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

SHARAD INSTITUTE OF TECHNOLOGY, COLLEGE OF ENGINEERING, YADRAV

An Autonomous Institute

APEX

...A Newsletter

DEPARTMENT OF MECHANICAL ENGINEERING 2024-25

Vol-1, Issue-2

Themes Inside

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Report of One-Day Workshop on Reverse Engineering

Date: **23/01/2025**

Time: **09:30 AM to 04:30 PM**

Topic: **Reverse Engineering**

Resource Persons: **Mr. Shivaraj Mahajan**

Mr. Vinayak Mane Reverse

Mr. Mahammadkaif Naik

The One Day Workshop was conducted on Thursday, 23/01/2025 for the class of TY Mechanical, Mechatronics, Automation and Robotics Engineering students on the topic “Reverse Engineering” in association with Industry Partner Reverse Minds LLP Belagavi Karnataka and Indian Society for Technical Education.

Reverse engineering is the act of dismantling an object to see how it works. It is done primarily to analyze and gain knowledge about the way something works but often is used to duplicate or enhance the object. Many things can be reverse-engineered, including software, physical machines, military technology, and even biological functions related to how genes work.

The workshop was designed to provide insights and live demonstrations about the state-of-the-art Reverse Engineering Process. Learning reverse engineering can help students to understand how products work, identify vulnerabilities, and

improve designs. It can also help to create reliable models for research and innovation.

Introduction and vote of thanks were proposed by department guest lecture committee head Dr. Padmakumar A. Bajakke. Some glimpses of the program are attached to this report.

Agenda

Date: 23rd January 2025	**Time: 09:30 AM**	**Venue: Seminar Hall-1**
09:30 AM – 09:45 AM	Students and Faculties Assembly in Seminar Hall 1	
09:45 AM – 10:00 AM	Escorting Resource Persons, Principal, Deans, and HODs	
10:00 AM – 10:05 AM	Welcome Address by Dr. P. A. Bajakke, Convenor	
10:05 AM – 10:10 AM	Green Inauguration by Watering Plant	
10:10 AM – 10:15 AM	Keynote Address by Dr. S. D. Patil, HOD	
10:15 AM – 10:25 AM	Keynote Address by Dr. S. A. Khot, Principal	
10:30 AM – 12:30 PM	Session-1 Insights of Reverse Engineering	
12:30 AM – 01:30 PM	Lunch Break	
01:30 AM – 04:00 PM	Session-2 Live Demonstration of Reverse Engineering	
04:00 AM – 04:15 PM	Resource Persons Interaction with Students	
04:15 AM – 04:30 PM	Vote of Thanks and Closing Remarks	

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SHARAD INSTITUTE OF TECHNOLOGY, COLLEGE OF ENGINEERING
Yadrav - Ichalkaranji, Dist-Kolhapur (Maharashtra)
AN AUTONOMOUS INSTITUTE
» NBA Accredited Programmes » NAAC 'A' Grade Institution » An ISO 9001: 2015 Certified Institute
Department of Mechanical Engineering is organising
ONE DAY
WORKSHOP ON
REVERSE ENGINEERING
Mr. Shivaraj Mahajan & Team
(Reverse Minds LLP Belagavi)
Thur. 23rd January 2025
09:30AM
Venue - SITCOE, Seminar Hall-1
Dr. P. A. Bajakke Convenor
Dr. S. D. Patil HOD
Dr. S. A. Khot Principal
Shri Anil Bagane Executive Director


Shri. Shamrao Patil Yadravkar Educational & CharitableTrust's
Sharad Institute of Technology
College of Engineering, Yadrav.
ONE DAY
WORKSHOP ON
REVERSE ENGINEERING
23rd
09:30AM
GPS Map Camera
Ichalkaranji, Maharashtra, India
Pf5h+493, Yadrav, Ichalkaranji, Maharashtra 416121, India
Lat 16.708336° Long 74.478417°
23/01/25 10:37 AM GMT +05:30
Google


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College of Engineering, Yadrav.
ONE DAY
WORKSHOP ON
REVERSE ENGINEERING
23rd
09:30AM
GPS Map Camera
Ichalkaranji, Maharashtra, India
Pf5h+493, Yadrav, Ichalkaranji, Maharashtra 416121, India
Lat 16.708345° Long 74.478403°
23/01/25 10:36 AM GMT +05:30
Google

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STUDENT RESEARCH PROJECT GRANT AMOUNT ₹42,420/- FROM ISHRAE

Congratulations

Project Title:

Sustainable Space Cooling Through Solar-Assisted Evaporative System With Porous Pads and Nanofluids

ISHRAE

GUIDE :

Mr. Avesahemed Husainy Mr. Sujit Kumbhar

STUDENTS :

Pratik Prabhakar Gurav Rushikesh Nana Kshirsagar

Sumit Suresh Mangave Abhijeet Appaso Hagande

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STUDENT RESEARCH PROJECT GRANT AMOUNT ₹48,500/- FROM ISHRAE

Congratulations

Project Title:

Smart Algae Bio Panels: Revolutionizing HVAC with Renewable Energy and Carbon Sequestration

ISHRAE

GUIDE :

Mr. Avesahemed Husainy

STUDENTS :

Sumit Suresh Mangave Chetan Chandrakant Patil

Vedant Nitinkumar Yalazare Akil Raju Mujawar

IPR ACTIVITY

Sr. No.	Title	Name of Applicant/ Inventor	Patent Type	Patent No	Status
1	Automatic moisture Control system for Vermicompost bed	Dr. Sagar Dnyandev Patil, Mr. Ashish Arunrao Desai , Dr. Pravin Hindurao Yadav, Aniket Amar Mhetar, Avinash Pandurang Nirmal, Rohit Sunil Mahabale, Avadhut Appaso Mane	Indian Patent	202321019081	Published
2	Hydraulic flood protection system at global industry	Mr.Bahubali B Sangame, Mr. Pratapsinh S Chougule, Dr. Vishal V Patil, Dr.Adik M Takale, Mr.Shital P Udgave, Ms.Viddya S Patil	Indian Patent	202321034729	Published
3	Kinetic Energy advanced recovery system using flywheel bicycle	Dr.Suyog S Patil, Mr.Swapnil B Herwade, Ms.Anjali A Zalake, Mr.Saurabh B Kamble, Mr.Sunil S Jugale, Mr.Utkal S Patil	Indian Patent	202321034730	Published

Industrial Visits

Innovation 2k25

K-12 Activity

ISHRAE
KOLHAPUR CHAPTER

GREEN

Women in ISHRAE

World Earth Day

ISHRAE Technoloy Day (ITD)

K-12 Activity

By,
Dr. S V Kumbhar, Assistant Professor, AR Department,
SITCOE, Yadrav and K-12 Activity Chair,IKC

Date and Time:
23rd April 2025,
12 PM Onwards

Venue: Sharad Junior College, Yadrav-Ichalkaranji

Earth Day

Mr. Avesahemad Husainy	Mr. Yogesh Gandhi	Mr. Vijay Patil	Mr. Rangrao Ekal
President, IKC	President Elect, IKC	Secretary, IKC	Treasurer,IKC
Contact: 8007005860	Contact: 986085858581	Contact:7620443426	Contact:9850336292

Program Outcomes (Pos)

Mechanical Engineering graduates will be able to,

1. **Engineering Knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problem.
2. **Problem Analysis**: Identify, formulate, review research literature, and analyze complex engineering problem reaching sustained conclusions using first principle of mathematics, natural sciences, and engineering sciences.
3. **Design/ development of solutions**: Design solutions for complex engineering problem and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, societal and environmental considerations.
4. **Conduct investigations of complex problems**: Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.
5. **Modern tool usage**: Create, select and apply appropriate the techniques, resources and modern engineering and IT tools including and modeling to complex engineering activities with an understanding of the limitations.
6. **Engineer & society** : Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
9. **Individual and team work:** Function effectively as an individual and as a member or leader in diverse terms and in multidisciplinary settings.
10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, give and receive clear instructions.
11. **Project management and finance**: Demonstrate knowledge and understanding of engineering and management principles and apply these to one's work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Lifelong learning**: Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

Program Specific Program Objectives

Mechanical Engineering graduates will be able to,

1. Ability to demonstrate knowledge of mechanical engineering/ sciences for solving industrial problems
2. To be able to analyze & optimize real life problem through simulation & testing with prototype by using advance engineering techniques.

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Sharad Institute of Technology,
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E-mail: contact@sitcoe.org.in website: www.sitcoe.org.in

VISION AND MISSION OF THE INSTITUTE

Vision

- **To be a center of excellence in technical education by using cutting edge technology that produces competent engineers of today and tomorrow to serve the society.**

Mission

- **To impart quality education by implementing state-of-the-art teaching-learning methods to enrich the academic competency, credibility and integrity of the students.**

- **To facilitate a conducive ambience and infrastructure to develop professional skills and nurture innovation in students.**

- **To inculcate sensitivity towards society, respect for environment and promote high standards of ethics.**

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E-mail: contact@sitcoe.org.in & website: www.sitcoe.org.in

VISION AND MISSION OF THE DEPARTMENT

Vision

- **To be a centre of excellence in Mechanical Engineering 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.**


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COLLEGE OF ENGINEERING
Galaxy A34 5G

OUR PROFESSIONAL SOCIETIES

Indian Society for Non-Destructive Testing

ISO 9001:2015

One more Crowning moment for Sharad Institute of Technology College of Engineering, Ichalkaranji, Dist- Kolhapur, Maharashtra. SITCOE has now became **ISO 9001:2015 Accredited Engineering Institute.**

9001:2015 ISO CERTIFIED Registered Quality System

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SHARAD INSTITUTE OF TECHNOLOGY, COLLEGE OF ENGINEERING, YADRAV

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