



MSME-TOOL ROOM, HYDERABAD
CENTRAL INSTITUTE OF TOOL DESIGN
(A GOVT. OF INDIA SOCIETY, MINISTRY OF MSME)
BALANAGAR, HYDERABAD-500 037, TELANGANA, INDIA



(An ISO 9001: 2008, ISO 29990: 2010, ISO 14001:2004 & ISO 50001:2011 Certified Institution)

PROSPECTUS

FOR

M. Tech (Mechatronics)

2016-17

Conducted in collaboration with
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
KUKATPALLY, HYDERABAD – 500 072

ABOUT CITD

The Central Institute of Tool Design(CITD) is an ISO 9001:2008, ISO 29990:2010, ISO 14001:2004 & ISO 50001:2011 certified premier Institute in India providing specialized training courses in Tool Design & Manufacture/ CAD/CAM/CAE, Mechatronics & Robotics. 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 MSME. The Development Commissioner, Ministry of MSME is the ex-officio Chairman of the Governing Council. The Principal Director is the Chief Executive Officer of the Institute.

AIMS & OBJECTIVES

- a) Training of technical personnel in design and manufacture of Tools, Jigs & Fixtures, Dies & Moulds, Press Tools, CAD/CAM/CAE, Mechatronics & Robotics.
- b) Provision of advisory, consultancy and common facility & service 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 of Tools, Jigs & Fixtures, Press Tools, Dies & Moulds, Gauges and Special Cutting Tools subject to the condition that the 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 Wirecut EDM (AGIE Cut Classic-III & Electronical), 4-Axis & 5-Axis High-Speed Machining Centres, and 3D Coordinate Measuring Machine with Scanning & Digitization facilities. The Institute is equipped with latest version of EMCO 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 Meter scope, ULM OPAL600, Carl Zeiss Technology, Germany and Slip Gauge Measuring Unit 826 with Millitron 1240, Mahr, Germany, to Calibrate Limit Gauges, Micrometers, Dial Indicators, etc.

The CAD/CAM Centre is equipped with latest hardware like latest Configuration workstations, Systems and softwares like AutoCAD, Pro-E, CATIA, ANSYS, Hypermesh Unigraphics, Master CAM, Del CAM, Nastran & Patron, ABACUS, LS-DYNA, Q-FORM, SOLIDCAST, etc.

The Institute is also equipped with an Automation Centre with Programmable Logic Control Systems; Hydraulic, Pneumatic, Electronic Controls with Simulators.

The Institute has a special Library with a collection of technical books in Tool & other Engineering fields and subscribes 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 Centre collects and organizes information and data useful for the technological advancement in Tool Engineering. For the dissemination of information, the centre publishes a computerized current awareness abstracting bulletin and provides technical enquiry service.

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, CAE,VLSI & Embedded Systems, Automation Mechatronics & Robotics.

ABOUT JNTUH

Situated in the heart of the city at Kukatpally a major landmark- Jawaharlal Nehru Technological University Hyderabad has an environment of academic excellence with 'A' Grade accreditation by NAAC (National Assessment and Accreditation Council). Bringing the spark of knowledge to young minds and instilling a new confidence and vigour to face the world, it is providing quality education for nearly 4 decades in Engineering, Master of Philosophy (M.Phil) in Science and Humanities and Doctor of Philosophy (Ph.D) in all streams. The admission procedure centres around merit. Industrial knowledge forms a part and parcel of JNTUH, Hyderabad. An Entrepreneurship Development Cell (EDC) was established by the Department of Science and Technology to create a business oriented environment, to promote small and medium Enterprises (SME's) and NGO's, to organize lectures, T.V. and Radio talks, skill development training program etc. To get a hands-on experience of the industry, the JNTUH Bureau of Industrial Consultancy Services (BICS) was formed to aid in the Human Resource needs, to identify R & D developments, to engage in entrepreneurial opportunities and to coordinate with organizations like HUDA, MCH, APSRTC, APSEB, BHEL, NTPC, ONGC, Telecommunications Department, MES, South Central Railway, Airport Authority of India and many others.

Even though Research constitutes the academic framework, the university has an exclusive R&D cell which monitors all the research activities and coordinates them through the recommendations of faculty members. Extension activities form part of campus life, apart from academics. The National Service Scheme (NSS) is introduced with an aim to help students develop a humanitarian temper. Commendable work done were - Laying of Roads, Janmabhoomi Clean & Green program, Famine and Cyclone relief work with the assistance of Social and Tribal Welfare Departments, Govt. of Andhra Pradesh, Ministry of Social Justice and Empowerment, Govt. of India. Additional facilities are the Bank, Post-office and Health-care centre.

Grooming students for placements and helping them make a fruitful career is the topmost priority after learning. World famous companies like Wipro, Infosys, Tech Mahindra, Tata Consultancy Services(TCS), Birla Soft, Yahoo, Google and many others walk out with brilliant talent in exchange for huge pay packets and dynamic careers giving the University its due credit of a fulfilling future. Fine-tuning the skill of the faculty is a regular feature here. For this purpose, the Academic Staff College(ASC) was instituted which conducts Refresher courses for Principals, Heads, Lecturers and also to evaluate, plan and implement innovative teaching methods. As a consecutive whole, JNTUH Hyderabad helps to build many a bright and ambitious career.

This University has been deemed an autonomous one after Act No 30 of the approval of the Andhra Pradesh Legislature known as the Jawaharlal Nehru Technological Universities Act, 2008 which came into force on 18th August, 2008. It is a teaching cum research oriented University consisting of the constituent and affiliated colleges. The main officers and councils of the University are Chancellor, Vice-Chancellor, Rector, Executive Council and Academic Senate. The Governor of Andhra Pradesh shall be the Chancellor of the University. The first Vice-Chancellor of the University is Dr. D. N. Reddy, a brilliant administrator and widely read scholar.

GLOBAL COLLABORATION

To make our students get a wide global exposure, a few collaborative programs with International Universities of repute have been designed. Some of them are

- 1) School of Information Technology (SIT) with Carnegie Mellon University, USA,
- 2) School of Management Studies with Central Michigan University, USA
- 3) JNTUH College of Engineering, Hyderabad with Kansas State University USA
- 4) JNTUH Hyderabad with Blekinge Institute of Technology, Sweden.

Knowledge has no barriers - in depth exploration of it is essential to discover hidden areas." Keeping this principle in mind the University offers Research -Oriented courses like Master of Science (MS).

MASTER OF TECHNOLOGY (MECHATRONICS)

The Central Institute of Tool Design is conducting fulltime Post Graduate programme in Master of Technology (Mechatronics) and in collaboration with Jawaharlal Technological University, Hyderabad.

Post Graduate programmes in Engineering prepare students to enhance their interest and develop skills in specialized areas through Master of Technology in Mechatronics.

COURSE DETAILS

M.TECH (MECHATRONICS)

Duration : 24 months (4 Semesters).

Age : No age limit. However, candidates below 45 years of age are preferred.

ELIGIBILITY

B.E. / B.Tech (Mech / ECE /EEE EIE/ Mechatronics /Automobile /Aeronautical Engg.) OR equivalent. Minimum of 55% marks in the qualifying examination from the Institutions approved by AICTE.

ELIGIBILITY FOR INDUSTRY SPONSORED CANDIDATES

i) The candidates must have a minimum of two years of full-time professional work experience after passing the qualifying examination in a Registered Firm/Company/Industry/Educational and Research Institutions/Govt. Department/Autonomous organizations in the relevant field in which admission is being sought.

ii) A letter from the employer must be furnished sponsoring the candidate for admission into M.Tech. (Mechatronics). The employer should also indicate that the candidate sponsored will not be withdrawn midway till the completion of the M.Tech. course.

iii) The mode of selection shall be based on merit in the written test conducted by J.N.T.U.H, Hyderabad. The GATE rank holders are also need to qualify themselves in the Entrance test.

THE CLASSES WILL BE CONDUCTED AT THE FOLLOWING PLACES

JNTUH, Kukatpally, Hyderabad
Monday, Tuesday (from 9.00 AM to 5.00PM)

CITD, Balanagar, Hyderabad
Wednesday, Thursday, Friday & Saturday (from 9.30 AM to 5.30PM)

HOLIDAYS AND WORKING HOURS

- (i). The Institute is following the holidays applicable to Central Government.
- (ii). The Institute working hours are from 9.30 AM to 6.00 PM.
- (iii). Weekly Holiday - Sunday.

GENERAL RULES REGARDING RESERVATIONS OF SEATS FOR SC/ST/PWD CANDIDATES

- a) SC/ST candidates who get seats by merit in general category will not be counted against the seats reserved for them and such candidates will go into the list of general seats.
- b) If sufficient number of candidates are not available to fill-up the seats reserved for SC, they shall be filled up by the suitable candidates from ST's and Vice-versa. If, the required number of candidates are not available for filling the SC/ST reserved quota, the seats will be filled up by candidates from the general pool on the basis of merit.
- c) Candidates claiming reservation under SC/ST category are required to produce a certificate from the competent authority.
- d) The candidates claiming reservation under Persons with Disability category, is subject to production of a medical certificate from competent authority.
- e) If no candidate under Persons with Disability category is available, the seat will be filled by the candidate from Non-sponsored General category on the basis of merit.

SCHOLARSHIPS

No candidate is eligible for any Scholarship from the CITD / J.N.T.U.H or A.I.C.T.E.

COURSE FEE

The selected candidates have to remit the following course fee at the beginning of each semester either in Bank Challan or DD in favour of the Principal Director, CITD, Hyderabad.

Category	Rs.
Self Sponsored	41,000/-
Industry Sponsored	51,500/-

In addition to the semester fee, candidates who are admitted in M.Tech (Mechatronics) have to remit the affiliation fee as detailed below:

S. NO	Particulars	I year Rs.	II year Rs.
1	Admn./Reg./Recognition fee	2000/-	NIL
2	Spl. Services rendered by Institution	3000/-	3000/-
3	Common Services rendered by University	1500/-	1500/-
4	Refundable Caution Deposit (Lab+ Library)	1000/-	1000/-
5	Ratification Fee	1,000/-	-----
TOTAL		8,500/-	5,500/-

DOCUMENTS TO BE HANDED OVER AT THE TIME OF JOINING

- a) Original certificates of qualifying examination, i.e., SSC / Metric, B. Tech/ B.E. **The original certificates will not be given back to the candidates under any circumstance till they complete the scheduled study 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.
- b) Certificate of Physical fitness from any Assistant Civil Surgeon. The Institute reserves the right to send the candidate for further Medical examination, if necessary.
- c) The candidates should give an undertaking for good conduct and behavior and to abide the rules & regulations as prescribed by the Institute.

NOTE

Eligibility criteria for writing the Entrance examination may be seen from the Institute's website www.citdindia.org. The eligible candidates who have not received Hall Tickets by post, , can collect Duplicate Hall Tickets in person by producing one passport size photograph at CITD, Balanagar, Hyderabad and or at the examination centre one hour before the commencement of the examination at JNTUH, College of Engineering, Kukatpally, Hyderabad.

Candidates who have applied for admission may verify their eligibility from the website and attend the entrance examination directly after collecting the Duplicate Hall Ticket. The Institute is not responsible for any postal delay or delay in collection of Hall Ticket as per schedule by the candidates.

ADMISSION

The candidate can download the application from our website www.citdindia.org or can collect at CITD personally. The hard copy of the filled in application form along with Xerox copies for proof of age, proof of pass of the qualifying examination and proof of caste/PWD where applicable should be sent to Director (TRG) CITD, Hyderabad, enclosed with the copy of the challan of cost of application paid.

SYLLABUS FOR ENTRANCE EXAMINATION

The Paper will be of 100 objective type questions with a duration of 2 hrs.

1. Electrical Engineering
2. Fluid mechanics & Hydraulic System
3. Thermal Engineering
4. Production Technology
5. Basic & Digital Electronics
6. Metallurgy & Material Science
7. Measurements & Instrumentation
8. Control Systems
9. General Aptitude (Analytical & Reasoning)

GENERAL TERMS & CONDITIONS FOR CANDIDATES ADMITTED TO FULLTIME COURSES

- a) The Institute reserves the right not to conduct any course at its sole discretion.
- b) The course fee for next semester should be paid i.e by 31st January / 31st July every year. A late fee of Rs.1000/- per week subject to 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 with held and they will not be allowed to attend the next semester.
- c) The candidates have to pay a caution deposit of Rs. 1000/- at the time of admission refundable on successful completion of the course.
- d) No traveling allowance or any other allowance will be paid for attending the entrance examination, joining the course or on termination thereof.
- e) No hostel facility is available and the candidates have to make their own arrangements for boarding and lodging.
- f) The student shall not cause any damage or loss to the property of the Institute/University, failing which they are liable to bear the loss.
- g) Any information given in the application by the candidate, if found incorrect after selection to the course, is liable for such punishment as may be deemed fit including his/her disqualification and/or dismissal from the course.
- h) Once the selected candidates report for the course and pay the fees by the prescribed date, the admissions are treated as closed and the waiting list ceases. Fee once paid will not be refunded
- i) The Institute reserves the right to terminate at any time at its discretion for misconduct/indiscipline, breach of rules etc. In such an event the course fee paid by the candidate shall not be refunded.
- j) The rules are liable for change from time to time depending upon the exigencies of the course.
- k) All matters concerning the admissions and conducting the course shall be subject to Hyderabad jurisdiction only.

IMPORTANT DATES

Sale of Applications	:	10.06.16 (Friday)
Last date for submission of filled in applications (upto 5.00pm at CITD)	:	02.07.16 (Saturday)
Last date for receipt of filled-in applications with late fee of Rs.500/-	:	07.07.16 (Thursday)
Entrance examination	:	10.07.16 (Sunday)