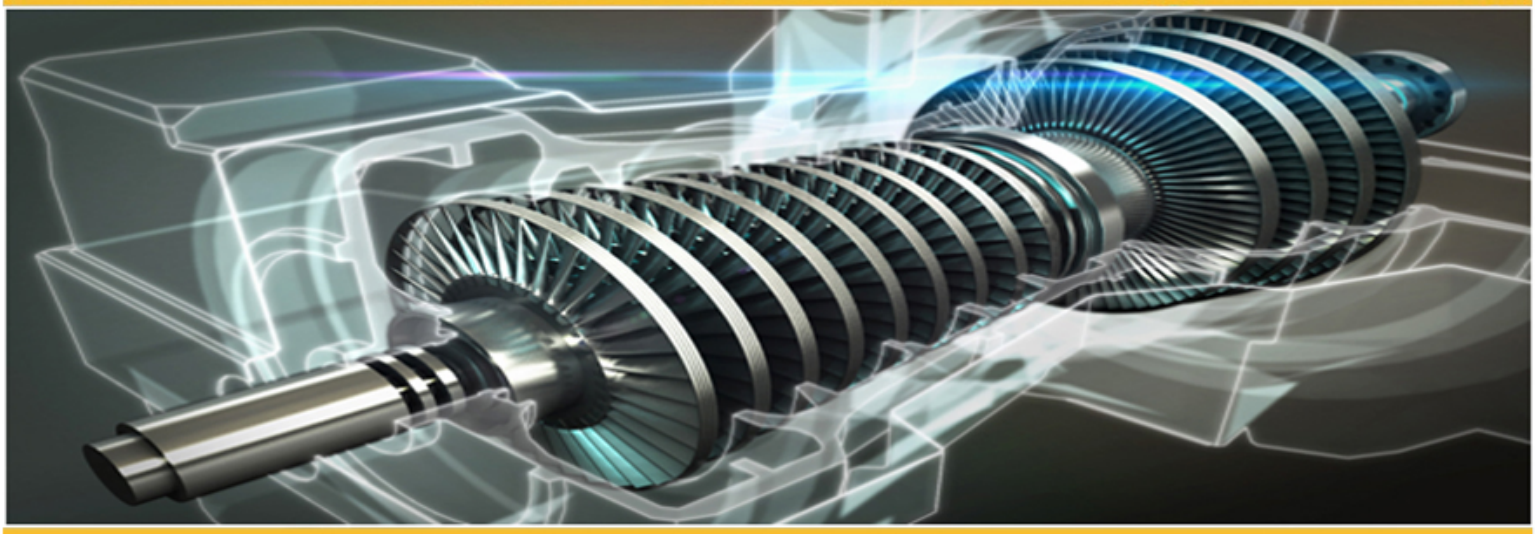
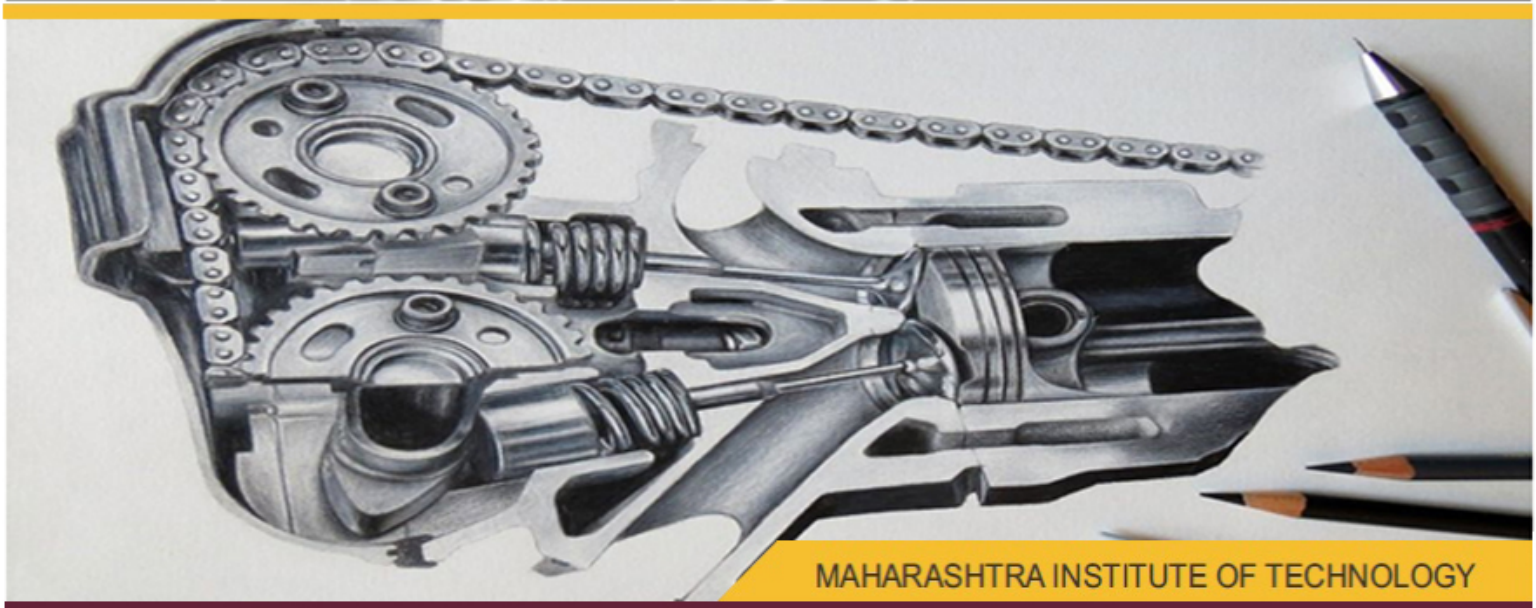
M.I.T B'TECH

MECH-ZINE 2019





MAHARASHTRA INSTITUTE OF TECHNOLOGY

10TH EDITION

Mechanical Engineering Magazine

Forward From Editorial Team:

"MECHZINE" highlights achievements and events conducted by the Department of Mechanical Engineering. The team's efforts towards providing the readers with the dimensions of enthusiasm that our students and teachers measure along with the marvelous moments shared in and out of the academics. The main "FOCUS" captures the aspiring wings flying high. The events organized and participated by the students create a novel experience for them that add up to their dairy of memories.

Dr.A.J.Keche
(Patron Editor)

Prof.M.N.Farooqui
(Executive Editor)

MIT
Quest for Excellence

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Contents

1. Industrial Visits

2. Placements

3. Expert's Talk

4. MoU with CAD CAM Guru

5. Book Chapters published by faculty members

6. Workshops/Seminars attended by faculty members

Industrial visit

To get the practical knowledge of CNC machines as Lathe, Milling, EDM, WEDM, Rapid Prototyping, Robotics in the CAD/CAM subject an industrial visit was organized by Mechanical Engineering department, on the 30th of July 2019.

In the Machine Shop one could see a various number of machines like,

a. 3D Laser cutting: Prima Machines, Domino 400 CP can cut MS thickness up to 20mm and SS thickness up to 12mm.

b. Auto Blanking Press: AIDA, MCX-S2-6300 of capacity 6,300kN having progressive die.

c. Standard Room: This is material inspection facility consisting of following machines

i. CMM: Mitutoyo Crysta- Apex 5122010 of bed size 1200*2000*1000 mm

ii. Manual vision measuring mac: Mitutoyo QSL 2010Zb of 10 kg loading capacity

iii. Roundness Tester: Mitutoyo RA 2200 AH of 60 kg capacity

iv. Contour measuring: Mitutoyo Contracer CV 2100 for quick and easy to use

v. Hardness tester: Rockwell+Brinell HR 522 of test force 29.2:98.07
vi. Electronic Height Gauge: Mitutoyo LH 600 of measuring range 0.972 mm
vii. Surface Roughness Tester: Mitutoyo SJ measurement range of 8 μm
d. Cutting Slitting Line: EKI control Twin cut for SS, Al, MS for thickness 1.5, 6, 3 mm respectively.
e. RPT Plastic: EOS BEOSNT P 395 of bed size of 340*340*600 mm.
f. Tool Room: Mazak, Nexus 8800 II.

The centre of excellence included the KUKA Robot of 5 axes of degrees of freedom programming

Placements

20 budding engineers were placed in various companies of Mechanical Engineering Department from Maharashtra Institute of Technology, Aurangabad.

Companies including

- Grindmaster Pvt Ltd, Endress + Hauser India Pvt Ltd.
- Endurance Technologies Pvt Ltd, Metalman Auto Pvt Ltd.
- LESER India Pvt Ltd.
- Grindwell Engineering Pvt Ltd.
- Sanjeev Auto Pvt Ltd.
- ParasonMachineries Pvt Ltd.
- Clad Metal India Pvt Ltd.
- Kale Group of Industries.
- Goodyear South Asia Tyres.
- Hybrid BI Cables
- Raisen (M.P.)

These were a few companies which offered good pay packages to students. Out of these some students were placed through In-Plant Training offered by the institute for a period of 6 months in various industries and is unique feature of the institute.

Students were congratulated by President of G. S. Mandal, Dr. Yadnyaveer Kawade and Director General, Prof. Munish Sharma and were felicitated by the Principal, Dr. Santosh Bhosle, Head of Mechanical Engineering Department, Dr. Ashok Keche, Inplant Training and Placement Officer, Mr. Amol Patil. In this process departmental coordinators Prof. Abhay Gore and Prof. Sameer Patil took special efforts.

Sr No	Name of student	Placement Company	Nature of Placement
1	Pritam Wani	Grindmaster Pvt Ltd	Campus
2	Akash Keche	Grindmaster Pvt Ltd	Campus
3	Anand Chinchane	Endress + Hauser India	IPT
4	Atharav Pande	Endurance Tech. Pvt. Ltd	Campus
5	Wanale Shivkant	Metalman Auto Pvt Ltd	Campus
6	Kiran Bidarkar	LESER India Pvt Ltd	IPT
7	Akshay Mule	Grindwell Engineering Pvt Ltd	Campus
8	Sandip Bibe	Grindwell Engineering Pvt Ltd	Campus
9	Piyush Jaipurkar	Sanjeev Auto Pvt Ltd	IPT
10	Mahesh Santosh	Parason Machineries Pvt Ltd	IPT
11	Shriniwas Rudrawar	Clad Metal India Pvt Ltd,	Campus
12	Abrar Ganchi	Clad Metal India Pvt Ltd,	Campus
13	Namdev Kadam	Clad Metal India Pvt Ltd,	Campus
14	Neeraj Makariye	Clad Metal India Pvt Ltd,	Campus
15	Prabhakar Jadhav	Clad Metal India Pvt Ltd,	Campus
16	Omprakash Rambachan	Hybrid BI Cabels, MP	IPT
17	Pawar Sandip	Goodyear South Asia Tyres	Campus
18	Jugal Vinod Kshatriya	Sanjeev Auto Pvt Ltd	Campus
19	Tausif Rafique Pathan	Sanjeev Auto Pvt Ltd	Campus
20	Saurabh Londhe	Sanjeev Auto Pvt Ltd	Campus

EXPERT TALK

Alumni are the reflection of the past of the institute, representation of its present and a link to its future. They are our most loyal supporters and our best ambassadors, offering invaluable marketing and promotion across their personal and professional networks.

Talented alumni will likely have a wealth of experience and skills to share with current students via talks and meets. In certain cases, this could go even further with alumni offering to practically support students in work placements and help them launch their careers. Alumni network has a real life benefit for current students. Alumni also donate their valuable time to offer career support to current students. This enhances the students' experience and gives them that competitive edge in today's tough job market. The alumni network of a college is one of the biggest sources of placement opportunities to the students.

Alumni can play an active role in voluntary programs like mentoring students in their areas of expertise. They also play a significant role in contributing scholarships to deserving students. Alumni get in touch with students and share their expertise and best practices in a given field.

Mr. Laxmikanth Bangadiya (Assistant Manager, SBI General Insurance, Pune) is also one of our talented alumnus who shared his valuable time with the students on the 27th of July 2019. He conducted an interactive session during which he spoke about "How to Manage and Build your Personal Brand".

Drawing the focus of the students on many important aspects pertaining to building one's personal brand in view of some important Program Outcomes. Some of which were:

- Worldwide competitive scenario for a Mechanical Engineer.
- How to use Professional Networking for developing an effective profile (like a LinkedIn All-Star profile), how to build sound connections with world class professionals, giving ideas on effective professional communication.
- Introducing newer and more powerful presentation tools other than M.S. PowerPoint.
- Enlightening students on how to create opportunities and own space. Wherein he emphasized on "An opportunity is the creation of your own efforts"
- Boosting students' Metacognitive skills related to analyzing one's knowledge and way of thinking.

Prof. V. M. Chidri (Dean, Alumni Affairs) and Dr. C. D. Kuthe (Head Mechanical Engineering Department) facilitated the alumnus Mr. LaxmikanthBangadiya. The session was attended by a number of Students and faculty members including Prof. A .S. Gore, Prof. P. A. Lad, Prof. N. M. Sakhare, Prof S. L. Sathe.

Student coordinators Mr. AayushAkkewar, Mr. ManojSonune and Mr. AadishMohurle (B.Tech.(C) Mechanical) along with the Alumni Coordinators Prof. I. A. Quazi, Prof. A. M. Ingle, Prof. B. B. Shikhare coordinated the program under the guidance of Prof. V. M. Chidri.

MoU with CADCAM Guru

A leading organization in the field of CAD, CAE and mechanical engineering design training and is the authorised training partner of Dassault Systèmes for Catia, PTC for Creo, Siemens PLM for NxCAD and Altair for Hyperworks.
Providing 100% placement assistance to the students in mechanical engineering design domain and till date has placed more than 3000 candidates in leading companies in India.

Maharashtra Institute of Technology, Aurangabad has successfully signed a memorandum of understanding (MoU) with CADCAMGURU Solutions Pvt. Ltd. The two parties included Dr. S P Bhosle (Professor and Principal) and Dr. A J Keche (Associate professor and Head) from Maharashtra Institute of technology, Aurangabad and Mr. Prasanna Joshi (Director) and Mr. Shrikant Bidwai (Head – College Relations) from CADCAMGURU Solutions Pvt. Ltd.

This MoU was signed to achieve the following objectives:

- Training and placement Partnership Program of CSPL for Mechanical Department of Maharashtra Institue of Technology, Aurangabad.
- To provide training and expertise on various topics for the above mentioned department, as per need basis.
- To provide industrial training to students and staff.
- To provide mentoring to students and to prepare them for interviews.

The desired out comes from this collaboration are as to,

- Help students understand practical applications of the theory studied in college.
- Help students to brush up their technical skills regarding various design software.
- Improve the placement chances to satisfy industry needs.
- Utilize the expertise of faculty from CSPL, Pune in solving problems faced in design and automation.
- Provide help in product development to students and train them to face interview.

Book Chapters published by faculty members

Sometimes researchers decide to publish their work in a book chapter in an edited volume, or they may decide to write a monograph or another type of book. There are advantages and disadvantages in choosing to publish in book form.

Sr. No	Title	Authors	Book title
1.	Reduction of Warm-up Time in Light Duty Petrol Engine.	Ashok J Keche, Kishore Kulkarni, Sachin Avghad.	Smart technologies for Energy, Environment and Sustainable Development.
2.	Design Analysis of Conventional and composite Spur Gear Using Finite Element Method.	Ashok J Keche, Manjiri S Gajhas.	Smart technologies for Energy, Environment and Sustainable Development.
3.	Durability Analysis of Titanium Engine Value Using CAE.	Ashok J Keche, Anuradha Thakre.	Smart technologies for Energy, Environment and Sustainable Development.
4.	Process Parameters Optimization of Drip Pipe Extrusion Process Using Taguchi Approach.	Ashok J Keche, Vrushali M Shete.	Smart technologies for Energy, Environment and Sustainable Development.

Sr. No	Title	Authors	Book title
5.	Automation on front fork Assembly Machines Using Vibro-Feeder & Pick and Place Mechanism.	S V Lomte, Dhananjay Kathar, Dilip Pawar.	Smart technologies for Energy, Environment and Sustainable Development.
6.	Effect of the Post-weld Heat Treatments on Mechanical and Corrosion Proper- of Friction StirWelded AA 7075-T6 Aluminium Alloy.	Ambad P.M., Pankade S.B., Wahane R., Gogte C.L.	Strenghtening and Joining by Plastic Deformation.
7.	Study Spring Back Effect in Industrial Grade Materials in Sheet Metal Processing Using FEA.	P T Borlepwar, Akshay P Thakare.	Smart technologies for Energy, Environment and Sustainable Development.
8.	Recent Development in the field of Rapid prototyping : An overview	P T Borlepwar, Umesh Sable.	Proceeding of International Conference on intelligent Manufacturing and Automation.

Workshops/Seminars attended by faculty members

Date	Attended / Organised by	Name of Workshop
1st to 6th March 2019	Prof. M N Farooqui and Prof. A S Gore	Advances in Material and Manufacturing Technology. (AMMT 2019)
8th March 2019	Dr. P.M.Ambad	Skill Development for Tribal Youth in association with CTARA, IIT Bombay and TRTI, Pune.
22nd March 2019	Dr. P.M.Ambad	Industry Academia Consortium on Smart Manufacturing (IndAC-SM) under Academia Partnership Program (IAPP) of Royal Academy of Engineering, London.
6th May 2019	Dr. P.M.Ambad	Skill Development of Tribal Youth.
24th to 29th June 2019	Prof. M N Farooqui and Prof. A S Gore	Fundamentals of Modelling Micro/Nano Machining Process, NIT,Calicut.