

## PROSPECTUS FOR DIPLOMA COURSES 2013-14

1. Diploma in Tool, Die & Mould Making (DTDM)
2. Diploma in Electronics and Communication Engineering (DECE)
3. Diploma in Production Engineering (DPE)
4. Diploma in Automation & Robotics Engineering (DARE)



## 1. ABOUT CITD

The Central Institute of Tool Design is an ISO 9001:2008, ISO 29990:2010, ISO 140001:2004 certified Premier Institute in Asia providing specialized training courses in tool Design and Manufacturing, CAD /CAM and LCA techniques. The Institute was established in the year 1968 by the Government of India with the assistance of UNDP and ILO as an executing agency. CITD was converted into a Government of India Society in 1970 under the administrative control of the Ministry of SSI. The Development Commissioner, Ministry of MSME is the ex-officio Chairman of the Governing Council. The Principal Director is the Chief Executive of the Institute.

### **AIMS & OBJECTIVES:**

- a) Training of the technical personnel in design and manufacturing of tools, Jigs & fixture, dies & moulds, press tools, CAD/CAM, CNC and LCA techniques.
- b) Provision of advisory, consultancy and common service facilities to small scale units including assistance in the design and development of tools for various processes, calibration of Mechanical Measuring Instruments.
- c) Recommending measures to standardize tools and tooling elements, components of jigs & Fixtures, Dies & Moulds, Press Tools and other tools.
- d) Production on Limited basis of tools, Jigs & fixtures, press tools, dies & moulds, gauges and special cutting tools subject to the condition that job works undertaken by the Institute should suit to the needs of the training.

The Institute has a well equipped Tool Room with sophisticated CNC machines like CNC EDM (Charmilles Roboform 54); CNC Wire Cut EDM (AGIE Cut Classic – III & Electronica), 4-Axis & 5-Axis High Speed Machining Centers, Kellenberger CNC Cylindrical Grinding machine and 3D Coordinate Measuring Machine with Scanning & Digitization facilities. The institute is equipped with latest versions of EMCO (Australia make) Table Top CNC Turning and Milling machines with closed loop system to impart training in CNC Programming.

The Calibration laboratory is set up in CITD with Universal Horizontal Microscope ULM OPAL600 Carl Zeiss Technology, Germany and Slip Guage Measuring Unit 826 with Millitron 1240, Mahr, Germany to Calibrate Limit Guages, Micrometers, Dial Indicators, etc., The CAD/CAM Centre is equipped with latest hardware like Compaq, HP, DELL & IBM Workstations, QUAD CORE Systems & software like AutoCAD-2009, I-DEAS, Pro-E wild fire/CREO CATIA V5V6, ANSYS, Hypermesh, Unigraphics NX, Master CAM , Solid Works-2008, Nastran, DELCAM,SOLID CAST, Q Form etc..

The Institute is also equipped with an Automation Centre with Programmable Logic Control Systems; Hydraulic, Pneumatic, Electronic Controls with Simulators, Working models of Automation and Robotics systems etc

The Institute has a special Library with a collection of technical books in Tool Engineering field and subscribe to various International journals like CIRP Annals, American Machinist, Journal of Engineering Materials & Technology (ASME), Precision Engineering (JAPAN) and Precision Tool Maker, etc. The documentation center collects and organizes information and data useful for the technological advancement in Tool Engineering. For the dissemination of information,

the center publishes a computerized current awareness abstracting bulletin and provides technical enquiry services.

The Institute also extends its services to the developing countries by imparting knowledge and necessary skills to their personnel in the field of Tool Design, CAD/CAM and Low Cost Automation Techniques.

## **1.2 Various Courses Conducted By CITD :**

1. M.E (Mechanical – CAD/CAM) of two years (4 Semesters) duration, in collaboration with Osmania University.
2. M.E (Tool Design) of two years (4 Semesters) duration , in collaboration with Osmania University.
3. M.Tech (Mechatronics) of two years (4 Semesters) duration in Collaboration with JNTUH.
4. Post Graduate Course in Tool, Die Mould Design (PGTD) of one and a half years duration. (3 Semesters). Recognized by the Govt. of India as an advanced Post Graduate qualification for recruitment to superior posts.
5. Post Graduate diploma in CAD/CAM and Tool Engineering (PGDCTE) –
6. Post Graduate Diploma in Mechatronics (PGDM) –
7. Post Graduate in VLSI & Embedded Systems(PGVES)-3 Semesters.
8. Post Diploma in Tool Design (PDTD) – One year duration by AICTE, New Delhi. (2 Semesters).
9. Diploma in Tool, Die & Mould Making – (DTDM) for 10<sup>th</sup> class passed students – Four years duration, (8 Semesters) approved by AICTE, New Delhi, and recognized by the State Board of Technical Education and Training, Govt. of A.P.
10. Diploma in Electronics and Communications Engineering – (DECE) ) for 10<sup>th</sup> class passed students – Four years duration, (8 Semesters) approved by AICTE, New Delhi, and recognized by the State Board of Technical Education and Training, Govt. of A.P.
11. Diploma in Production Engineering – (DPE) ) for 10<sup>th</sup> class passed students – Three years duration, (6 Semesters) approved by AICTE, New Delhi, and recognized by the State Board of Technical Education and Training, Govt. of A.P.
12. Diploma in Automation & Robotics Engineering – (DARE) ) for 10<sup>th</sup> class passed students – Three years duration, (6 Semesters) approved by AICTE, New Delhi, and recognized by the State Board of Technical Education and Training, Govt. of A.P.

## **SHORT TERM TRAINING PROGRAMMES**

These courses are tailor made to cater to the needs of the specific fields in tool design, manufacture, low cost automation and CAD/CAM for working engineers, supervisors, technicians etc., Separate brochures are available and can be had on request.

## **SPECIALISED TRAINING PROGRAMMES**

These courses are conducted to update knowledge of technical personnel working in the industries in the latest technology in Tool Engineering by conducting seminars, workshops etc.,. The Institute conducts in house training programs either at the Industries or at CITD in the field of Tool Design Automation & CAD/CAM.

## 2. DIPLOMA COURSES

The Diploma courses conducted by the Institute are **Approved by AICTE, New Delhi.**

### **Course No.1 – Diploma in Tool, Die & Mould Making (DTDM)**

Duration	4 years (8 Semesters)
Qualification	Matriculation (10 <sup>th</sup> ) or equivalent examination from recognized university / Board with minimum 50% marks (40% incase of candidates belonging to SC / ST in aggregate)
Age	The candidate should have attained the age of 15 years but should not be more than 19 years (not born before 12.05.1994)(Not born after 12.05.1998) Relaxation upto 5 years for SC/ST Candidates.
No. of seats	60 Seats
Mode of Selection	Through Entrance Examination
Course Fee	Rs 15,000 /- per Semester

### **Course No.2 – Diploma in Electronics & communications Engineering (DECE)**

Duration	3 Years (6 Semesters)
Qualification	Matriculation (10 <sup>th</sup> ) or equivalent examination from recognized university / Board
Age	The candidate should have attained the age of 15 years but should not be more than 19 years (not born before 12.05.1994) (Not born after 12.05.1998) Relaxation upto 5 years for SC/ST Candidates.
No. of seats	60 Seats
Mode of Selection	Through Entrance Examination
Course Fee	Rs 15,000 /- per semester

### **Course No.3 – Diploma in Production Engineering (DPE)**

Duration	3 Years (6 Semesters)
Qualification	Matriculation (10 <sup>th</sup> ) or equivalent examination from recognized university / Board
Age	The candidate should have attained the age of 15 years but should not be more than 19 years (not born before 12.05.1994) (Not born after 12.05.1998) Relaxation upto 5 years for SC/ST Candidates.
No. of seats	60 Seats
Mode of Selection	Through Entrance Examination
Course Fee	Rs 15,000 /- per semester

### **Course No.4 – Diploma in Automation & Robotics Engineering (DARE)**

Duration	3 Years (6 Semesters)
Qualification	Matriculation (10 <sup>th</sup> ) or equivalent examination from recognized university / Board
Age	The candidate should have attained the age of 15 years but should not be more than 19 years (not born before 12.05.1994) (Not born after 12.05.1998) Relaxation upto 5 years for SC/ST Candidates.
No. of seats	60 Seats
Mode of Selection	Through Entrance Examination
Course Fee	Rs 15,000 /- per semester

**2.1 Use of Unfair Means**

Use of unfair means by candidate at the entrance examination whether detected at the time of examination, evaluation or at any stage will lead to cancellation of his/her examination and debar him/her from appearing in future entrance examinations.

**3. All Diploma Courses**

1. Medium of instruction – English
2. Tentative Date for Commencement of course: 01 August 2013
3. Working hours 9:00 A.M. to 5:00 P.M. with Sunday as weekly holiday. (Weekly holidays & working hours are liable to change.)
4. **Methodology of imparting training**
  - a) Lectures supported by audio-visual aids
  - b) Film shows in technical subjects
  - c) Tool Design / Manufacturing exercises.
  - d) Technical Literature / handouts on related subjects
  - e) Working on computers and CNC machines.
  - f) Expert guest Lectures
  - g) Factory visits
  - h) Personality Development Lectures.

**4.0 COURSE CONTENTS**

**4.1 DTDM – Subjects (8 Semesters)**

Communication Skills Applied Mathematics Applied Physics Applied Chemistry Applied Mechanics Engineering Drawing Workshop Technology Engineering Metrology Workshop Practice Strength of Materials Computer Applications Design of Jigs & Fixtures, Gauges Design of Press tools	Plastic Moulds CNC Technology Thermal Engg. Ren. Energy Sociology Hydraulics & Pneumatics Electrical / Electronics Engg Design of Die Casting Dies Design of Forging Dies Heat Treatment Entrepreneurship Development Production Planning & Costing Industrial Management
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**4.2 DECE – Subjects (6 Semesters)**

Communication Skills Applied Mathematics Applied Physics Applied Chemistry Engineering Drawing Electronic Circuits Digital Electronics Circuit Theory Microprocessors	Electronic Measuring Instruments Audio & Video Systems Industrial Management Entrepreneurship Development Micro Controllers Advanced Communication Systems Industrial Electronics Data Communications & Computer Networks Computer Hardware
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#### 4.3 DPE – Subjects ( 6 Semesters)

Communication Skills Applied Mathematics Applied Physics Applied Chemistry Engineering Drawing Applied Mechanics Workshop Technology Engineering Metrology Workshop Practice Strength of Materials Fluid Mechanics	Production Technology Machine Drawing Thermal Engineering Electrical Technology & Basic Electronics CAD/CAM Power Plant Engineering Tool Engineering Industrial Management Entrepreneurship Development Theory of Machining
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#### 4.4 DARE – Subjects (6 Semesters)

Communication Skills Applied Mathematics Applied Physics Applied Chemistry Engineering Drawing Electronic Circuits Pneumatics Digital Electronics Mechanisation, Analysis & Synthesis of Linkages Hydraulics	Microprocessors Electronic Measurements & Sensor Technology Robotic Engineering Industrial Management Entrepreneurship Development Micro Controllers PLC & Scada Industrial Electronics CAD/CAM Dynamics of Machines
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#### 5.0 Distribution of marks in each semester for final grading

a. The following distribution is made for calculating the total marks at the end of the semester.

	Theory	Practical
<b>For DTDM</b>		
<b>Sessional</b>	<b>20%</b>	<b>40%</b>
<b>External</b>	<b>80%</b>	<b>60%</b>
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>
<b>For DECE,DPE &amp; DARE</b>		
<b>Sessional</b>	<b>40%</b>	<b>40%</b>
<b>External</b>	<b>60%</b>	<b>60%</b>
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

### 5.1 Standard of Passing and Award of class

The final grading for the courses shall be awarded on the basis of the total aggregate marks obtained in all semesters as given below.

<b>DTDM</b>	<b>DECE,DPE &amp; DARE</b>
75% - First Division with Distinction	70% - First Division with Distinction
60% - First Division	60% - First Division
50% - Second Division	50% - Second Division
50% - Minimum marks for Pass	35% - Minimum marks for Pass in Theory subjects.
	50% - Minimum marks for Pass in Practicals.

### 6.0 ADMISSION TO ALL DIPLOMA COURSES

Academic year commences during August every year. Candidates of all categories selected through entrance test are admitted to the courses on the basis of merit in the written examination conducted by CITD at Hyderabad on payments of course fee and caution deposit.

First semester fee is payable on the counseling day and the fee once paid will not be refunded. The trainees should also deposit caution money of Rs. 1,000/- which will be refunded on successful completion of the course and not before under any circumstance. Students should also pay Registration fee of Rs.500/- at the time of admission which is non refundable.

### 6.1 APPLICATIONS

- A) Application form and prospectus can be obtained from Training Department, MSME-Tool Room /Central Institute of Tool Design, Balanagar, Hyderabad – 500 037, on any working day between 9:30 AM and 5:00 PM.(Weekly holiday on Sunday) by paying application cost prescribed by cash or a crossed demand draft **drawn in favor of Principal Director , CITD, Hyderabad**, on any Nationalized Bank, preferably on State Bank of Hyderabad, Balanagar Branch, Hyderabad – 37. **Last date for receipt of filled-in applications is 25-05-2013.**
- B) Application form can also be downloaded from our website [www.citdindia.org](http://www.citdindia.org) and the filled in application forms can be sent to the Director (Trg), CITD, Hyderabad, along with prescribed application cost by way of Demand Draft **drawn in favor of Principal Director, CITD, Hyderabad.**

### SYLLABUS FOR ENTRANCE EXAMINATION

#### 7.1 For DPE,DECE,DTDM & DARE:

- 1) The syllabus for the exam will be as follows:
  - a) Mathematics
  - b) Science
  - c) English
  - d) Aptitude and General Knowledge

## 8. MODE OF SELECTION FOR ALL CATEGORIES

**Selection of Candidates:** Selection is purely based on rank obtained in the Entrance Test which is compulsory for all categories of candidates for all Diploma courses.

### 8.1 Reservation

- A. Reservation exist as per Govt. of India Rules.
- B. Age Relaxation for SC/ST/BC/Person with disabilities (PWD) category candidates exist as per Govt. of India Rules.
- C. In case of SC/ST candidates, they are required to pay the full semester fee and other fee/deposits or produce a specific sanction letter in the name of the candidate sectioning the course fee / scholarship from the competent authority viz., District Social Welfare Officer. If, the candidate fails to pay fee or produce a letter for course fee, etc., he will forfeit the seat and the same will be offered to the next SC/ST candidate in the order of merit.
- D. The merit List of the candidates of each course will be displayed on the notice board at the Institute and the same will be put on Website [www.citdindia.org](http://www.citdindia.org). As per the list all interested candidates are required to be present on counseling day as per the counseling dates mentioned here with along with all the original certificates & prescribed fees etc.

### 8.2 Counseling for Admissions:

Candidates who are qualified in the Entrance Exam as declared in the merit list on our website: [www.citdindia.org](http://www.citdindia.org) have to be present themselves on the dates mentioned below for counseling with all the original certificates and prescribed fee in cash/DD to be considered for admission at 10:00 a.m. at CITD, Balanagar, Hyderabad, on the dates mentioned below:

**8.3** Once the fee is paid by the candidate and selected candidates report for training, the admissions are treated as closed. Fee once paid will not be refunded.

**8.4** Rules made by the Institute regarding selection and closure of admissions shall be final.

## 9.0 DOCUMENTS TO BE HANDED OVER AT THE TIME OF JOINING

**9.1** Original certificates of qualifying examination i.e., SSC / Metric , Transfer Certificates, Date of Birth Certificate, Bonafide Certificate, Integrated caste Certificate, Latest Income Certificate, Xerox copy of ration card etc applicable.

**These original certificates once submitted will not be given back to the trainees under any circumstances till they complete the scheduled training period at this Institute. Therefore candidates are advised to take sufficient number of Xerox copies to keep with them before submitting the originals to CITD at the time of counseling.**

**9.2** Certificate of physical fitness from any Assistant Civil Surgeon. The Institute reserves right to send the candidate for further Medical examination, if necessary.



- 9.3 The trainee should give an undertaking for good conduct and behavior and to abide by the rules & regulation as prescribed by the Institute.

**10. GENERAL TERMS AND CONDITIONS TO BE FOLLOWED DURING TRAINING:**

- a) **In the case of all Diploma courses the course fee for next semester should be paid before beginning of the semester i.e., by 15<sup>th</sup> December and 15<sup>th</sup> June of every year. A late fee of Rs.1000/- per week subject to the maximum of two weeks will be levied if the semester fee is not paid in time. Thereafter Defaulters are liable to be terminated from training. Their results of previous semester will be withheld and they will not be allowed to attend classes for next semester.**
- b) **Vernier & Micrometer :**Every Diploma trainee must purchase at his own cost one Vernier 0-150mm and one micrometer 0-25 mm, and bring for practicals and for tests.
- c) **Hostel :** Limited hostel facility is available. The students will have to pay hostel rent in advance as per rules and regulations of the hostel.
- d) **Uniforms :** All Diploma trainees are required to get the uniforms as prescribed by the Institute, stitched at their own cost and attend the training in uniform and with safety shoes everyday.
- e) **Semester Holiday:** 2 weeks vacation at the end of each semester, for all Diploma batches.
- f) **Eligibility of leave :** Casual leave 12 days per academic year. Sick leave 15 days per academic year (Period exceeding 3 days needs medical certificate from a Registered Medical Practitioner to be submitted within 7 days.)
- g) No traveling allowance or any other allowance will be paid for attending entrance exam, Joining the course or on termination thereof.
- h) The outstation industrial visits will be arranged by CITD. The trainees are required to bear all expenses including cost of boarding, lodging, Railway / Bus fare and other incidental expenditure.
- i) Final year trainees are exposed to campus interviews, by intending industries. They can appear for interviews and get absorbed. However, the Institute does not guarantee any employment or absorption.  
*( It may be noted that the ex-trainees of the Institute have earned excellent reputation with their employers and as such prominent industries are coming forward to absorb candidates before completion of their training.)*
- j) The trainees shall not cause any damage or loss to the property of the Institute, failing which they are liable to bear the loss.
- k) Any information given in the application by the candidate, if, found incorrect after selection, the trainee is liable for such punishment as may be deemed fit including his/her disqualification and / or dismissed from training course.
- l) The trainees are expected to complete the assignments as per schedule of training programs.
- m) The trainees will have to strictly undergo the training as per the schedule and instructions and comply with all the rules of discipline as may be in force from

time to time. Copying in examination and malpractice during the exams will be viewed seriously.

- n) The trainees should complete the full course of training and will not be allowed to discontinue the training.
- o) The trainees are not permitted to join part-time / evening courses of study conducted by any other University / Institute.
- p) The trainees are expected to maintain utmost discipline and good manners inside and outside the campus and not get involved in activities which cause blemish to the good image of the institute.
- q) The trainees have to follow the rules and regulations pertaining to any department of the Institute.
- r) The Institute reserves the right to fill – up any vacant seat from among the candidates present at the time of counseling as per the merit, subject to payment of requisite fee applicable to self sponsored.
- s) No request for extension of time for submission of proof of pass or submission of original and the trainees have to abide by these rules.
- t) The Institute reserves the right to alter, vary change and / or modify the rules governing the admissions, or any other procedure from time to time depending upon exigencies of training and the trainees have to abide by these rules.
- u) The trainees have to follow the rules and regulations made by the institute pertaining to any department, examination, hostel, discipline etc.
- v) The Institute reserves the right to terminate the trainee at any time at its discretion for misconduct/indiscipline/irregular attendance, breach of rules etc. In such an event, the course fee paid by the candidates shall not be refunded.
- w) The Institute shall take all precautionary measures with regard to safety. However, the trainees should decide to join the course at their own free will and at their own risk. In case of any injury or any disablement (temporary/permanent) suffered by the trainees during the course due to any accident or otherwise, the Institute shall not be liable to pay any compensation whatsoever. The trainees shall indemnify the Institute in this account.
- x) Trainees shall arrange at their cost, all stationary, drawing and other instruments and books prescribed for the course.
- y) Ragging of any kind will be viewed seriously and offenders shall be liable to be prosecuted under the law. Their training will be terminated and the fee paid by them shall be forfeited. They will not be allowed to rejoin the semesters/course afresh.
- z) The trainees should give an undertaking to abide by the rules & regulations of the Training.



**Entrance Test will be held at:**

Main Building,  
University College of Engineering  
Osmania University,  
Hyderabad – 500 007  
Tel : 9908606805,9949519535, 040-23776156

*For Further Clarification, Please Contact:*

**Training Department**

**Phone No's:** 040-2377 1959, 23776156, 23772747 & 48 – Ext: 207.212

**Fax :** 040-23772658, **Email :** [citdplacements@citdindia.org](mailto:citdplacements@citdindia.org), [citdadmissions@citdindia.org](mailto:citdadmissions@citdindia.org)

**Website :** [www.citdindia.org](http://www.citdindia.org)

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