

Syllabus for the trade
of

DIGITAL PHOTOGRAPHER

(SEMESTER PATTERN)

UNDER

CRAFTSMEN TRAINING SCHEME

Designed in : 2013

By

Government of India

CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE

Directorate General of Employment & Training

Ministry of Labour & Employment

EN - 81, SECTOR – V, SALT LAKE CITY

Kolkata – 700 091

List of members of the trade committee meeting for the trade of Digital Photography

SL NO.	NAME & DESIGNATION S/Shri	REPRESENTING INDUSTRIES/INSTITUTE	REMARKS
1	S. D. Lahiri, Director	C.S.T.A.R.I, Kolkata	Chairman
2	Aditya Prasad Mitra, Dean, Department of Applied Art.	Rabindra Bharati University, Kolkata	Member
3	Krishnendu Sinha, Lecturer, Visual Art	Rabindra Bharati University, Kolkata	Member
4	Ranjan Kr Bose, Sr. Lecturer, Department of Photography	Regional Institute of Printing Technology, Kolkata	Member
5	Binayak Pal, Faculty, Department of Photography	Indian Institute of Chemical Biology(CSIR),Kolkata	Member
6	Biraja Prasanna Kar, Faculty, Department of M.P.P	Roopkala Kendra, Kolkata	Member
7	S. Louis, Sr. Cameraman	Doordarshan Kendra,Kolkata	Member
8	Keshab Ch. Manna, Faculty, Department of Photography	Satyajit Ray Film & Television Institute,Kolkata	Member
9	Srimati Mukherjee, Faculty	Webel DQE Animation Academy	Member
10	Shoubhik Bhattacharya, Faculty	Webel DQE Animation Academy	Member
11	Pratip Ranjan Mukherjee, Sr. Teacher, Photography	Naktala, High School	Member
12	A.Jayaraman, Trg. Officer	C.T.I, Chennai	Member
13	Anil Kumar, Joint Director	C.S.T.A.R.I, Kolkata	Member
14	Is war Singh, Joint Director	R.D.A.T (ER) Kolkata	Member
15	M. C. Sharma, Joint Director	C.S.T.A.R.I, Kolkata	Member
16	L.K.Mukherjee, Dy. Director	C.S.T.A.R.I, Kolkata	Member
17	A. Nandi, Dy. Director	C.S.T.A.R.I, Kolkata	Member
18	P.K.Dutta, Trg Officer	C.S.T.A.R.I, Kolkata	Member
19	S.B.Sarder, Trg Officer	C.S.T.A.R.I, Kolkata	Member
20	M.K.Batabayal, JTA	C.S.T.A.R.I, Kolkata	Member

List of members attended the Workshop to finalize the syllabi of existing CTS into Semester Pattern held from 6th to 10th May'2013 at CSTARI, Kolkata.

Sl. No.	Name & Designation	Organisation	Remarks
1.	R.N. Bandyopadhyaya, Director	CSTARI, Kolkata-91	Chairman
2.	K. L. Kuli, Joint Director of Training	CSTARI, Kolkata-91	Member
3.	K. Srinivasa Rao, Joint Director of Training	CSTARI, Kolkata-91	Member
4.	L.K. Mukherjee, Deputy Director of Training	CSTARI, Kolkata-91	Member
5.	Ashoke Rarhi, Deputy Director of Training	ATI-EPI, Dehradun	Member
6.	N. Nath, Assistant Director of Training	CSTARI, Kolkata-91	Member
7.	S. Srinivasu, Assistant Director of Training	ATI-EPI, Hyderabad-13	Member
8.	Sharanappa, Assistant Director of Training	ATI-EPI, Hyderabad-13	Member
9.	Ramakrishne Gowda, Assistant Director of Training	FTI, Bangalore	Member
10.	Goutam Das Modak, Assistant Director of Trg./Principal	RVTI, Kolkata-91	Member
11.	Venketesh. Ch. , Principal	Govt. ITI, Dollygunj, Andaman & Nicobar Island	Member
12.	A.K. Ghatge, Training Officer	ATI, Mumbai	Member
13.	V.B. Zumbre, Training Officer	ATI, Mumbai	Member
14.	P.M. Radhakrishna pillai, Training Officer	CTI, Chennai-32	Member
15.	A.Jayaraman, Training officer	CTI Chennai-32,	Member
16.	S. Bandyopadhyay, Training Officer	ATI, Kanpur	Member
17.	Suriya Kumari .K , Training Officer	RVTI, Kolkata-91	Member
18.	R.K. Bhattacharyya, Training Officer	RVTI, Trivandrum	Member
19.	Vijay Kumar, Training Officer	ATI, Ludhiana	Member
20.	Anil Kumar, Training Officer	ATI, Ludhiana	Member
21.	Sunil M.K. Training Officer	ATI, Kolkata	Member
22.	Devender, Training Officer	ATI, Kolkata	Member
23.	R. N. Manna, Training Officer	CSTARI, Kolkata-91	Member
24.	Mrs. S. Das, Training Officer	CSTARI, Kolkata-91	Member
25.	Jyoti Balwani, Training Officer	RVTI, Kolkata-91	Member
26.	Pragna H. Ravat, Training Officer	RVTI, Kolkata-91	Member
27.	Sarbojit Neogi, Vocational Instructor	RVTI, Kolkata-91	Member
28.	Nilotpala Saha, Vocational Instructor	I.T.I., Berhampore, Murshidabad, (W.B.)	Member
29.	Vijay Kumar, Data Entry Operator	RVTI, Kolkata-91	Member

GENERAL INFORMATION

1. **Name of the Trade** : **DIGITAL PHOTOGRAPHER**
2. **NCO Code No.** :
3. **Duration** : One year (Two semesters)
4. **Power Norms** : 6.35 Kw
5. **Space Norm** : 48 sq m.
6. **Entry Qualification** : Passed 10th Class examination
7. **Unit Size (No of student)** : 16 Trainees.
8. **A. Instructor's/Trainer's Qualification:**
 - Diploma in Photography + 2 year Experience
 - Or
 - NAC/NTC in the trade of Digital Photographer/Photographer with three years experience in the relevant field .
- 8 B. **Desirable qualification** : Preference will be given to a candidate with Craft Instructor Certificate(CIC).

At least one Instructor must have Degree / Diploma in relevant field

Syllabus for the Trade of “ Digital Photographer” under C.T.S.

Duration- Six months

First Semester

Semester Code: DIP: SEM I

Week no.	Trade Practical	Trade theory
1	Introduction to training familiarization with the Institute. Importance of trade training. Instruments used in the trade. Handling of Digital cameras, compact and SLR.	Importance of safety and general precautions observed in the trade by the Institution. Care & maintenance of equipments & material. Introduction to photography and its applications. Introduction to Cameras.
2	Use of natural light, tungsten light, fluorescent light, single & multiple electronic flash, reflectors, exposure meters, studio flash & accessories and guide number.	Understanding visual communication and aesthetic in Photography. Theory of light and sources. Colour - temperature & colour balance.
3-7	Practice on different types of composition using various lighting techniques and use of lenses. Taking photographs out door & indoor. Hands on special areas of photography.	Exposure, Conception of aperture, shutter speed, depth of field. Lens and its accessories. Knowledge of different types of lenses & their uses. Covering power/ angle, aberrations of lens, perspective. Use of lens hood, tripod, self timer.
8-9	Introduction to Computer Fundamentals	
10-14	Digital editing by using bit map and vector based image editing software. Ability of taking printouts of photographs taken by a digital camera from computer printer. Concept of image transportation to storage media. Practice of sending photographs through internet, sending photographs through E-mail and printing and analysis of images.	Knowledge of image editing software. Knowledge of different types of printing media, for hard copy. Knowledge of different types of printer in respect of their resolution
15-16	Ability to scan photographs and capture frames	Knowledge of other different types through scanner & capture card, editing of capturing methods through scanners frame grabber with digital camera. Knowledge of photo editing through different types of updated photo editing software's.
17	Internship (visit to studios and labs etc)	
18-22	Practice and Project work (Three weeks for practical and two weeks for project work)	
23-24	Handling of digital video cameras, Tape, DVD, HDD and accessories. Types of common shots and movements. Dimension of images.	Introduction to video, use of video as a communication medium, types of video cameras-their various formats, types of various video tapes, DVD, HDD. Principle of video recording.
25	Project work / Industrial visit (optional)	
26	Examination	

Syllabus for the Trade of “ Digital Photographer” under C.T.S.

Duration- Six months

Second Semester

Semester Code: DIP: SEM II

Week no.	Trade Practical	Trade theory
1-2	Handling of digital video cameras, Tape, DVD, HDD and accessories. Types of common shots and movements. Dimension of images.	Introduction to video, use of video as a communication medium, types of video cameras-their various formats, types of various video tapes, DVD, HDD. Principle of video recording.
3-6	Lighting of different areas of video shooting. Practice on three point lighting, indoor and outdoor lighting etc. Practice on hard & soft, bounce, silhouette lighting, key lighting. Use of reflectors & skimmers.	Knowledge of different types of lighting. Concept of power distribution depending upon the requirement of the light output.
7-10	Using of microphones. Audio video recording, mixing, editing, dubbing of sound.	Concept of different types of microphones. Knowledge of sound recording, mixing, editing, dubbing etc.
11	Idea & planning of production - proposal, scope, script, shot division, visualization according to script.	Planning for production, pre-production, production and post production etc. Introduction to multi camera setup and production.
12-19	Shooting and editing of short documentary, news items , interviews, music video etc.	Idea of different subject to be selected for shooting.
20	Storing materials in media. Using software for changing the formats.	Visual digitization, authoring, final output and format change.
21-24	Internship (visit to production house/studios etc)	
25	Revision	
26	Examination	

TRADE: DIGITAL PHOTOGRAPHER**LIST OF TOOLS & EQUIPMENT****A. TRAINEES TOOL KIT FOR 16 TRAINEES**

Sl. No.	Items	Quantity (NOS)
1	Digital compact Still Camera with standard accessories	5 Nos
2	Digital SLR Camera with standard accessories.	2 Nos
3	Digital SLR Camera with detachable recorder (Latest model)	1 No.
4	Video capture card	2 Nos
5	14" LMD monitor	2 Nos
6	Multi media speaker 2.1	2 sets
7	Digital lens (Normal/wide/telephoto)	2 sets each
8	Desiccators 15" dia	5 Nos
9	Digital handycam with cassette and DVD, hard disc type	3 Nos
10	Zoom lens matchable with Digital SLR camera (28-70mm, 70-300mm)	1 each
11	Fish eye lens matchable with Digital SLR camera	1 No.
12	Camera stand for still camera	2 Nos
13	Camera stand for video (low base)	1 No.
14	Cable release	2 Nos
15	Different types of filters, (10 types) matchable with camera (Graduated, Star filter, multi image, ND, Sky light, polarizer, colour filter set, 80B, both for video & still)	1 No.
16	Extension ring (4 types)	2 Nos
17	Electronic flash gun (Manual & auto) Different types with slave unit	4 Nos
18	Studio light	4 Nos
19	Spotlight	2 Nos
20	Electronic umbrella light	4 Nos
21	Air conditioner for studio (1.5 ton)	4 Nos
22	Exposure meter (digital incident)	6 Nos
23	Studio room (30ft. x 30ft. x 18ft. height) fitting with cataract system, light grid, sound proof, AC, with cyclorama	1 room
24	Studio & Classroom furniture a) Steel chairs folding type with arm rest for trainees b) Working table moulded	16 Nos 16 Nos
25	Computer with multimedia facility and graphic accelerator card and DVD writer, CD drive, Zip drive, video capture card (latest configuration) connected with LAN	8 Nos
26	Standalone DVD recorder	2 Nos
27	Inkjet printer with colour cartridge (1200 dpi or higher)	1 No.
28	Laser printer with colour cartridge (1200 dpi or higher)	1 No.
28	Scanner (1200 dpi or higher)	2 Nos
29	UPS (5 KV A)	8 Nos
30	Windows operating system XP or latest version	1 No.
31	Photo editing software like Photoshop CS 3 etc.	As required

32	MS-Office latest version	1 No.
33	Macro media Free Hand latest version	1 No.
34	Flash latest version	1 No.
35	Director latest version	1 No.
36	Sound Forge/ cool edit pro latest version	2 Nos
37	Digit Mix latest version	1 No.
38	Anti Virus software latest version	1 No.
39	Adobe premier available version	1 No.
40	Table for computer, printer and scanner	8 Nos
41	Chairs for computer classes	16 Nos
42	DVD writable (latest capacity)	80 Nos
43	DVD Re-writable (latest capacity) Portable hard disk 320GB- 1 TB	40 Nos 1 No.
44	Pen drive 8 GB, 16 GB	5 each
45	Multiple card reader	5 Nos
46	Reflectors (Folding Portable)	8 Nos
47	Cool light	8 Nos
48	Multi 10 & Multi 20	8 each
49	Sun Gun	6 Nos
50	Porto pack light	3 sets
51	Tape matchable with the camera	As required
52	Slide & film high resolution scanner with adapter for A3	1 No.
53	Slide & film high resolution scanner with adapter for A4	1 No.
54	DV VTR according to digital camera	1 No.
55	DV VTR with play back adapter for camcorder	1 No.
56	Play back adapter for video camera	1 No.
57	Battery charger for still camera	1 No.
58	Battery charger for video camera	12 Nos
59	Battery for digital SLR camera	12 Nos
60	Battery for digital video camera'	1 No.
61	Microphone (boom)	2 Nos
62	Microphone (lapel)	1 No.
63	Trolley set 30 ft.	1 No.
64	Round trolley 30 ft.	1 No.
65	Cable	As required
66	Extension Board	As required
67	BNC cable with various connectors (80 ohms)	As required
68	Steel almirah	2 Nos
69	Pigeon hole steel almirah	1 No.
70	Fire extinguisher	4 Nos
	Optional tools & Equipments	
1	Over head projector with screen	1 No.
2	LCD Projector	1 No.
3	DLP projector and motorized projection screen	1 No.