

Understanding the Heart of Automobile



Department of Mechanical Engineering, Sinhgad Institute of Technology, Kusgaon (Bk.), Lonavala, Pune-410401

# **Club Activity Report**

A. Y.: 2022 - 2023



#### **Contact Information:**

Mr. Mohit Ganesh Nikam (Club President) +91 9075327706

Mr. Sanskar Yadav (Registration Head) +91 9146947913

#### Social Media:

Instagram: ice.\_.club\_

Facebook: ICE CLUB



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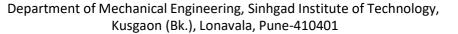
No.	Description	Date	Page No.
1.	Workshop for FE all engineering students	11 <sup>th</sup> feb 2023	1

### **List of Coordinators:**

Sr. No.	Name	Designation	
1.	Prof. R. S. Patil	Faculty Coordinator	
2.	Mr. Mohit Ganesh Nikam	Club President	
3.	Mr. Sanskar Yadav	Registration Head	
4.	Mr. Gaurav Shirsath	Member	
5.	Ms. Shreya Khobragade	Member	



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**Workshop Report: Hands-On IC Engine Workshop** 

Date: 11th February 2023 Expert Speaker: Mr. Jaiprakash Kumbhar

Number of Participants: 36

#### Introduction:

The hands-on IC Engine workshop was organized on 11th February 2023, with the aim of providing participants with practical knowledge and experience in the field of Internal Combustion Engines (IC Engines). The workshop was conducted by the renowned expert, Mr. Jaiprakash Kumbhar, who is a well-respected authority in the field of automotive engineering.

#### **Workshop Objectives:**

- ➤ To introduce participants to the principles and functioning of Internal Combustion Engines.
- > To provide hands-on experience in assembling and disassembling different types of IC Engines.
- ➤ To explain the various components and their roles within the engine system.
- ➤ To demonstrate troubleshooting techniques and common maintenance practices.
- Workshop Agenda:

**Introduction to IC Engines**: The workshop commenced with an overview of the history and evolution of IC Engines, highlighting their significance in various industries.

**Working Principles:** Mr. R.S. Patil who is faculty coordinator of ICE club, elucidated the fundamental working principles of IC Engines, covering both the four-stroke and two-stroke cycles. He also explained the differences between gasoline and diesel engines. He also overviewed the advanced technology adopted in IC engine to improve its performance in terms of fuel consumption, output power, safety and emission level.

**Engine Components**: Participants were given a detailed explanation of the major components of an IC Engine, such as the cylinder, piston, crankshaft, valves, and camshaft. Special emphasis was placed on their functions and interconnections.

**Hands-On Session:** The highlight of the workshop was the hands-on session, during which participants had the opportunity to work directly with IC Engines. Mr. Jaiprakash demonstrated the proper methods of assembling and disassembling engines, ensuring a practical learning experience.

**Competition session:** there were six groups formed each consist of 5 members. All groups were given an engine to practice enough after the training session. Once the participants felt confidents, the competition began Out of 6 groups one group succeeded to assemble within 11 min.

**Troubleshooting and Maintenance:** Participants were exposed to common issues that arise in IC Engines and were taught troubleshooting techniques to identify and rectify them. Additionally, Mr. Jaiprakash shared valuable insights on regular engine maintenance to ensure optimal performance and longevity.



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**Q&A Session:** A question-and-answer segment followed the practical session, allowing participants to seek clarifications on specific concepts or challenges they encountered during the hands-on activities.

#### **Participant Feedback:**

The workshop received overwhelmingly positive feedback from the 36 participants. Many appreciated the practical approach of the session, which allowed them to gain hands-on experience with IC Engines under the guidance of a seasoned expert. Participants also commended Mr. Jaiprakash's teaching style, as he made complex concepts easy to understand.

#### **Conclusion:**

The hands-on IC Engine workshop conducted by Mr. Jaiprakash on 11th February 2023 proved to be a valuable and enriching experience for all participants. It not only enhanced their theoretical understanding of IC Engines but also provided them with the confidence and skills to work on these engines practically. The workshop's success can be attributed to the expertise of Mr. Jaiprakash and the active participation of the enthusiastic attendees.

#### **Acknowledgments:**

The organizers express their heartfelt gratitude to Mr. Jaiprakash for graciously sharing his knowledge and expertise. Special thanks to all the



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#### PHOTO GALLERY



Image: faculty coordinator Mr.R.S. Patil and expert Mr. Jaiprakash Kumbhar



Image: Expert Mr. Jaiprakash Kumbhar overviewing about work shop and its importance



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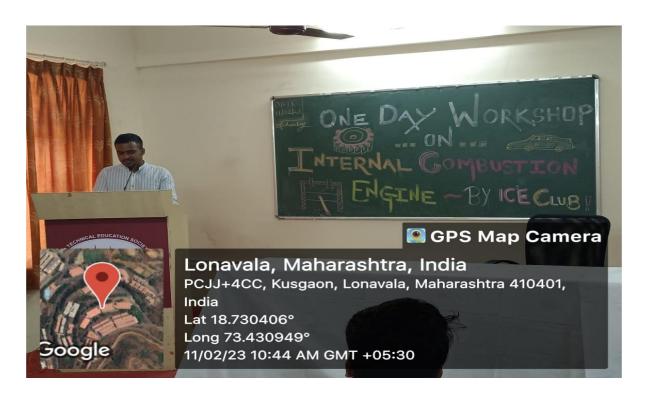


Image: Mr. Mohit Ganesh Nikam, President ICE club addressing participants



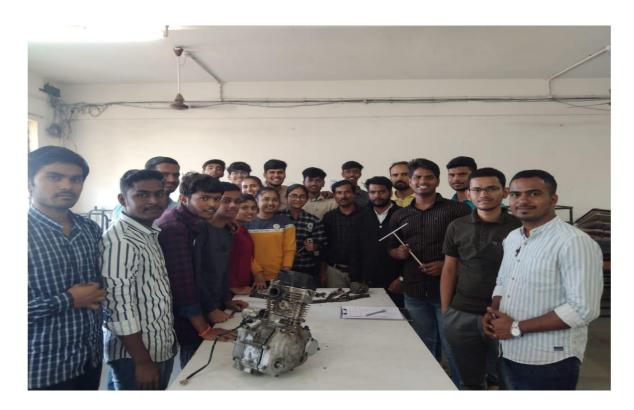
Image: All Participants



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