



# Grading of Industrial Training Institutes (ITIs)

Framework and methodology



Directorate General of Training
Ministry of Skill Development and Entrepreneurship
Government of India

# **CONTENTS**

1.	BACKGROUND		3
	NEED FOR GRADING OF ITIs		
	GRADING FRAMEWORK	and the same of th	
	GRADING METHODOLOGY		
-	TIMELINES		
-	INCENTIVES OF GRADING		
	GRADING PARAMETERS AND THEIR SIGNIFICANCE		
,	INEXURE I – GRADING PARAMETERS AND SCORING		
	INEXURE II – INDICATIVE LIST OF OPTIONAL EQUIPMENT		

#### 1. BACKGROUND

- 1.1 Skilling has been one of the most focused agenda of Government of India for the last few years. India is targeting to equip 400 million youth (by 2022) with industry relevant skills in multiple trades/sectors through various skill programs/schemes implemented at skilling institutions such as Skill Development Centers (SDCs), Vocational Training Providers (VTPs), Industrial Training Institutes (ITIs), and Polytechnics/Engineering Colleges etc. Initiatives like "Make in India", "Digital India" etc. are creating job opportunities in key manufacturing and service sectors of the economy thereby, demanding quality skilled manpower.
- 1.2 However, a significant gap exists between the demand for skilled manpower and the supply of such manpower through skilling institutions such as ITIs. Apart from this, 12 million people enter the workforce every year who not only need to have jobs, but who also need to have the required skills for different job roles. While this is a large number in itself, added to this is the complexity that about 93% of workers are in the informal sector which is transient in nature.

#### 2. NEED FOR GRADING OF ITIS

- 2.1 The Government's vocational training programs are primarily managed by the ITIs which cater to about 36% of the 7 million people getting trained in India today. The first ITI was set up in 1950 and the number today stands at 13,348 (including both government and private ITIs)¹ providing vocational training to around 19 lakh youths in 126 trades. With such a speedy increase in number of ITIs, it is necessary to have a standard "quality assurance mechanism" in place. To ensure the quality checks of these institutes, Directorate General of Training (DGT) Ministry of Skill Development and Entrepreneurship (MSDE) has decided to grade the ITIs on the basis of some key parameters. The grading shall provide a "benchmark for comparison" amongst the institutes.
- 2.2 The National Policy on Skill Development and Entrepreneurship, 2015 also emphasizes on rating of ITIs. It states that "Performance rating of ITIs will also be promoted based on outcome linked parameters and trainee/employer feedback".
- 2.3 The objective of conducting grading exercise for ITIs is to provide "Star Rating" to the performing institutes and give an opportunity to the institutes lagging behind in some of the parameters, to improve upon. The scoring shall be done against each of the defined parameters. The final rating of the institute shall determine its current performance level and shall enable them to find out the key areas where they can improve further, so as to get higher rating during next grading process.
- 2.4 Further, MSDE aims to identify at least 500 ITIs to become "World Class" training institutes which are recognized for their training standards and practices, not just in India but abroad. These ITIs will act as model institutes for others to emulate and will provide strategic direction to industrial training in India. In addition, students of such ITIs shall be given preference for training opportunities outside India through various collaborative efforts of Government of India with other countries. The rating of these best institutes will be declared and displayed separately to support their improved positioning in skills ecosystem.

# 3. GRADING FRAMEWORK

- 3.1 The grading process shall be voluntary in nature and only those ITIs desirous of obtaining rating under this framework shall be required to submit/upload information/data for the purpose. However, ITIs opting out of grading process shall be denied benefits/incentives (outlined in section 6 of this document) and shall not be allowed to add new trades/courses.
- 3.2 A comprehensive "framework" has been designed to detail out the key parameters on which the performance of each of the institutes shall be evaluated and graded accordingly. The primary purpose of this framework is to galvanize ITIs towards a competitive environment so as to improve their current operational performance. Clear definition and identification of key parameters shall help ITIs to work candidly towards maintaining the highest level of performance standards and further improving their rating. These parameters are strong pointers of "quality of training" being imparted at ITIs across the country.

<sup>&</sup>lt;sup>1</sup> NCVT MIS Portal data as on 6<sup>th</sup> Jan 2017

- 3.3 The parameters (total 43) are grouped under 10 heads such as <u>civil work, trades, industry connect, outcome, instructors, production center, capacity utilization, key compliances, special achievement, and <u>miscellaneous</u>. Essentially, the grading parameters would evaluate the civil work of the institute in terms of building completion, rented or owned building etc.; status of Institute Management Committee (IMC) and the level of institute-industry engagement; availability and specification of machines, tools and equipment as per DGT norms; availability of high-end machines; availability of qualified instructors as per DGT norms; instructor vacancy; availability of full-time principal; availability of books; drop-out rate; placements; pass-out ratio; capacity utilization; availability of high-end trade; industry involvement in delivering guest lectures; diversity in revenue streams, amongst other things.</u>
- 3.4 The detailed "grading parameters" along with "information/data to be provided", "metrics", and "weights" assigned to each parameter has been provided in Annexure I.
- 3.5 The DGT (MSDE) reserves the right to modify any of the metrics if it deems fit to do so in the interest of various stakeholders. Any changes so made will be notified at the time of announcing the ratings.

## 4. GRADING METHODOLOGY

- 4.1 The methodology is based on developing a set of metrics for rating of ITIs, based on the parameters agreed upon by DGT (MSDE).
- 4.2 An attempt is also made to identify the relevant data needed to suitably measure the performance rating under each parameter. Here the emphasis is on identifying data that an ITI can easily provide and can be easily verifiable, where verification is needed. This is important in the interest of transparency.
- 4.3 A suitable metric is then proposed based on this data, basis which a rating is given under each parameter. The parameters have appropriate weight assigned to them. The parameter ratings are then added to obtain rating for each individual head.
- 4.4 The methodology for grading of ITIs shall include following steps:

**Step 1:** DGT (MSDE) shall invite ITIs who volunteer to participate in the grading exercise. Interested ITIs shall rate themselves on grading parameters defined in Annexure I. This shall be enabled using assigned User ID and Password through a web-link in NCVT<sup>2</sup> MIS portal. On the ratings web-page, ITIs will be able to mention "actual value" of the data/information against each parameter. The self-rating; corresponding mention of data/information; shall be carried out by ITI.

It is also desirable that ITIs upload the submitted data and relevant documents on their publicly visible website in the interest of transparency.

If self-rating of an ITI is not as per actual data/information submitted then DGT reserves the right to provide Zero rating to that ITI.

**Step 2:** Various users such as Trainees, Parents, Faculty, Employers, and Others (which may include other stakeholders and unidentified users) shall rate an ITI on same grading parameters (defined in Annexure I) through a NCVT MIS Portal. The self-rating of ITI will be visible to users. The objective of this step is to get a calibrated view through eliciting feedback from key stakeholders.

It may further be noted that rating given by unidentified users will not be counted towards temporary or final rating.

**Step 3:** "NCVT Sub-Committee on Affiliation" shall scrutinize the rating data and provide "<u>Temporary</u>" Star (\*) rating to an ITI giving "70% weightage to ITI self-rating; and 30% weightage to rating from other stakeholders and users".

<sup>&</sup>lt;sup>2</sup> National Council for Vocational Training

- **Step 4:** The grading framework will be used for all routine inspections carried out by DGT officials as well by State government officials. All such inspection reports will be loaded on the NCVT MIS rating portal. The DGT may assign an "official" to visit select ITIs, validate the submitted data and provide rating against same grading parameters through their respective "log-in" facility in NCVT MIS portal. The self-rating given by an ITI and by various users along with comments/remarks shall be visible to assigned official while giving rating. Further, DGT/State official should be able to provide comments/remarks while giving rating to an ITI. The record of comments/remarks shall form the "base" for future inspections of ITIs against the existing grading parameters or changed parameters (after appropriate revisions in future). The inspection shall be a continuous process after ITI self-rating. Furthermore, rating given by DGT / State officials will be counted as part of user rating.
- **Step 5:** The "external agency/s" (selected through an open tender process) shall visit all the ITIs (under consideration for grading); conduct physical verification of infrastructure, machines, tools and equipment, trainers, documents etc.; validate the data uploaded by ITI; recommend a "Star Rating" for each ITI; and submit the report to DGT. The external agency should also be able to apply analytical tools & techniques to analyse the ITI data and provide meaningful insights on ITI performance in its report.
- **Step 6:** A "Core Grading Committee" shall recommend to DGT the <u>final rating</u> of each ITI based on the report submitted by external agency. The core grading committee may consist of 4 members headed by an external expert. Other members may include representatives from DGT, Ministry of Human Resource Development (MHRD), National Assessment and Accreditation Council (NAAC). Based on the recommendations of committee, DGT shall publish the final ratings.
- 4.5 The final "Star Rating" obtained through grading mechanism shall be displayed on the website of ITI, DGT website, and NVCT MIS Portal. Further, all graded ITIs shall display rating on their institute's signboard.
- 4.6 A suitable mechanism shall be developed to display the ITI rating on NCVT certificate of pass-out trainees.
- 4.7 MSDE/DGT shall carry out an "independent external audit" (based on random sampling of ITIs) of entire grading process, inspection reports and comments/remarks to ensure quality assurance of entire process; and to establish the veracity of claims/statements made and data/information/document collected in relation to grading.
- 4.8 If it is found that an ITI has deliberately manipulated the submitted data, causing erroneous rankings, DGT (MSDE) will remove the ITI from the rating list and publish a suitable note to this effect.
- 4.9 If an ITI loses its affiliation status at any point of time, it also loses its rating.

# 5. TIMELINES

5.1 The first grading process is expected to commence from January 2017 and completed by October 2017 when ratings will be published on DGT website. The timelines for each step are defined below:

Sl. No.	Steps	Timelines
1.	Self-rating by ITI	January 2017 to March 2017
	Rating through crowd-sourcing	
2.	Temporary rating by NCVT Sub-Committee on Affiliation	May 2017 to June 2017
3.	Inspection by Centre/State officer	Continuous process after ITI self-rating
4.	Selection of external agency/s	January 2017 to June 2017
5.	Field visit, data validation and report submission by external agency	July 2017 to September 2017
6.	Final rating by committee and publishing on DGT website	October 2017

5.2 The ITI ratings are valid for 2 years (one academic session) from the date of publish of such ratings by DGT. The grading exercise shall be conducted after every 2 years which will provide an opportunity for low graded institutes to perform better and score higher during the next grading process. However, an ITI may opt for re-inspection for upgradation by paying prescribed fee.

#### 6. INCENTIVES OF GRADING

- 6.1 Grading of ITIs will help differentiate between performing and non-performing ITIs. It would also contribute to the skill ecosystem in number of ways such as: comparison and identification of ITIs incorporating the best practices; enabling healthy competition among ITIs; providing relevant information to potential trainees; as well as employers/corporates; enabling an ITI to benchmark itself with other ITIs across the country, and in the same state or region etc.
- 6.2 Following incentives shall accrue to ITIs who opt for grading and preferably score rating of 3 and above:
  - 1. ITIs will be allowed to add new trades/units
  - 2. Eligible to receive financial support under Government schemes including STRIVE (proposed World Bank Project)
  - 3. Principals and Instructors of private ITIs will be provided training in central institutes in India and also will be given opportunity for training abroad, wherever possible
  - 4. Awards for best ITI and best Principal on "Skill Day" and other relevant skill development platforms
  - 5. Flexibility in charging higher course fee from students
  - 6. No re-affiliation will be required if an ITI continuously score 3+ rating and there is no change in affiliation norms for the trades in ITI
  - 7. Grading would be displayed on final NCVT certificates. For ITI not opting for grading, it will be indicated as "Ungraded ITI"

# 7. GRADING PARAMETERS AND THEIR SIGNIFICANCE

There are 43 grading parameters categorized into 10 heads which are defined as under. The documentary proofs to be checked/verified at the time of visit by "Centre/State officer" and "external agency" shall be made available by ITI management.

#### A. Civil Works:

1) Dedicated plot in the name of ITI lends credibility to continuity of ITI operations and provides flexibility to ITI management to expand its operations in terms of starting more trades/courses and setting up facilities for other training related activities. It also encourages target segment (trainees, parents) to enquire about the institute and its programs and make the institute aspirational. An ITI with a dedicated plot will be given highest rating.

**Documentary proof** Title deed of plot of land

2) ITI boundary wall with main entrance gate is one of the important mechanism to ensure safety and security of institute, its facilities and assets. An ITI with complete boundary wall will score high on this parameter.

**Documentary proof** Photograph/video of boundary wall with entrance gate

3) Availability of Building Completion Certificate by the competent authority is necessary to ensure that relevant building "codes and standards" of the competent authority have been complied with. ITIs with the certificate will score highest under this. If an ITI has certificate of approval of building plan by the competent authority, it shall also get some score as prescribed. The competent authority could be Local Planning Authority/Local Municipal Body/District Collector Office/Town Planning Department.

**Documentary proof**Building completion certificate
Approved building plan

4) Owned building of ITI also lends credibility to continuity of ITI operations compared to a rented building. It also provides flexibility to ITI management to expand its operations in terms of starting more

units and providing extra facilities which has direct bearing on training outcome. ITIs with owned building will score highest under this.

Documentary proof

Lease agreement in case of owned building on leased land and last paid property tax receipt

Title deed of land in case of owned building on own land and last paid property tax receipt

For ITIs in rural areas not under property tax system, latest electricity bill in the name of institute will suffice

#### **B.** Trades:

5) Diversity of Trades (availability of trades over and above "Fitter and Electrician") is important to encourage ITIs to provide training in other relevant trades as per needs of the economy. In this way, ITIs can contribute significantly to the manpower requirement of key sectors of the economy such as electronics, manufacturing etc. which are in line with key national programmes of Govt. of India. Hence, more the no. of additional trades, higher is the score.

**Documentary proof** NCVT affiliation order for additional trades

6) Availability of high-end/advanced trades such as Machinist / Turner / Welder / MMV / MD / RAC / Tool and Die Making / Power Electronics (indicative list) signifies that training provided at ITIs is industry relevant and contributing to manpower requirement as per changing needs of the economy. It also shows ITI's progressiveness in carrying out skill development activities. Hence, more the no. of advanced trades, higher is the score. These trades must meet the re-affiliation norms.

**Documentary proof** 

NCVT affiliation/re-affiliation order for highend/advanced trades

7) Availability of high-end machinery and equipment categorized as optional as per NCVT **norms** signifies the progressiveness of ITIs and its endeavor to modernize its training infrastructure in line with skill sets required by industry. ITIs with more high-end machinery and equipment will score more. The indicative list of optional machinery and equipment is attached for reference in Annexure II.

Documentary proof

Physical inspection and photographs of high-end machinery and equipment

8) Re-affiliation of all trades as per latest NCVT norms is necessary to ensure that ITIs have duly followed the re-affiliation norms and procedures and the machinery and equipment has been updated for relevant trades. ITIs with completed re-affiliation will score highest. Here re-affiliation is applicable in case of a) mandatory re-affiliation after every 5 years, b) change in affiliation norms for existing trade, and c) addition of new trade

Documentary proof

Re-affiliation order, **Physical** inspection and photographs of updated/new machinery and equipment

# **C. Industry Connect:**

9) Number of MoUs signed with industry (at least a Small and Medium Enterprise (SME3)) for industrial visits of students: Number of industrial visits of trainees are necessary to ensure that trainees are up-to-date in industry requirements and latest industrial technologies and also familiar with industry settings and work environment. A first-hand exposure to industry will significantly boost the confidence level of trainees. This parameter shall assess the efforts undertaken by ITIs in getting MoUs signed with the industries in this regard. Under this, more no. of active MoUs will make an ITI eligible for higher score

**Documentary proof** Physical copy of MoUs signed in last 2 calendar years

10) Number of trainees who have been sent for "dual training" (%) also assess the efforts undertaken by ITIs in operationalizing the dual system of training. As per the DGT order dated 24<sup>th</sup> June 2016, dual training is defined as a system under which theory portion; basics about safety, tools & equipment; along with foundation practical will be conducted at ITI whereas for providing the industrial training relevant to practical/lab training portion of the curriculum, the trainee will be trained in the industry. More the no. of students under this system, higher is the score.

Documentary proof

Physical copy of MoUs, indicating number of trainees, signed with industry for dual training in last one calendar year

11) Functional IMC in case of Govt. ITI and a similar institutional mechanism in case of Pvt. ITI to ensure that the ITI has proper institutional mechanism to effectively govern the institute. Functional IMC means that meetings of IMC have been held on a regular basis as per the agenda defined at the beginning of the year or session. A similar institutional mechanism for a Pvt. ITI could be a society/board/trust which has adequate representation from industry or industry has a significant role to play in training operations through an appropriate forum. Further, the IMC or a similar institutional mechanism is instrumental in facilitating industry-institute engagement. ITIs with such mechanism will score highest.

Documentary proof

Minutes of meeting of latest IMC meeting in case of Govt. ITI and certificate of incorporation of institutional mechanism in case of Pvt. ITI

**12) Number of guest faculty from Industry** is important to ensure that trainees are up-to-date in industry requirements and latest industrial technologies. Further, the presence of guest faculty will enhance the confidence of trainees and create competitive environment amongst ITI instructors. Hence, more the involvement of guest faculty, higher is the score.

Documentary proof

Attendance record of guest faculty involved in last one calendar year

## D. Outcome:

**13) Apprenticeship engagement and Employment/Placements (%)** shows an ability of an ITI to provide apprenticeship and employment opportunities to its pass-out trainees. Employment/placement (%) is a very important indicator of quality of training being imparted at ITI. If the placement is low then it reflects poorly on various facets of its training programs. Here, placement % has been calculated by dividing the no. of trainees employed by no. of trainee pass-outs. For example, if 100 trainees pass-out from a batch and of which, 50 trainees get employment/or apprenticeship then placement % will be calculated as (50/100)\*100 = 50%. More the no. of pass-out trainees getting placed/employed or going into apprenticeships, higher is the score.

Documentary proof

Apprenticeships contracts and email from employer/employment letter of pass-out trainees of last academic session

<sup>&</sup>lt;sup>3</sup> Manufacturing sector: "Small enterprise" is one where investment in Plant & Machinery is more than twenty five lakh rupees but does not exceed five crore rupees and "medium enterprise" is one where investment in Plant & Machinery is more than five crore rupees but does not exceed ten crore rupees. Similarly, in case of Services Sector: "Small enterprise" is one where investment in Plant & Machinery is more than ten lakh rupees but does not exceed two crore rupees and "medium enterprise" is one where investment in Plant & Machinery is more than two crore rupees but does not exceed five core rupees.

**14) Dropout rate (%)** is another indicator which has direct impact on success of ITI. Drop-outs could happen due to several reasons; some are even out of control of ITI. However, a reduced drop-out rate enhances the image of ITI and signifies the quality of training. Here, the number of drop-outs has been calculated by subtracting no. of trainees who attend exams from no. of enrolments and dividing the result by no. of enrolments. For example, if no. of enrollments = 100; no. of trainees who attend exams = 70 then drop-out rate will be calculated as (100-70)/100 = 30%. Lower the drop-out rate, higher is the score

Documentary proof Through NCVT MIS Portal (of last academic session)

**15) Pass-out rate (%)** is an indicator which also showcases the quality of training. It has been calculated by dividing the no. of trainee pass-outs by no. of trainees who attend exam. For example, if no. of trainees pass-out are 80 and no. of trainees who attend exam are 100 then pass-out rate will calculated as (80/100)\*100 = 80%. Hence, higher the pass-out rate, higher is the score.

Documentary proof Through NCVT MIS Portal (of last academic session)

**16)** Number of companies that have recruited at least 5 pass-outs each in last 3 academic years: It shows that the quality of training imparted at ITI is of high standards which is why companies are regular in campus recruitment. Hence, more the no. of such companies, higher is the score.

Documentary proof

Email from employer/Employment letter of trainees employed by such companies in last 3 academic years

17) Name of 5 employers (together employing 25% of eligible trainees) who did campus recruitment in last academic year (%): This showcases the credibility of ITI and validates the quality of training being imparted at ITI. It also motivates the institute's staff to keep improving the placement efforts and make it more sustainable. ITIs with 5 employers together employing 25% or more of eligible trainees will score high.

**Documentary** proof

Email from employer/Employment letter of trainees employed by 5 employers in last academic year

#### E. Instructors

**18) Instructor vacancy against sanctioned posts (%):** The shortage of instructors at ITIs is a key challenge which has impact on effectiveness of training. The posts have been sanctioned keeping in mind the requirements hence, parameter will encourage ITIs to move towards filling up vacant posts in order to maintain the quality of training. Hence, higher the vacancy, lower is the score.

**Documentary proof** Through NCVT MIS Portal (as on date)

19) Availability of "full-time" ITI Principal is important to ensure that an effective leadership provided to the institute which can steer it through various challenges being faced by it. It also motivates other staff to give-in their best and work collectively towards the success of the institute. Hence, the ITI with a full time principal will score highest under this.

**Documentary proof**Record of monthly salary deposit through "cheque/online payment" (of last 3 months at least)

**20)**Craftsmen Instructor Training Scheme (CITS) certification of available instructors (in eligible trades as per NCVT) (%): As per NCVT guidelines, CITS training certificate is mandatory for ITI instructors in 34 eligible trades. Hence, this parameter shall check the certification level of instructors as per NCVT norms in eligible trades. More the instructors certified with CITS in eligible trades, higher is the score.

**Documentary proof**CITS certificate of trainers in eligible trades as on date

21) Number of ITI instructors with "industry experience" of at least 3 years (%) will help in assessing the relevant professional experience of the ITI instructors. Training in a particular trade is

more effective if the instructor has experience in the same industry to which that trade belongs to. Hence, more no. of instructors with relevant industry experience, higher is the score.

**Documentary proof** Email from instructor's employer/Experience certificate of instructors

#### F. Production Center:

**22)** Availability of production center generating revenues (excl. course fee) as per audit report: It has been emphasized many times that ITIs should explore diverse revenue streams other than course fees to enhance the long term sustainability of institutes. One way could be to establish a "production center" to produce and supply products as per industry demand. Similarly, a "service center" considering service related trades e.g. Automobile could also be set up to provide services and generate additional revenues. This parameter will encourage ITIs to explore this option and engage in "job-works" with industry. Hence, ITIs with a production center (generating additional revenues other than course fee) will score high. ITIs have to mention the revenues earned as per audit report.

**Documentary proof** Audit report of last financial year

### **G.** Capacity Utilization:

**23) Capacity Utilization (power): No. of electricity units consumed against norms prescribed by DGT:** The amount of power consumption validates the assumption that machinery and equipment has been used for training operations as per DGT norms. For example, if machines have to run for 2 hours daily during an academic year (180 days) and NCVT approved power load for all trades is 10Kw then, taking two units per trade total amount of electricity consumed should be equal to 10\*2\*2\*180 = 7200 Kwh. ITIs with more electricity consumption against required will score high.

Documentary proof Electricity bill of last calendar year

**24)** Capacity Utilization (% of seats) – (excluding super-numeri) filled. This shows accessibility of an ITI to potential trainees around ITI location and also reflects on the quality of training and training outcome. The capacity utilization has been calculated by dividing no. of admissions by no. of available seats. Hence, more the capacity utilization, higher is the score.

**Documentary proof** Through NCVT MIS Portal (of last academic session)

#### H. Key Compliances

**25) Aadhar number and other details of all instructors entered in MIS** is important to ensure that an online database of instructors for future reference and other administrative tasks (transfers, trainings etc.) has been created and shared with concerned stakeholders. ITIs complying with this requirement will score highest.

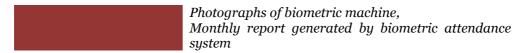
**Documentary proof** Through NCVT MIS Portal (as on date)

**26)Number of women students equal to or more than 30% of total student strength of ITI:** Increased representation of women students in overall student strength of ITI highlights the women friendly training environment, courses and facilities. It also showcases the effort of ITI management to admit more women students. Hence, if an ITI fulfills the condition of minimum 30% of total strength as women students, it will score highest.

**Documentary proof** Admission register of ITI

**27) Biometric attendance** mechanism for trainees will generate digital record of attendance of trainees which can be monitored and any fraudulent practices can be avoided. An ITI with working biometric attendance mechanism will score high against this parameter.

**Documentary proof** Physical inspection,



# I. Special Achievement

**28)**Awards and accolades at District / State / National Level given to an ITI will enhance the credibility and reputation of the institute and create pull-factor for trainees. This will also motivate the staff to work harder and sustain the performance. More the no. of awards or accolades, higher is the score.

**Documentary proof** Certificate/trophy against awards and accolades

**29) ISO Certification: 29990** granted to an ITI will validate the technical standards of operations achieved by ITI through its relentless approach to continuous improvement. Hence, an ISO certification will provide highest score to an ITI.

**Documentary proof** Physical copy of ISO certificate

**30)Patent:** Patents granted are an indicator of research and innovation activities taking place in an ITI. This could provide self-employment opportunities to ITI trainees provided there is an adequate arrangement for incubation and commercialization of the idea/product/service. Hence, more the no. of patents, higher is the score.

**Documentary proof** Physical copy of Patent certificate/s

#### J. Miscellaneous:

**31) Operational IT Lab with minimum 10 computers** is necessary to impart basic IT skills to every trainee in order to navigate the complexities of modern industrial operations and keep abreast of use of technology in industry. In today's world, it is difficult to progress ahead without knowledge and skills of basic IT and computers. Hence, in order to impart effective IT skills, an optimum ratio of computers with internet connectivity to trainees needs to be maintained. Hence, ITIs complying with the requirements as prescribed in this parameter, scores highest.

**Documentary proof** Physical inspection and photographs of computer lab

**32) Availability of library with NIMI books and reference books per trade** ensures that learning is continuous even though trainees are not in classroom and also provides flexibility to students in learning. Further, availability of books will ensure that trainees are aware of what is being taught in the class-room; they can check if the curriculum is being followed by instructors. Hence, more the no. of books, higher is the score.

**Documentary proof** Physical inspection and photographs of library showcasing books

**33) Functional website of ITI** having at least key features such as: about us, schemes, admission criteria, trades affiliated to NCVT/SCVT, infrastructure, industry institute linkage, placement, application format for courses, right to information, certification, staff, sports, other facilities, feedback & suggestions, rating of the institute. This ensures that ITI has an online presence to disseminate information and communicate with the outside world. ITI with a functional website with at least above key features will score highest.

**Documentary proof** Link to the ITI website for verification

**34)**No. of scholarships available with an ITI encourages talented trainees to take admission who are otherwise not willing to enroll due to inability to pay. Similarly, it is a tool to award meritorious trainees and sets a benchmark for others to emulate. Hence, more the no. of scholarships, higher is the score.

**Documentary proof** Scholarship letter/s given to trainees in last academic session

**35)** Convocation ceremony of ITI pass-outs conducted for pass-out trainees gives the feeling of ownership/belongingness towards the institute they belong to. So, it is important to conduct such events so as to bring the all ITI students together and make them feel nostalgic about their alma-mater. Institute following this practice shall score highest on this parameter.

**Documentary proof** Date and Photographs of last convocation ceremony

**36) Grievance redressal mechanism in ITI** must be an integral part of ITI administration. It gives student a confidence and faith on institute management that he/she shall get his problems/issues (if any) solved/resolved at any point of time during and even after the course. Institutes having such mechanism shall score maximum.

Documentary proof Grievance redressal register (as on date)

**37) ITI Logo:** ITIs have been serving the skilling need of Indian economy for the last 6 decades. Presence of ITI logo provides a unique identity to ITIs in overall skill ecosystem of India. An ITI with visible ITI logo will score highest.

**Documentary proof** Photograph of visible ITI Logo on institute building/entrance gate

**38)Skill India Logo:** Presence of Skill India Logo connects the vision and mission of ITI operations with overall skill development plan/agenda of India. It provides a common thread to which an ITI is tied up in relation to all its core activities. An ITI with visible Skill India logo will score highest.

**Documentary proof**Photograph of visible Skill India Logo on institute building/entrance gate

**39)** Uniform for ITI trainees provides a unique identity and similarity among trainees. Trainees wearing the same uniform sends a message of an institutional unity and they feel proud because of feeling that he/she belongs to an ITI fraternity. An ITI with Uniform for trainees will score highest.

**Documentary proof** Photographs showing all enrolled trainees wearing uniform

**40)Separate washrooms for girls** is a mandatory requirement for any institute/organization across the globe. ITIs with separate washrooms for girls shall score highest.

**Documentary proof**Photographs showing separate washroom for girl students

**41) Availability of logbook in respect of machine repair and maintenance:** Maintaining logbooks to record annual machine repair and maintenance should be a regular practice across the ITIs. It shows the uniformity and transparency in ITI administration. ITIs with 100% complete logbook in respect of every machine repair and maintenance shall score highest.

**Documentary proof** Physical copy of logbooks (as on date)

- 42) ITIs adopting innovative measures such as:
  - Rain water harvesting the harvesting of rainwater simply involves the collection of water from surfaces on which rain falls, and subsequently storing this water for later use. Normally water is collected from the roofs of buildings and stored in rainwater tanks.
  - **Solar power utilization** installation of solar energy plant (thermal or photo voltaic) for generation and use of generated electricity for the operations of institute.
  - Scrap utilization means use of a single piece of raw material (wherever possible) such as an "iron ingot" for more than one practical training task in order to ensure less generation of scrap material
  - **Waste management** it includes all the activities and actions required to manage waste from its inception to its final disposal. This includes amongst other things, collection, transport, treatment and disposal of waste together with monitoring.

An ITI adopting maximum innovative measures will score highest against this parameter

**Documentary proof** Any valid proof along with photographs

**43) Digital transactions:** the benefits of digital collection of course fees and payment for expenses (incl. salary of instructors) are ease of conducting transactions, proper tracking of spends, maintaining budget discipline, low risk from theft and smooth reconciliation in account books. Hence, an ITI with more transactions (both collection and payment) through any digital mode (incl. but not limited to bank cheque, net banking, debit/credit card, mobile banking etc.) will score high against this parameter.

**Documentary proof**Audited balance sheet and bank statement of last financial year

# ANNEXURE I – GRADING PARAMETERS AND SCORING

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website <sup>4</sup>	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
		1	Dedicated plot in the name of ITI	o Star: No 5 Star: Yes	Yes/No	Yes (title deed)	2	
		2	ITI boundary wall with main entrance gate	o Star: No 5 Star: Yes	Yes/No	Yes (photograph/ video)	2	
1	CIVIL WORK	3	Availability of Building Completion Certificate by the competent authority	o Star: No such certificates 3 Star: Certificate of approval of Building Plan by competent authority 5 Star: Building Completion Certificate by the competent authority	Name of the certificate	Yes (certificate)	2	
		4	Owned building	o Star: No 5 Star: Yes	Yes/No	Yes (lease agreement, title deed, property tax receipt, electricity bill)	2	
		5	Diversity of Trades - availability of trades over and above "Fitter and Electrician"	o Star: No additional trade 1 Star: 1 additional trade 2 Star: 2 additional trades 3 Star: 3 additional trades 4 Star: 4 additional trades 5 Star: 5 and above additional trades	Name of trades	Yes (NCVT affiliation order)	4	
2	TRADES	6	Availability of high- end/advanced trades such as Machinist / Turner / Welder / MMV / MD / RAC / Tool & Die Making / Power Electronics (as per re-affiliation norms)	o Star: No high-end trade 1 Star: 1 high-end trades 2 Star: 2 high-end trades 3 Star: 3 high-end trades 4 Star: 4 high-end trades 5 Star: 5 and above high-end trades	Name of trades	Yes (NCVT affiliation/ re-affiliation order)	2	
	0	7	Availability of high-end machinery and equipment categorized as optional as	o Star: No high-end machinery and equipment 1 Star: 1 high-end machinery	List of such machinery and	Yes (photographs of such machines)	2	

<sup>&</sup>lt;sup>4</sup> Please refer Section 7 of this document for detailed requirement of documents

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website4	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
			per NCVT norms – list of optional machinery and equipment is attached for reference	and equipment 2 Star: 2 high-end machinery and equipment 3 Star: 3 high-end machinery and equipment 4 Star: 4 high-end machinery and equipment 5 Star: 5 and above high-end machinery and equipment	equipment			
		8	Re-affiliation of trades as per latest NCVT norms	o Star: No 5 Star: Yes	Yes/No	Yes (re-affiliation order and photographs of updated/new machines)	3	
		9	Number of MoUs signed with industry (at least one SME) for industrial visits of students	o Star: No MoU signed 1 Star: 1 MoU signed 2 Star: 2 MoUs signed 3 Star: 3 MoUs signed 4 Star: 4 MoUs signed 5 Star: More than 4 MoUs signed	Name of companies with whom MoUs has been signed	Yes (copy of MoUs)	2	
3	INDUSTRY CONNECT	10	Number of trainees who have been sent for "dual training" (%)	o Star: 0% 1 Star: less than 20% 2 Star: 20% to less than 30% 3 Star: 30% to less than 40% 4 Star: 40% to less than 50% 5 Star: 50% and above	Actual value		2	
	060	11	Functional IMC in case of Govt. ITI and a similar institutional mechanism in case of Pvt. ITI Number of guest faculty	o Star: No 5 Star: Yes o Star: No guest lecture	Yes/No Actual value	Yes (minutes of meeting (for Govt. ITI) and certification of incorporation (for Pvt. ITI)) Yes (attendance	3	

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website <sup>4</sup>	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
			from Industry	1 Star: 1 per month per group of trades 2 Star: 2 per month per group of trades 3 Star: 3 per month per group of trades 4 Star: 4 per month per group of trades 5 Star: 5 and above per month per group of trades		record)		
		13	Employment/placement and apprenticeship engagement (%)	O Star: 0% 1 Star: less than 50% 2 Star: 50% to less than 70% 3 Star: 70% to less than 80% 4 Star: 80% to less than 90% 5 Star: 90% and above	Actual value	Yes (apprenticeship contracts/email/ employment letters from employers)	5	
4	OUTCOME	14	Dropout rate (%)	1 Star: more than 20% 2 Star: 15% to less than 20% 3 Star: 10% to less than 15% 4 Star: 5% to less than 10% 5 Star: less than 5%	Actual value	No	3	
	S	15	Pass-out rate (%)	o Star: 0% 1 Star: less than 60% 2 Star: 60% to less than 70% 3 Star: 70% to less than 80% 4 Star: 80% to less than 90% 5 Star: 90% and above	Actual value	No	4	
	060	16	Number of companies that have recruited at least 5 pass-outs each in last 3 academic years	o Star: No company 1 Star: 1 company 2 Star: 2 companies 3 Star: 3 companies 4 Star: 4 companies 5 Star: 5 and above companies	Actual value	Yes (Email/employment letter from employers)	4	

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website <sup>4</sup>	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
		17	Name of 5 employers (together employing 25% of eligible trainees) who did campus recruitment in last academic year (%)	o Star: 0% employed 1 Star: less than 10% employed 2 Star: 10% to less than 15% employed 3 Star: 15% to less than 20% employed 4 Star: 20% to less than 25% employed 5 Star: 25% and above employed	Name of employers with number of trainees employed	Yes (Email/employment letter from employers)	4	
		18	Instructor vacancy against sanctioned posts (%)	1 Star: 20% and above 2 Star: 15% to less than 20% 3 Star: 10% to less than 15% 4 Star: 5% to less than 10% 5 Star: less than 5%	Actual value	No	2	
		19	Availability of "full-time" ITI Principal	o Star: No 5 Star: Yes	Yes/No	Yes (Principal's online salary payment record)	2	
5	INSTRUCTORS	20	Craftsmen Instructor Training Scheme (CITS) certification of available instructors (in eligible trades as per NCVT) (%)	o Star: 0% instructors are certified  1 Star: less than 20% instructors are certified  2 Star: 20% to less than 40% instructors are certified  3 Star: 40% to less than 60% instructors are certified  4 Star: 60% to less than 80% instructors are certified  5 Star: 80% and above instructors are certified	Actual value	Yes (CITS certificate)	2	
Q	601	21	Number of ITI instructors with "industry experience" of at least 3 years (%)	0 Star: 0% 1 Star: less than 40% 2 Star: 40% to less than 50% 3 Star: 50% to less than 60% 4 Star: 60% to less than 70%	Actual value	Yes (email/experience certificate from instructor's employers)	2	

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website <sup>4</sup>	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
6	PRODUCTION CENTER	22	Availability of production center generating revenues (excl. course fee) as per audit report	o Star: 70% and above o Star: no production center 1 Star: production center with less than INR 2 lakhs revenues per annum 2 Star: production center with INR 2 lakhs to less than 3 lakhs revenues per annum 3 Star: production center with INR 3 lakhs to less than 4 lakhs revenues per annum 4 Star: production center with INR 4 lakhs to less than 5 lakhs revenues per annum 5 Star: production center with INR 5 lakhs and above revenues per annum	Actual value	Yes (audit report)	2	
7	CAPACITY UTILISATION	23	Capacity utilization (power): No. of electricity units consumed against norms prescribed by DGT	o Star: 0% power capacity utilization 1 Star: less than 40 % 2 Star: 40% to less than 50% 3 Star: 50% to less than 60% 4 Star: 60% to less than 70% 5 Star: 70% and above	Actual value	Yes (electricity bill)	4	

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website <sup>4</sup>	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
		24	Capacity Utilization (% of seats) - excluding super-numeri) filled	o Star: 0% seat capacity utilization 1 Star: less than 50 % 2 Star: 50% to less than 70% 3 Star: 70% to less than 90% 4 Star: 90% to less than 100% 5 Star: 100%	Actual value	No	4	
		25	Aadhar number and other details of Instructors entered in NCVT MIS Portal	o Star: No 5 Star: Yes	Yes/No	No	3	
8	KEY COMPLIANCES	26	Number of women students equal to or more than 30% of total student strength of ITI	o Star: No 5 Star: Yes	Yes/No	Yes (admission register)	2	
		27	Biometric Attendance	o Star: No 5 Star: Yes	Yes/No	Yes (photograph of biometric machine, monthly report)	3	
9	SPECIAL ACHIEVEMENTS	28	Awards and accolades at District / State / National Level	o Star: no award/accolade at district / state / national Level 1 Star: 1 award or accolade at district level 2 Star: 1 award or accolade at state level 3 Star: 1 award or accolade at national level 4 Star: 2 awards or accolades at state level 5 Star: 2 or more awards or accolades at national level	List of awards and accolades	Yes (certificates, if any))	2	

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website <sup>4</sup>	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
		29	ISO Certification: 29990	o Star: No 5 Star: Yes	Date of certification	Yes (certificate)	1	
		30	Patent	o Star: no patents 1 Star: 1 patent 2 Star: 2 patents 3 Star: 3 patents 4 Star: 4 patents 5 Star: 5 and above patents	List of patents	Yes (certificate)	1	
10	MISCELLANEOUS	31	Operational IT Lab with Min. 10 computers	o Star: No IT lab 1 Star: 10-14 computers in IT lab 2 Star: 15-19 computers in IT lab 3 Star: 20-24 computers in IT lab 4 Star: 25-29 computers in IT lab 5 Star: 30 and above computers in IT lab	Actual value	Yes (photograph of computer lab)	2	
	30,57	32	Availability of library with NIMI books and reference books per trade	o Star: No library or library with no books 1 Star: library with less than 20 books per trade 2 Star: library with 20 to less than 30 books per trade 3 Star: library with 30 to less than 40 books per trade 4 Star: library with 40 to less than 50 books per trade 5 Star: library with 50 books and above per trade	Actual value	Yes (photograph of library)	2	
Q	Q"	33	Functional website of ITI having at least key features such as: <i>about us</i> ,	o Star: No 5 Star: Yes	Yes/No	Yes (link to the website)	2	

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website <sup>4</sup>	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
			schemes, admission criteria, trades affiliated to NCVT/SCVT, infrastructure, industry institute linkage, placement, application format for courses, right to information, certification, staff, sports, other facilities, feedback & suggestions, rating of the					
		34	No. of scholarships available with an ITI  Convocation Ceremony of	o Star: No scholarship 1 Star: 1 scholarship 2 Star: 2 scholarships 3 Star: 3 scholarships 4 Star: 4 scholarships 5 Star: 5 and above scholarships o Star: No	Actual value	Yes (scholarship letters)	2	
		35 36	ITI pass outs Grievance Redressal Mechanism in ITI available	5 Star: Yes 0 Star: No 5 Star: Yes	Yes/No Yes/No	Yes (photographs) Yes (record register)	2	
		37	ITI Logo	o Star: No 5 Star: Yes	Yes/No	Yes (photograph)	1	
		38	Skill India Logo	o Star: No 5 Star: Yes	Yes/No	Yes (photograph)	1	
	6	39	Uniform for all ITI trainees	o Star: No 5 Star: Yes	Yes/No	Yes (photograph)	1	
	<b>\</b>	40	Availability of separate washroom for girls	o Star: No 5 Star: Yes	Yes/No	Yes (photograph)	2	
	(O)	41	Availability of logbook in respect of machine repair and maintenance	o Star: No 5 Star: Yes	Yes/No	Yes (logbooks)	1	
0		42	Innovative measures being adopted by ITI viz. rain	o Star: No innovation 1 Star: 1 innovation	Actual value	Yes (any valid proof and photographs)	2	

#	Category	#	Parameters	Metrics for Scoring	Value/text to be filled in by ITI (Mandatory)	Document uploaded on ITI website <sup>4</sup>	Weightage	Final Rating (system calculated based on ratings by different users and weights assigned)
			water harvesting, solar power utilization, utilization of scrap, and waste management	2 Star: 2 innovations 4 Star: 3 innovations 5 Star: 4 innovations 0 Star: 0% digital transaction (%				
		43	Digital transactions	of total of collection and expenses in a year)  1 Star: 1% to 10% digital transaction (% of total of collection and expenses in a year)  2 Star: 11% to 30% digital transaction (% of total of collection and expenses in a year)  3 Star: 31% to 50% digital transaction (% of total of collection and expenses in a year)  4 Star: 51% to 70% digital transaction (% of total of collection and expenses in a year)  5 Star: more than 70% digital transaction (% of total of collection and expenses in a year)  5 Star: more than 70% digital transaction (% of total of collection and expenses in a year)	Actual value	Yes (audited balance sheet)	1	

# ANNEXURE II – INDICATIVE LIST OF OPTIONAL EQUIPMENT (ref grading parameter no. 7)

1.	TOOL & DIE MAKER (DIES & MOULDS)
	Vertical machining center (VMC)
	Co-ordinate measuring machine
	Profile projector
2.	TOOL & DIE MAKER (PRESS TOOLS, JIG & FIXTURES)
	Spark Erosion EDM
	CNC vertical milling machine
	CNC lathe
	Co-ordinate measuring machine
	Profile projector
3.	Welder
	Welding Simulators for SMAW/GTAW/GMAW
4.	WELDER (Structural)
	Welding Simulators for SMAW/GTAW/GMAW
5.	WELDER (PIPE)
	Universal Testing machine
	Welding Simulators for SMAW/GTAW/GMAW 1
6.	WELDER (Welding & Inspection)
	Welding Simulators for SMAW/GTAW/GMAW
	Universal Testing machine
	Universal Testing machine

# 7. CNC Lab infrastructure for Turner and Machinist trades

Applicable for number of units as indicated - vide DGT letter 19/03) (2)/2015/CD dated 7 Jan 2016 (given below):

S.N.	Name of Item	Category	Quantity			
			16 (8+8) units & Above	Below 16(8+8) units	Unit	Remark
1	CNC turn Centre with minimum specification as: Chuck size:135mm Between center distance: 250mm Travel In X: 100mm Travel in L: 200 mm No. of tool stations: 8 station turret Spindle power: 3.7kW (continuous rating) preferably with popular control system like Fanuc/Siemensalong with	Machine	1	1	Number	Refer Instructions
2	Tool holders to suit the CNC machine for turning, threading, grooving (external & internal), and parting off operation, boring, under-cutting with 20 inserts of each operation.	Tool	1 each	1 each	Number	
3	CNC Vertical Machining Centre with minimum specification as: Table size:500x250mm  Travel X-axis x Y-axis x Z-axis: 300 x 250 x 250mm  Auto Tool Changer: 8 nos.  Spindle power: 3.7kW (continuous rating) with popular controls system like Fanuc/ Siemens along with motorized	Machine	1	1	Number	Refer Instructions
4	CNC milling tools assorted such as adapter to suit above machine to accommodate face cutter, shell end mill cutter, taper shank and parallel <i>shank</i> drills/cutters.	Tool	1 set along with cutters & inserts	1 set along with cutters & inserts	Set	

S.N.	Name of Item	Category	Quantity					
			16 (8+8) units & Above	Below 16(8+8) units	Unit Remark			
5	CNC hole machining tools assorted such as adapter to suit above machine to accommodate different boring bars.	Tool	1 set along with cutters	1 set along with cutters	Set			
6	Multimedia based simulator for CNC technology and interactive CNC part programming software forturning & milling with virtual machine operation and simulation using popular operation control system such as Fanuc, Siemens, etc. (Webbased orlicensed based) (10trainees + 1	Software	16	8	Users			
7	Desktop Computers compatible to FUR simulation software with LAN facility	Machine	16	8	Number			
		tructions						
a)	For units less than 8(4+4), then ITI can enter Into MoU with Facilitator who will provide the Training to Trainees admitted and undergoing training in above Trades.  The Facilitator should be Government ITI, Engineering/ Polytechnic College, Recognized Training Institute, Industry, Private ITI (Facilitators are arranged in descending preference order). The Facilitator should have all the above training infrastructure, (including CNC Machines and Multimedia software for CNC). If any of the facility is not available with facilitator then the same should be provided in the ITI. The facilities of CNC should be made available to ITI trainees at the time of examination. This clause should be part of MoU to be signed. The training provider must be within the range of 15 Km or within city whichever is less.							