functions in programs.
- 12. Creating and editing macros. Writing code to work with Excel VBA forms and

- 13. Form controls like buttons, Checkboxes, Labels, Combo Box, Group Box, List Box, Option Button, Scroll Bar and Spin button. Modification of object properties.
- 14. A simple project to create an animated demo website.

#### 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

# **MULTIMEDIA AND WEB PAGE DESIGNER**

LIST OF EQUIPMENTS, SOFTWARES & TOOLS for Basic Training (For 20 Apprentices)

# A. EQUIPMENTS & TOOLS

(For each additional unit trainees tool kit Sl. 1-3 is required additionally)

SI.	additional drift trainees tool kit 31. 1		
osi. no.	Name of the Tool & Equipments	Specification	Quantity
1	Server for LAN – As Required. Latest 32/64 bit processor or Higher with PCI Express Video Card Paper license of OS – Server Edition with latest Internet, Antivirus / Total Security – Server Edition & UPS for Power Back up.	4GB VRAM 4 GB RAM expandable 19" TFT Keyboard, Mouse, DVD OR BLU-RAY WRITER	1 No.
2	WORKSTATION FOR MULTIMEDIA i700 (i7) PROCESSOR or Quad core or Higher KEYBORD/INTERNET USB Optical Mouse, USB Keyboard with latest license of OS	8 GB RAM 1 Terabyte HDD 22" TFT Monitor101 DVD OR BLU-RAY WRITER	2 Nos.
3	WORKSTATION/NODES : 2 <sup>nd</sup> Generation Core i3 Processor	Equivalent and above with major minimum features as below:  1) 32/64 Bit Processor (3.06 GHz or Higher, 4 MB 4-Core) or Higher.  2) Network Card: Integrated Gigabit Ethernet (10/100/1000).  3) RAM: 2 GB/ 4 GB DDR3 or Higher.  4) 320 GB / 500 GB HDD or Higher.  5) 19" TFT Monitor / Higher 6) DVD Writer  7) PS2 / USB KeyBoard , USB/Optical Mouse with latest Paper Licensed Operating System / OEM Pack(Preloaded)	10 Nos.

		Drofossional / Ultimata Edition	
		Professional/Ultimate Edition with Internet Facility.	
4	Line UPS FOR NODES	500 VA or higher off	13 Nos.
5	COLOUR LASER PRINTER	As per standard	15 Nos. 1 No.
	Network MONOCHROME LASER	73 hei stailaain	
6	PRINTER	As per standard	1 No.
7	OPTICAL SCANNER	DESK TOP TYPE	1 No.
8	WEB CAM (DIGITAL CAMERA)	As per standard	1 No.
9	DVD OR BLU-RAY WRITER	As per standard	2 Nos.
10	Standalone HARD DISKS	As per standard	4 Nos.
11	Network Interface Card	Ethernet Card 10/100/1000	
		Mbps	4 Nos.
12	Fire Extinguisher	As per standard	1 No.
13	Vacuum Cleaner (For IT & ITES Sector)	As per standard	1 No.
14	LCD / DLP projector	As per standard	1 No.
15	24 port Switch /Router	As per standard	1 Each
16	Off – line UPS FOR NODES and server	500 VA or higher off	11 Nos.
17	Air Conditioner	1.5 ton	3 Nos.
18	Modem (Internal & External)	As per standard	2 Nos.
19	Broad Band connection	As per standard	1 No.
20	Telephone Line	As per standard	1 No.
21	CD / DVD Writer	As per standard	2 Nos.
22	Room temperature thermometer	As per standard	1 No.
23	Scanner	As per standard	1 No.
24	Digital Still SLR Camera	As per standard	1 No.
25	Digital Video Camera	As per standard	1 No.
TRAIN	IEE TOOL KIT		
1	Screwdriver Set of min. 5 bits (Combination of star & minus) + 1 ext. rod	As per standard	1 Set
2	Crimping Tool for BNC and RJ-45 connectors	As per standard	1 No. Each
3	Punching Tool	As per standard	1 No.
B:SO	FTWARE PER UNIT		
1	Windows XP/vista/8 Network Support with 10 User license	As per standard	
	professional/academic edition		1 No.
	MS Office latest version / Open Office	As per standard	
2	10 user license professional/academic edition (along with MS access and MS		1 No.
	Front page)	40.1111	4 5:
3	Anti Virus Latest version/ Total	10 User License	1 No.

	Security software with		
4	Adobe Photoshop	Academic edition with 10 user license	1 No.
5	3D STUDIO Max	Academic edition with 10 user license	1 No.
6	Maya	Academic edition with 10 user license	1 No.
7	Adobe Flash	Academic edition with 10 user license	1 No.
8	Adobe premier Suite	Academic edition with 10 user license	1 No.
9	Front Page Editor	Academic edition with 10 user license	1 No.
C : LIS	FOF OTHER ITEMS/ FURNITURE		
1	Computer Tables	As per standard	11 Nos.
2	Printer Tables	As per standard	3 Nos.
3	Instructor Table	As per standard	1 No.
4	Instructor's Chair	As per standard	1 No.
5	Straight back revolving & adjustable chairs (Computer Chairs )	As per standard	20 Nos.
6	Steel cupboards drawer type	As per standard	3 Nos.
7	Cabinet with drawer	As per standard	2 Nos.
8	Pigeon hole cabinet	16 compartments	1 No.
9	Steel almirah	Big size	1 No.
10	Steel almirah	Small size	2 Nos.
11	Class room chairs with writing pad moulded type	As per standard	20Nos.



TOOLS & EQUIPMENTS FOR EMPLOYABILITY SKILLS							
SI. No.	Name of the Equipment	Quantity					
1.	1. Computer (PC) with latest configurations and Internet connection with standard operating system and standard word processor and worksheet software						
2.	UPS - 500VA	10 Nos.					
3.	Scanner cum Printer	1 No.					
4.	Computer Tables						
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.



# **FORMAT FOR INTERNAL ASSESSMENT**

Name & Address of the Assessor :							Ye	Year of Enrollment :								
Nar	me & Address of ITI (Govt	:./Pvt.) :						Da	Date of Assessment :							
Nar	me & Address of the Indu	stry :			Assessment location: Industry / ITI					I						
Tra	de Name :		Semeste	:	7	7/		Dı	ırat	ion of	the Trad	e/cour	se:			
Lea	rning Outcome:															
	Maximum Marks (Total	100 Marks)	1!	5 5		10	5	10		10	5	10	15	15	nt	
SI. No	Candidate Name	Father's/Mothe Name	er's	Safety consciousness	Workplace hygiene	Attendance/ Punctuality	Ability to follow Manuals/ Written instructions	C	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		4713					9	<b>V-1</b>								
2																