

**MSDE(DGT)-07/08/2022-CD**  
**Government of India**  
**Ministry of Skill Development & Entrepreneurship (MSDE)**  
**Directorate General of Training (DGT)**

Employment Exchange Building, PUSA Complex, IARI,  
 New Delhi-110012,  
 Dated: 10<sup>th</sup> November, 2022

To

The Commissioners/ Director, Vocational Training / Skill Development, All States/ UTs

Subject: Clarification regarding teaching of Workshop Calculation & Science (WCS) and Engineering Drawing (ED) post simplification and subsequent merging with Trade Theory under Craftsmen Training Scheme.

Sir/Madam,

Kindly refer to this Directorate's D.O. letter no. MSDE(DGT)-19/03(02)/2022-CD dated 05<sup>th</sup> April, 2022 wherein simplification of Workshop Calculation & Science (WCS) and Engineering Drawing (ED) syllabus of max. 40 hours each and merging with Trade Theory Subject for all engineering trades from the current session were communicated to All State Principal Secretaries/ Directors of States/UTs dealing with Skill Development in ITIs as per the decision of 16<sup>th</sup> NSQC meeting under NCVET held on 24.02.2022 (Copy enclosed).

2. The DGT has received queries from various stakeholders regarding the teaching of WCS and ED under CTS. In this regard, it is informed that for teaching of the topics of WCS and ED in ITIs, States/ UTs may follow the recommendations at serial no. 4 of letter no. DGE&T-19(4)/2013-CD dated 26<sup>th</sup> June, 2013, mentioned (copy enclosed), as under:

“One Drawing Instructor is required for 144 Engineering seats sanctioned in the Institute. Additional instructor will be required on increase in every 144 students. Up to 144 Engineering seats one instructor for Workshop Calculation & Science (WCS)”

3. In addition to teaching of Workshop Calculation & Science (WCS) and Engineering Drawing as per order dated 26<sup>th</sup> June, 2013, the vocational instructors of ITIs may be utilized for training/ teaching related activities of trades matching to their qualification.

This issues with the approval of Competent Authority.

Yours Sincerely,

  
 (Sanjay Kumar)  
 Director, CD

Encls : As above

Copy to:

1. PPS to Secretary, MSDE
2. Sr. PPS to DG, DGT
3. All State Principal Secretaries/ Secretaries of States/UTs dealing Skill Development Program
4. All Directors at DGT (HQ), New Delhi
5. Director CSTARI and Executive Director, NIMI
6. IT Head, DGT with a request to upload on DGT website

**DGE&T-19(4)/2013-CD**  
**Government of India**  
**Ministry of Labour & Employment**  
**Directorate General of Employment and Training**  
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Shram Shakti Bhawan, Rafi Marg,  
 New Delhi, dated 26<sup>th</sup> June, 2013

To

1. Secretaries/ Principal Secretaries of all the State Governments / UT Administrations dealing with Vocational Training;
2. Directors dealing with Vocational Training of all States/ UT Administrations;
3. Directors, ATI Chennai, Hyderabad, Mumbai, Kolkata, Kanpur, Ludhiana, CSTARI Kolkata, ATI(EPI) Hyderabad & Dehradun, FTI Bangalore & Jamshedpur and NIMI Chennai; and
4. RDAT Kanpur, Mumbai, Kolkata, Chennai, Faridabad & Hyderabad.

**Subject: Modification in NCVT norms for various issues**

Sir/ Madam,

This is to inform you that, in order to streamline the existing NCVT norms on various issues, following norms have been revised.

S. No	Existing norms	Revised norms
1.	As per DGET/NCVT norms the following staff is admissible for industrial Training Institute in addition to other staff. a) Training Officer/ Group Instructor- 1 No. for every 8 units b) Qualifications of the Training Officer are: i. 10 <sup>th</sup> class pass or equivalent ii. Diploma in Tech/ Engineering iii. Five years practical experience in a reputed industrial concern or in training Institute.	a) Principal/ Superintendent of Institute can manage to impart the training in less than 8 units of institute thus 1 Group Instructor is required wherever there are 8 units or more than 8 units and in multiplication of 8 units. b) In addition of present qualification, the qualification of Group Instructor will be a degree in technology/ engineering with three years practical experience or diploma in technology/ engineering with 5 years of experience or ITI (NTC/ NAC) with 8 years experience in a reputed Industrial concern or in training Institute.
2.	Carpenter- one at each such Industrial Training where the number of seats sanctioned is 250 or more and where the post of Instructor Carpentry does not exist.	The said posts may be abolished. Carpenter may be outsourced if required.



3.	<p>i. Electrician- one at each Industrial Training Institute where the trade electrician does not exist.</p> <p>ii. The Switch Board Attendant Where there is a separate electric sub-station at the institutes and no attendant is provided by PWD, one sub-station attendant for each shift could be appointed, the scale of pay of the attendant will be according to the State's Scale.</p>	<p>i. Electrical maintenance works of institute can be managed through outsources/ contract basis where the Electrician trade does not exists. The position of electrician can be abolished.</p> <p>ii. The Switch Board Attendant may be outsourced as required.</p>																												
4.	<p>Drawing Instructor- one for 144 (Engineering and/ or non-engineering) seats sanctioned.</p> <p>Workshop Calculation &amp; Science Instructor (Maths Instructor)</p>	<p>One Drawing Instructor is required for 144 Engineering seats sanctioned in the Institute. Additional instructor will be required on increase in every 144 students. Upto 144 Engineering seats one instructor.</p>																												
5.	<p>Allied Instructor- The post of Allied Instructor may not be provided in the ITI in which allied trade training could be carried out by the respective trade instructor. However, the existing staff on all such posts may be phased out gradually.</p>	<p>The post of Allied Instructor in the Institute may be abolished.</p>																												
6.	<p>Medical Staff</p> <p>Medical Officer Part Time only (one full time for three or four Institutes in the same city)</p> <p>Compounder One for each ITI</p> <p>Dresser One for shift in each shift in each ITI</p>	<p>First Aid facility may need to be made available in the institute. It may be outsourced as per requirement.</p> <p>Tie-up with doctor/ clinic/ hospital is mandatory.</p>																												
7.	<p>The space required for Drawing Hall to accommodate with the following items in the hall:-</p> <table border="1" data-bbox="336 1391 906 1758"> <thead> <tr> <th>Furniture</th> <th>Quantity (for 300 trainees)</th> <th>Quantity (for 600 trainees)</th> <th>Quantity (for 1000 trainees)</th> </tr> </thead> <tbody> <tr> <td>Drawing Desk</td> <td>40</td> <td>80</td> <td>120</td> </tr> <tr> <td>Black Board</td> <td>2</td> <td>4</td> <td>6</td> </tr> <tr> <td>Chair</td> <td>2</td> <td>4</td> <td>6</td> </tr> <tr> <td>Table</td> <td>2</td> <td>4</td> <td>6</td> </tr> <tr> <td>Stools, wooden(High)</td> <td>40</td> <td>80</td> <td>120</td> </tr> <tr> <td>Chest Drawers</td> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	Furniture	Quantity (for 300 trainees)	Quantity (for 600 trainees)	Quantity (for 1000 trainees)	Drawing Desk	40	80	120	Black Board	2	4	6	Chair	2	4	6	Table	2	4	6	Stools, wooden(High)	40	80	120	Chest Drawers	1	2	3	<p>Class room will be used as a Drawing Hall for "Engineering Drawing" subject and no separate drawing hall is required. Drawing hall is required for the trade "Draftsman (Mechanical)" &amp; "Draftsman (Civil)".</p>
Furniture	Quantity (for 300 trainees)	Quantity (for 600 trainees)	Quantity (for 1000 trainees)																											
Drawing Desk	40	80	120																											
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8. As per Affiliation procedures, the following Supporting Staff is required and some proposals are given below for consideration and approval please:

Sanctioned Strength	Upper Division clerk (UDC)	Lower Division clerk (LDC)	Multi Skill Person			
			Attendant	Maali	Sweeper	Chowkidar
For a Minimum of 50 seats	1	-	1	1	1	1
For a Minimum of 100 seats	2	1	2	2	2	2
For a Minimum of 150 seats	2	2	2	3	2	3
For a Minimum of 200 seats	3	2	3	3	3	3
For a Minimum of 250 seats	3	3	3	4	3	4

Above the sanctioned strength of 250 seats, for every 50 to 100 additional seats, one additional clerk, UDC or LDC according to the circumstances, one workshop attendant and one class IV staff may be provided. Where the number of clerks is at least three, one of them may be appointed as head clerk. Where the number of clerks is six or more, one office superintendent may be appointed.

**Hostel Staff**

- i. Hostel Superintendent-cum-Physical Training Officer:- One for the hostel attached to each institute.
- ii. Hotel Clerk:- UDC or LDC, one for each hostel, where the actual strength is 50 or more in addition to the Hostel Superintendent.
- iii. Hostel Multi Skill Person

No. of trainees in the hostel	Sweeper	Chowkidar
1 to 50 trainees	1	1
51 to 100 trainees	2	2
101 to 200 trainees	3	4

9. There is no space norm for computer lab/IT lab.

As mentioned above the supporting staff is required as per the seating capacity of trainees, but most Institutes have informed that they are facing difficulty in employing the staff on regular basis. It is proposed that the supporting staff (Ministerial staff like Clerk, Head Clerk, Accountant, Superintendent etc, Multi skills persons & Hostel staff) may be allowed to be employed on contract basis/ outsourced & may be need based in the Institute.

- ii. Bank/PO accounts statement for existing instructors, if any, for last 2 years.

- i. All Government and Private ITIs need to set up an exclusive computer lab with internet connectivity on every computer with



		<p>multimedia. The setup of the computer lab must have minimum ten computers / workstations and peripheral with internet facility irrespective of trade (s) or trade related computer requirement for an ITI up to seating capacity of 100 per shift. For each additional unit accredited/ affiliated, two computers / workstation must be added.</p> <p>ii. The space norm to accommodate 10 computers for 100 trainees per shift is to be 25sq.m. and 2.5sq.m. for each additional computer.</p> <p>iii. One computer instructor is required who will also look after the work of Audio-visual instructor. The Computer Instructor may be Graduate in Engineering <u>or</u> Graduate in Computer Science with atleast 1 year experience <u>or</u> Diploma in Computer Engineering with 2 years experience <u>or</u> NTC / NAC in COPA with 3 years experience. The experience should be in a reputed Industrial concern or in a training Institute.</p>
10.	<p>Audio-visual Instructor –Upto 10 units GI may be made responsible and paid extra remuneration @Rs 25 to Rs 50 per month. He may be assisted by a workshop attendant (AVA).</p> <p>One Audio-visual Instructor is thus required wherever there 20 units or more.</p>	<p>This post may be abolished. The responsibilities of Audio-Visual Instructor would be taken by the IT Lab Instructor.</p>
11.	<p>Employability Skills Instructors:</p>	<p>One full time instructor is required for 1000 seats &amp; above and the qualification of the employability skill instructor will be BBA with two years experience or MBA.</p> <p>For seats less than 1000, the instructor can be outsourced / on contract basis.</p>

12.	(i)	<b>Mechanic Machine Tool Maintenance</b> One When Six Units exit in an ITI in the following trades- - Machinist - Turner - Tool & Die Maker - Jig & Fixtures - Die & Mould - Instrument Mechanic	Not mandatory. Can be out-sourced
		<b>Mechanic Machine Tool Maintenance</b> One in each ITI working in Three shifts and having trades of Machinist and / or Turner if Mechanic Machine Tool Maintenance are otherwise not admissible.	Not mandatory. Can be out-sourced
		<b>Mechanic Machine Tool Maintenance</b> One to be attached to an ITI with 600 seats or more to the State Directorate, of there is no such ITI.	Not mandatory. Can be out-sourced
	(ii)	<b>Maintenance Mechanic for Maintenance Section</b> One for 15-30 numbers of equivalent machines. Two for 30-60 number of equivalent machines. Three for 60-90 number of equivalent machines and above. The Mechanic Machine Tool Maintenance and Maintenance Mechanic already appointed under the existing pattern to be taken into account and only one maintenance mechanic to be appointed for the present where three or less Maintenance Mechanics are admissible	Not mandatory. Can be out-sourced
	(iii)	<b>Mechanic Machine Tool Foreman</b> One to be attached to an ITI with 600 seats or more.	Not mandatory. Can be out-sourced

13.	(i)	<p><b>Typewriter and Office Machine Mechanic:</b> One for each ITI where the trade of Stenography exists.</p> <p>Note: A regular mechanic may be appointed only if the repair of 40-50 computers can be entrusted to him failing which a part time mechanic may be engaged but they should attend every alternate working day.</p>	<p>Both the posts may be abolished. If the post is filled up, person may be trained for PC maintenance.</p>
	(ii)	<p>Farash-cum-Attendant: One for Stenography trade</p>	

This is being issued with the approval of the competent authority.

Yours faithfully,



(Deepankar Mallick)  
Director of Training  
Member-Secretary NCVT

Copy to:-

1. Principal CTI Chennai, MITI Haldwani, Calicut, Jodhpur, Choudwar, NVTI, Noida and all RVTIs.
2. All Officers up to JDT level and above at DGE&T (HQ)
3. P. R. O., Ministry of Labour & Employment, Government of India for wide publicity.
4. CEO, Quality Council of India, 2<sup>nd</sup> Floor, Institution of Engineers Building, Bahadur Shah Zafar Marg, New Delhi



(Amrit Pal Singh)  
Deputy Director of Training





ATUL KUMAR TIWARI, IAS  
ADDITIONAL SECRETARY/ DIRECTOR GENERAL

दूरभाष : 25731102, 25731103  
PHONE : 25731102, 25731103

प्रशिक्षण महानिदेशालय  
भारत सरकार  
कौशल विकास और उद्यमशीलता मंत्रालय  
नई दिल्ली-110001

DIRECTORATE GENERAL OF TRAINING  
GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT &  
ENTREPRENEURSHIP  
NEW DELHI-110001

No. MSDE(DGT)-19/03(02)/2022-CD

Dated 05<sup>th</sup> April 2022

To *Dear Colleagues,*

1. All State Principal Secretaries/ Secretaries/ of States/UTs dealing Skill Development Program
2. All States/ UTs Commissioners/ Director, Vocational Training / Skill Development,
3. The Directors, NSTIs & RDSDEs

**Subject- Simplification of Workshop Calculation & Science (WCS) and Engineering Drawing (ED) syllabus of max. 40 hours each and merging with Trade Theory subject for all engineering trades. Applicable for current session also. Thus, students will not appear for separate ED/ WCS Examinations in July/August 2022 Examinations-reg.**

Sir/Madam,

With reference to VC meeting held under the Chairmanship of Secretary MSDE on 10<sup>th</sup> March 2022 at 12:00 Noon with the State/UT Principal Secretaries/Secretaries of Skill, Sector Skill Councils, Controller of Examinations, RDSDE's and NSTIs wherein simplification of Workshop Calculation & Science (WCS) and Engineering Drawing (ED) syllabus of max. 40 hours each merging with Trade Theory subject for all engineering trades was discussed vide agenda item no. 2 in the meeting and it was unanimously decided that:

- i. The revised simplified syllabus will be followed from the current session i.e. the trainees taken admission in year 2021-22 and trainees admitted in current session need not appear for separate examination for WCS and ED.
- ii. Separate supplementary examination will be conducted for WCS and ED for the ex-trainees.

Accordingly, State/UTs Directorates dealing with vocational training are kindly requested to issue necessary directions to Principals and Instructors of ITIs to organize workshop/ give wide publicity amongst trainees to encourage them as well as to enable implementations of above decisions.

The copy of revised syllabus of ED and WCS are annexed as Annexure-A and Annexure-B respectively.

*With regards,*

Yours Sincerely

Encls: A/A

*Atul Kumar Tiwari*  
(Atul Kumar Tiwari)

Copy to:

1. Sr. PPS to Secretary, MSDE
2. PPS to DDG, DGT
3. Director TT Cell - to implement CBT accordingly,
4. All Directors at DGT (HQ), New Delhi
5. Director CSTARI and Executive Director, NIMI for necessary action please
6. IT Head, DGT with a request to upload on DGT website