



Shri Shamrao Patil (Yadravkar) Educational & Charitable Trust's

# SHARAD INSTITUTE OF TECHNOLOGY, COLLEGE OF ENGINEERING

Yadrav (Ichalkaranji), Dist.-Kolhapur (Maharashtra)

• NBA Accredited Programmes • NAAC 'A' Grade Institution • An ISO 9001 : 2015 Certified Institute

## INSIGHT

...A Newsletter

### Department of Automation and Robotics Engineering

Vol: 01 ISSUE: 01



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Principal



Dr. G.S. Patel  
HoD, Automation and Robotics

## ❖ EDITOR MESSAGE

From Faculty Editor Desk



Yogesh Kamble  
Assistant Professor  
Dept of Automation and Robotics

From Student Editor Desk  
Yashvardhan Arihant Shirgave



Dear Readers,

It is indeed a great honor to be the “INSIGHT” Newsletter Editor from Department of Mechatronics Engineering, SITCOE. And it is an immense pleasure to presenting you with the Volume 1 Issue 1 of AY 2022-23.

Our motto is to put forth two Issues of Newsletter in a year. A huge thank you to all for the efforts taken by the department faculty, our students who contributed in this “INSIGHT” Newsletter, without which there wouldn’t have been this newsletter issue. Last but not least, I would like to thank Beloved Hon. Executive Director, The Principal, Head of the Department and Faculty members for their everlasting support throughout the creation of this edition.

❖ Dear Readers,

We are happy to bring out the Volume 1, Issue 1 of our News Letter “INSIGHT”. Our Faculty diligently involved in encouraging students and preparing for a bright future.

I am glad that I am part of this News Letter preparation and release. I am very much thankful to our Department Faculty members and my team members for helping me in making this“ INSIGHT” News Letter of AY 2022-23

### From Executive Director Desk:

I am happy and glad that Sharad Institute of Technology College of Engineering, Department of Automation and Robotics Engineering is releasing out “INSIGHT ” Newsletter Volume 1 Issue-1. Bringing out a department “INSIGHT” Newsletter will definitely help to showcase the activities like Autodesk, Technical events, Industrial Visits, Expert talk etc., that are happening in the department campus. It also helps in building up teamwork which is very much needed today in the world of competition. It provides a platform for exposing the merits and academic achievements of the faculty and students. This enhances the documentation culture of the institute. This newsletter includes highlights of Automation and Robotics engineering department with perspective of technical event achievements, faculty achievements, professional society events and activities, etc. I hope that this culture of releasing Newsletter continue forever and become a quoted example for all other colleges to follow.

### From Principal Desk

I am extremely delighted to know that faculties and students of Automation and Robotics Engineering Department of Sharad Institute of Technology College of Engineering, bringing out their departmental “INSIGHT” Volume 1 Issue-1 newsletter. This will benefit all the students as they can now be aspired for greater heights by knowing about their Department’s achievements. Students and faculties have exhibited a great zeal and enthusiasm and have contributed significantly in various technical activities. The editorial team has initiated something that will continue to help and guide present and upcoming students of the Department. Personally, I feel that students of Sharad Institute of Technology College of Engineering should set standards and create environment so that they excel in their areas of interests and accordingly guide more and more SITCOE ians in future.

### From Head of the Department Desk:

I feel happy to introduce fourth issue of “INSIGHT” 2022-23 Issue-1 prepared by faculty and students of Automation and Robotics Department. Our Automation and Robotics Engineering department has been consistently working towards the goal to produce highly skilled and scientifically oriented manpower through flexible, adaptive and progressive training programs along with cohesive interaction with the research organizations, academicians and industries. “INSIGHT” provides good platform for student to update their technical skills. I congratulate “INSIGHT” team for their efforts in launching second issue of year 2022-23. Wish you all a happy learning here.

# Vision Mission and PEOs of the department

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## VISION

To be a centre of excellence in Automation and Robotics education to prepare professionally competent engineers with lifelong learning attitude for the accomplishment of ever-growing needs of society.

## MISSION

- ❖ To prepare technically and professionally competent engineers by imparting quality education through effective teaching learning methodologies and providing stimulating environment for research and innovation.
- ❖ To develop professional skills and right attitude in students that will help them to succeed and progress in their personal and professional career.
- ❖ To imbibe moral and ethical values in students with concern to society and environment.

## Program Educational Objectives (PEOs)

Graduates of the programme will

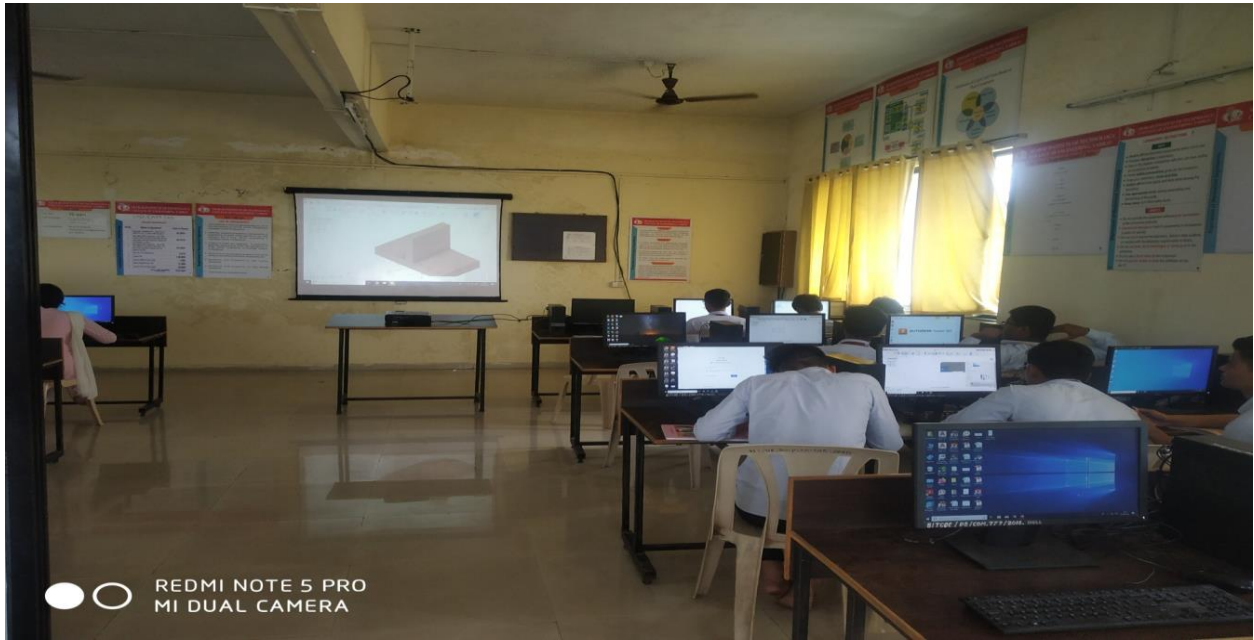
**PEO I :** Equip young minds to as proficient engineers with strong foundation fundamental in Automation and Robotics with application of mathematics ,science and engineering fundamentals

**PEO II:** Develop ability to Design, Develop and programme a robot for variety of engineering and multidisciplinary application using state of art tools and technologies

**PEO III:** Make the graduates to understand the need to engage in life long learning ethically so as to appreciate to current issues and develop solutions for cognizant problem for betterment of society

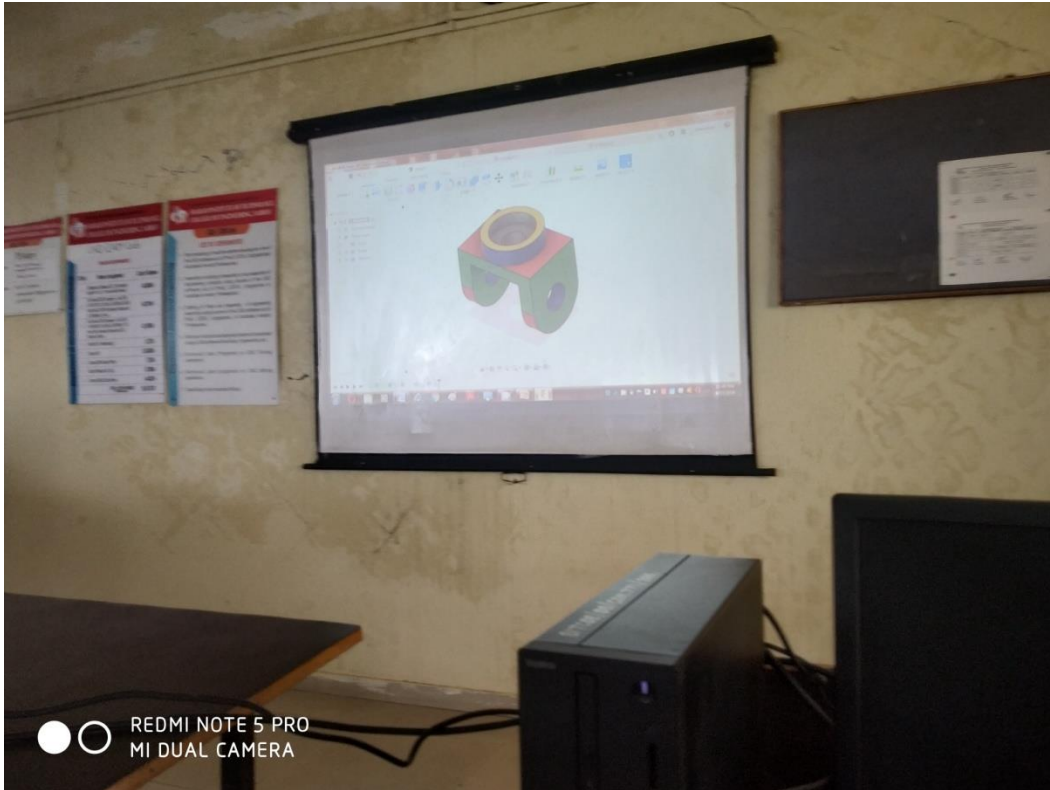
## Two days Workshop on Fusion 360 and 3D modeling conducted by -Design and Innovation Center Powered by AUTODESK (Innovation Center )

Date: 28<sup>th</sup> to 29<sup>th</sup> September 2022



### Description about the Activity:

In this event, Digital manufacturing competition is arranged on 28th to 29th September 2022. There were a total of 25 students who were participated The digital revolution is now breaching the walls of manufacturing as it continues to disrupt media, finance, consumer products, healthcare, and other sectors. Indeed, the explosion in data and new computing capabilities along with advances in other areas such as artificial intelligence, automation and robotics, additive technology, and human-machine interaction are unleashing innovations that will change the nature of manufacturing itself. Industry and academic leaders agree that digital-manufacturing technologies will transform every link in the manufacturing value chain, from research and development, supply chain, and factory operations to marketing, sales, and service.



## Industrial Interaction

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Industrial Visit is vital part of the curriculum .It helps to bridge the gap between classroom and real working world. It also provides the First hand knowledge about the organizational structures and Modes of operations in different Industries.

Industrial visits are an integral part of Engineering and Management Education .The purpose of industrial visit for students is to keep abreast with the technological development in the industry and to understand the gap between the theoretical and practical knowledge that could be passed to the society. In addition to that, they get an opportunity to gain in-depth knowledge about the CNC machines, its working, latest problems of manufacturing industry.Computer numerical control (CNC) has been incorporated into a variety of new technologies and machinery. One such machine of this sort that is used for a wide array of production processes is known as a CNC lathe. Due to technological advancements, CNC lathes are quickly replacing some of the older and more traditionally used production lathes, such as the multispindle. CNC lathes come with a number of benefits. They can be easily set up and operated. They offer tremendous repeatability, along with top-notch accuracy in production. A CNC lathe is typically designed to utilize modern versions of carbide tooling and processes. A

part can be designed for customization, and the machine's tool paths are often programmed using the CAD or CAM processes. However, a programmer can manually design a part or tool path as well. The resulting coded computer file is then uploaded to the CNC machine, and the machine will then automatically produce the desired parts for which it was programmed to design.

- To develop practical knowledge of students.
- To realize & familiar with new technology which is used in industry.

Sr. No.	NAME OF THE COMPANY	Class	No. of Students
1	GEM Ltd, Yadrav	SY	33
2	TOP Gear Industries, Hatakangle	SY	34
3	Perfect Plastic (India) , Yadrav	SY	37
4	Samarth Industries Pvt. Ltd. Hatakangle	SY	35
5	Ved Industries ,Hatakangle	SY	35
6	Acuara Foundries, Hatakangle	SY	35
7	Shriram Industries Pvt. Ltd. Hatakangle	SY	35

## Glimpses of Industrial Visit











## Industrial Visit /Guest Lecture

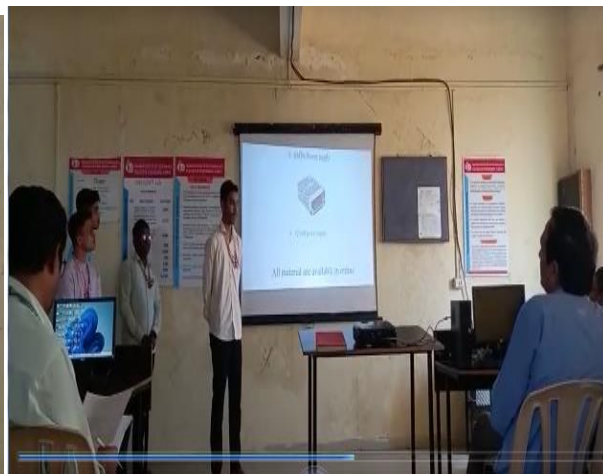
Sr. No.	Title of Expert Lecture	Class	Expert Lecture conducted Date	Name of Expert Resource person	Designation	Company /Institute	Time
1	Presentation Skills	SY	23/09/2022	Mr. Harshal Kajave	Consultant	Secoya ,Kolhapur	12.30 a.m. to 1.30 p.m.
2	Casting Processes	SY	24/09/2022	Mr.Kiran Mali	CEO	Mane Foundry	10.00 a.m.to 11.00 a.m.
3	Hydrogen Fuel and Automation opportunities	SY	28/09/2022	Mr. Anand Thakar	Consultant	CAD/CAM Guru	10.00 a.m to 11.30 p.m
4	How to get Government Jobs as per Students Education Level	SY	30/09/2022	Mr.Vishnu Bhosale	Consultant	EDU Genius Academy	12.30 a.m to2.00 p.m



# Project Based Learning

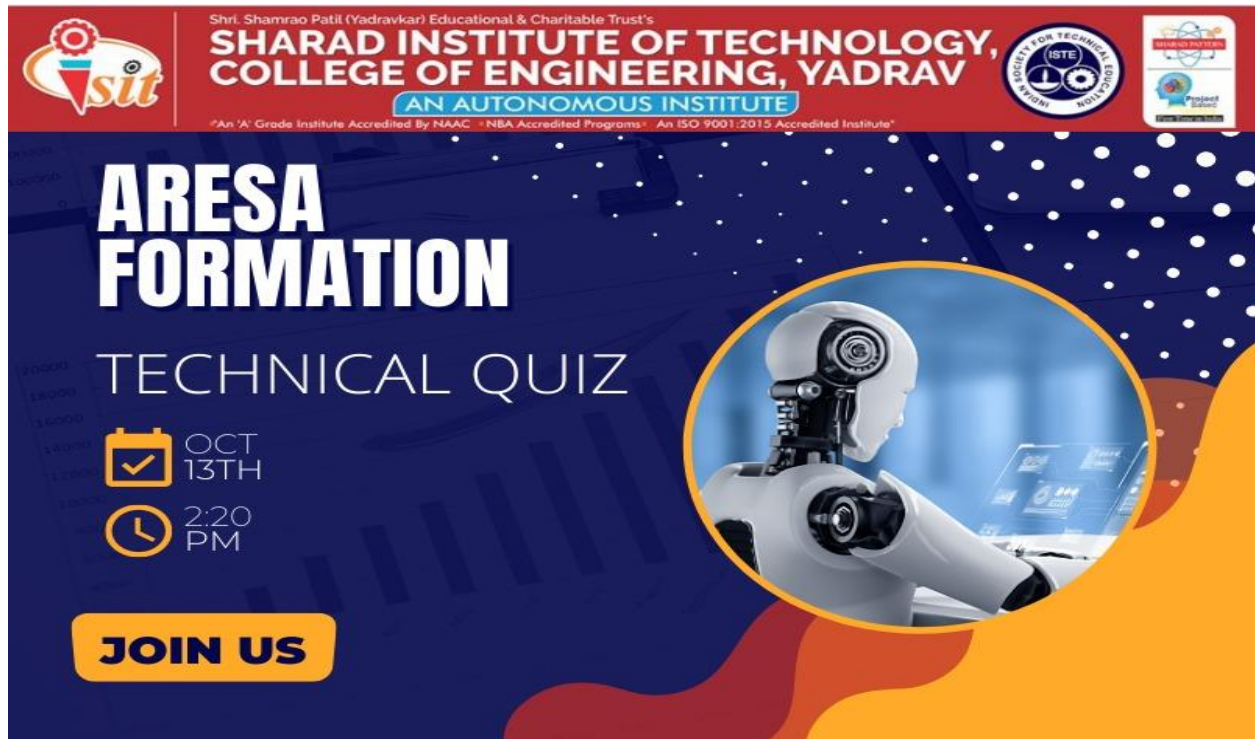
The institute has taken the wide-ranging decision to implement the concept of Project Based Learning (PBL). With this approach students actively explore real-world problems and challenges and acquire a deeper knowledge. Under this initiative, various value added programs and activities are conducted by department. The details are as follows.

## Mini Project Exhibition



# ARESA EVENT-1

## Poster Competitions :-



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ISTE  
INDIAN SOCIETY FOR TECHNICAL EDUCATION

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ACCREDITED

"An 'A' Grade Institute Accredited by NAAC. \* NBA Accredited Programs \* An ISO 9001:2015 Accredited Institute"

# ARESA FORMATION

## TECHNICAL QUIZ

OCT  
13TH

2:20  
PM

**JOIN US**

The poster features a central image of a white humanoid robot with a blue screen on its chest, set against a dark blue background with white stars and a yellow and orange wave at the bottom. The text is in white and yellow, with a yellow button for 'JOIN US'.



# ARESA EVENT-2

## Future Entrepreneur conducted by ARESA



The poster features a dark background with a yellow border. On the left, there is a graphic with a bar chart and an upward-pointing arrow, with the text "FUTURE ENTREPRENEUR" below it. Below the text is an icon of two hands shaking. To the right, the ARESA logo is displayed above a photograph of a person's hands typing on a laptop. At the bottom right, there is a yellow button with the text "JOIN US".

**FUTURE ENTREPRENEUR**

**ARESA**

CONTACT-  
YASHVARDHAN SHIRGAVE  
(+91 9403911791)  
OMKAR CHOUGULE  
(+91 9067262655)

**DATE- 25-11-2022**

**JOIN US**



# ARESA EVENT-3



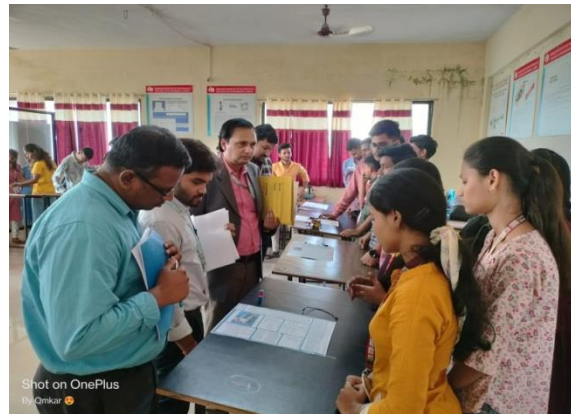
SHARAD INSTITUTE OF TECHNOLOGY,  
COLLEGE OF ENGINEERING, YADRAV  
AN AUTONOMOUS INSTITUTE

**ARESA**  
POSTER PRESENTATION

**JOIN US**

**23 rd December 2022**

Small text at the top: Shri. Shamrao Patil (Yadavkar) Educational & Charitable Trust's. Accredited by NAAC, TNA Accredited Programmes, An ISO 9001:2015 Accredited Institute.





# Value Added Programme on PLC and SCADA

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# Udemy certification Course


Teaching & Academics > Engineering > Hydraulics

## The Complete Hydraulic Course

Oil hydraulics systems & fundamentals, hydraulic fluids, control valves, cylinders, circuits construction & analysis

4.5 ★★★★★ (159 ratings) 630 students

Created by [Dr. Prafulla Hatte](#)

 Certificate no. UC-8477V7-ea88-478-3802-404e81883a  
Certificate url: udemy/UC-8477V7-ea88-478-3802-404e81883a  
Reference Number: 0004

CERTIFICATE OF COMPLETION

## The Complete Hydraulic Course

Instructors [Dr. Prafulla Hatte](#)

UDEMY Certificate completed = 66  
A.Y.2022-23



## PARTICIPATIONS in A.Y. 2022-23

SR. NO.	Activity Title	Participated Students
1	Extra-Curricular Activities	86
2	Co-Curricular Activities	64
3	Students NPTEL Registration	49

# Parent Meet

Parent –teacher interaction is wonderful opportunity for us to extend lines of communication between home and college, keep parents informed about their ward's progress both academic and social and for developing co-operative strategies that can ultimately t to every student. The Parents meet was conducted for academic year 2022-23



# Student Achivement

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Prabhat Hiremath-  
(Student-Automation and  
Robotics) 2<sup>nd</sup> Runner-up in  
Technoxian WRC Winner  
2022 – RC Craft Challenge  
held at New Delhi

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# DAAB,BOS Meeting

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For improvement in quality of the curriculum as well as the quality of students, Department Accreditation Advisory Board (DAAB) and Board of Studies (BOS) is conducted in every semester. The Department Accreditation Advisory Board consists of expert from industry, experienced academician from different colleges and the faculty of the department.



# Faculty Achievements

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## **1. Dr. G. S. Patel :**

- 1 Published book entitled "Machine Learning, Deep Learning, Big Data and Internet of Things for Healthcare "on CRC Press Taylor and Francis Group
2. Govind Singh Patel published paper entitled "Study of End to End Image Processing System including Image De-noising, Image Compression & Image Security," International Journal of Wireless Personal Communication, Springer, 121, 209–220 (2021)., Nov. 2021 (SCI Indexed by Thomson Reuters; Impact Factor: 1.061).
3. Govind Singh Patel published paper entitled "Analysis of improved ez-pass router design and its FPGA implementation", Journal of Harbin Institute of Technology, Vol. 53 Issue. 11 Pp. 17-28, Dec 2021(SCOPUS).
4. Govind Singh Patel published paper entitled "Development of improved speed AES based on key dependent intra-round operations", Journal of Theoretical and Applied Information Technology. 99(13), ISSN No. 1992-8645, pp 3231- 3241, 2021. (SCOPUS).
4. Govind Singh Patel published paper entitled , "Design Of Power, Area and Delay Optimized Direct Digital Synthesizer Using Modified 32-Bit Square Root Carry Select Adder", Journal of Circuits, Systems and Computers, World Scientific Publication(SCI Indexed by Thomson Reuters; Impact Factor: 1.33), Nov 2022.

## **2. Mr. A. A. Desai**

1. Published a paper entitled "Design , Analysis and Development of Additive Manufacturing by using FDM Technique with Dual Nozzle" 2022
2. Participated as Mentor for Smart India Hackthon 2022 which is organised by MHRD and AICTE, New Delhi
3. Winner team Mentor for Smart India Hackthon 2020 which is organised by MHRD and AICTE, New Delhi
4. Participated and exhibited Conference of Autodesk University India & SAARC 2019 in projects on dated 5th and 6th September 2019 at Bangalore.

# Faculty Development Programme “SMART TOOLS AND METHODOLOGIES FOR ACADEMIC RESEARCH” On 25th to 29th December 2022

**Registration Form**  
One week Faculty Development program

**“SMART TOOLS AND METHODOLOGIES FOR ACADEMIC RESEARCH”**

**25<sup>th</sup>Dec to 29<sup>th</sup>Dec, 2022**

**Organized by**  
**DEPARTMENT OF**  
**AUTOMATION AND ROBOTICS &**  
**MECHATRONICS ENGINEERING**

Name : \_\_\_\_\_  
Qualification: \_\_\_\_\_  
Designation: \_\_\_\_\_  
Department: \_\_\_\_\_  
Address for correspondence: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Mobile No.: \_\_\_\_\_  
Email ID : \_\_\_\_\_  
Sign. of participant: \_\_\_\_\_

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Chairman, Shri.ShamraoPatil (Yadavkar) Educational & Charitable Trust  
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Mr. B. B. Sangame (Dean, Administrative)  
Mrs. P.D.Ghate (Dean, Faculty Development)  
Mr. K. A. Patil (Dean, IIPC)  
Mr. K. H. Shedbalkar (Dean, R&D)  
Mr. S. V. Kumbhar (Dean, Students affairs)  
Mr. A. B. Jadhav (Dean, Finance)

**Convener**  
Dr. G.S.Patel (Head, Automation & Robotics. Dept.)  
Dr.S.K.Shikalgar (Mechatronics Engg.Dept.)

**Organizing Committee**  
Mr. A.A. Desai (Coordinator)  
Mr. G.V. Pujari (Coordinator)  
Mr. Y. Y. Kamble (Coordinator)  
Mrs. K.V. Joshi (Coordinator)

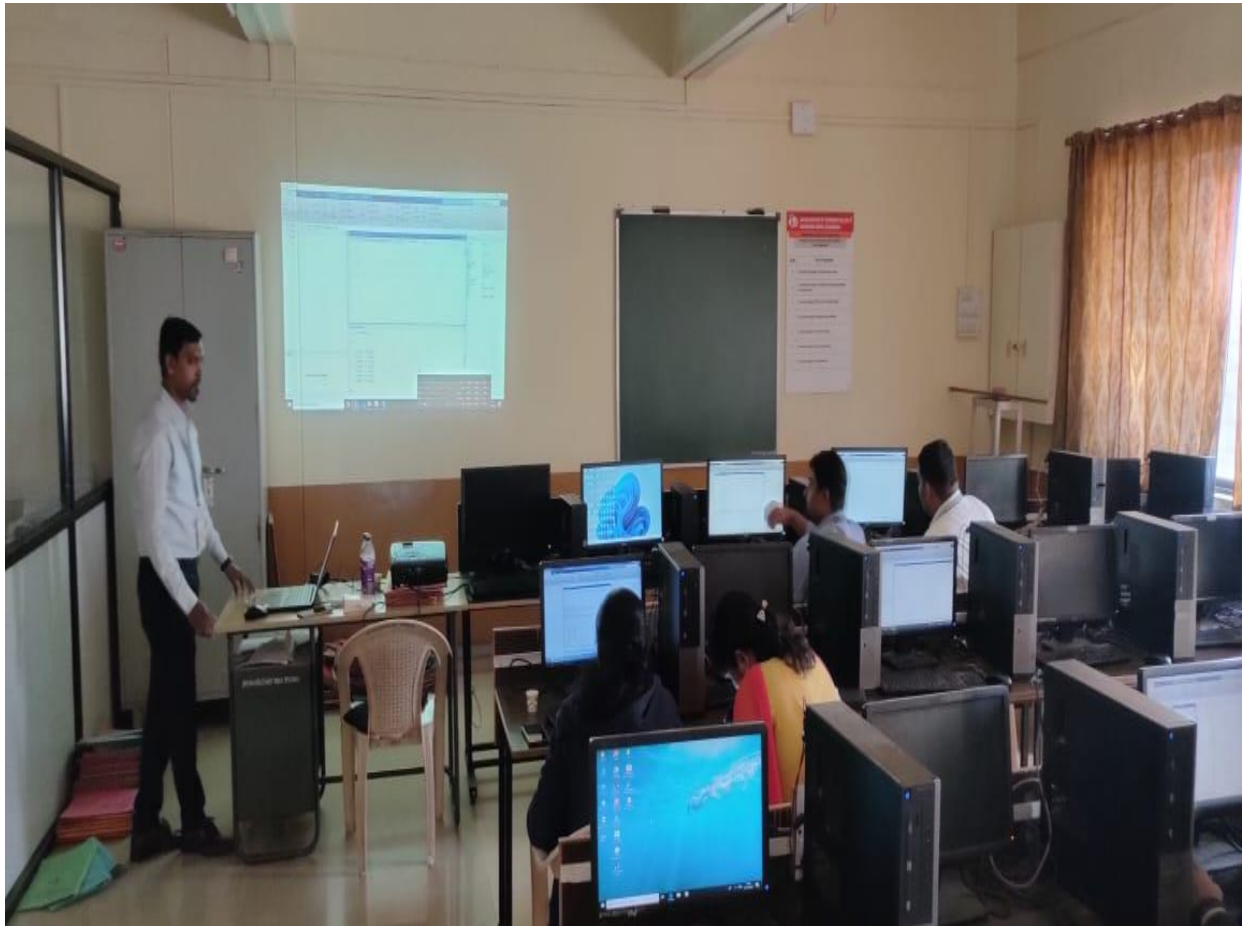


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(An Autonomous Institute)  
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**One Week Faculty Development program**  
on  
**“SMART TOOLS AND METHODOLOGIES FOR ACADEMIC RESEARCH”**  
**25<sup>th</sup>Dec to 29<sup>th</sup>Dec, 2022**







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