Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

Report of Workshop on Fundamentals of ANSYS: Simulation and Analysis

Topic: Workshop on "Fundamentals of ANSYS: Simulation and Analysis"

Organized by: Department of Automobile Engineering, Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (in association with IQAC Cell)

Speaker: Mr. Bijay Naskar, Senior Technical Consultant, Ardent Computech Pvt. Ltd., Kolkata

Date: 31st March 2026

Time: 02:00 PM onwards

Mode: Offline

No. of Participants: 27

Introduction:

The Department of Automobile Engineering of Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex, in association with IQAC Cell, organized a workshop on "Fundamentals of ANSYS: Simulation and Analysis" on 31st March 2026 from 02:00 PM onwards.

The primary objective of the workshop was to introduce students to the basic principles of simulation and analysis using ANSYS, a widely used engineering simulation software in various industries.

The session was conducted by Mr. Bijay Naskar, Senior Technical Consultant at Ardent Computech Pvt. Ltd., Kolkata, who has extensive expertise in simulation, finite element analysis (FEA), and industrial applications of ANSYS.

Background:

ANSYS is one of the most powerful engineering simulation tools used in mechanical, automobile, aerospace, and manufacturing industries. For automobile engineering students, knowledge of simulation tools helps in:

- Understanding real-time behaviour of components
- Performing structural, thermal, and fluid analysis
- Reducing design errors and improving efficiency
- Enhancing industry readiness

The workshop aimed to bridge the gap between theoretical knowledge and practical simulation skills required in modern engineering industries.

Objectives of the Workshop:

The key objectives of the workshop were:

1. To introduce students to the fundamentals of ANSYS software.

2. To familiarize participants with simulation and analysis concepts.
3. To demonstrate basic modelling and analysis techniques.
4. To explain the role of simulation in automotive and manufacturing industries.
5. To enhance students' employability through skill development in CAE tools.

Overview of the Workshop:

The session commenced with a welcome address from the Department of Automobile Engineering. Mr. Bijay Naskar initiated the workshop by highlighting the importance of simulation in modern engineering design and analysis.

Key Highlights:

- Introduction to ANSYS interface and workbench environment
- Fundamentals of simulation and finite element analysis (FEA)
- Demonstration of basic modelling and meshing techniques
- Structural analysis of simple components
- Application of boundary conditions and result interpretation
- Industrial applications of ANSYS in automobile engineering
- Interactive doubt-clearing session with students

Learning Outcomes:

By the end of the workshop, students were able to:

- Understand the basics of simulation and analysis using ANSYS
- Gain familiarity with ANSYS interface and workflow
- Develop basic knowledge of modelling, meshing, and analysis
- Understand real-world industrial applications of simulation
- Improve analytical and problem-solving skills
- Enhance readiness for CAE-based internships and career opportunities

Conclusion:

The workshop on "Fundamentals of ANSYS: Simulation and Analysis", conducted by Mr. Bijay Naskar, was highly informative and beneficial for the students.

It provided valuable exposure to simulation tools and strengthened the technical capabilities of the participants in line with industry requirements.

The Department of Automobile Engineering expressed sincere gratitude to the speaker for sharing his expertise and reaffirmed its commitment to organizing more such skill-oriented workshops for the overall development of students.

Workshop on “Fundamentals of ANSYS: Simulation and Analysis”conducted by department of Automobile Engineering in association with IQAC on 31/03/2026