



# Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

## Report on the Two-Day Workshop on Vehicle Maintenance

**Topic:** Two-Day Workshop on “Vehicle Maintenance”

**Organized by:** Department of Automobile Engineering, Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (DSCSITSC)

**Organized for:** 3rd Year Diploma Students, Automobile Engineering Department, Memari Government Polytechnic College, Memari.

**Speaker:**

Mr. Kalyan Mukherjee, Assistant Professor, Dept. of AUE, DSCSITSC

Mr. Pritam Bhattacharjee, Assistant Professor, Dept. of AUE, DSCSITSC

Mr. Sandip Bhadra, Senior Technical Assistant, Dept. of AUE, DSCSITSC

Mr. Supriya Dhara, Junior Technical Assistant, Dept. of AUE, DSCSITSC

**Date:** 10th November to 11th November 2025

**Time:** From 11:00 AM to 04:00 PM

**Venue:** Satish Dhawan Automobile Workshop

**No. of Participation:** 35

**Introduction:**

The Department of Automobile Engineering, Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (DSCSITSC) organized a two-day hands-on workshop on “Vehicle Maintenance” for 3rd year diploma students of Memari Government Polytechnic College, Memari on 10th and 11th November 2025. The workshop, held at the Satish Dhawan Automobile Workshop Shed, was led by technical experts Mr. Sandip Bhadra and Mr. Supriya Dhara. It focused on providing hands-on exposure to modern automotive systems, maintenance practices, and troubleshooting techniques that are essential for developing industry-ready skills among students. The session combined theoretical instruction with live demonstrations, bridging the gap between classroom knowledge and real-world applications. This workshop was coordinated by Mr. Kalyan Mukherjee, TIC, Department of Automobile Engineering, DSCSITSC.

**Background:**

With rapid advancements in automotive technology, vehicle maintenance has become more complex and dependent on technical expertise. Diploma students, especially in the final year, need strong practical knowledge of both conventional and modern vehicles to prepare for professional roles in workshops, service centers, and manufacturing industries. Recognizing this, the Automobile Engineering Department designed a structured workshop that emphasized preventive maintenance, diagnostics, and repair procedures for both two-wheelers and four-wheelers.

**Objective:**

The main objectives of the workshop were as follows:

- To develop practical knowledge of routine vehicle maintenance and servicing techniques.
- To train students in the identification and rectification of common mechanical and electrical faults.

- To familiarize students with the tools, equipment, and diagnostic instruments used in automotive workshops.
- To improve awareness of safety practices and standard procedures followed in vehicle servicing.
- To train students for industrial employment by enhancing hands-on technical competency.

### **Overview of the Workshop:**

During the workshop, the following key areas were covered:

- Day 1 – 10th November 2025
  - ❖ Introduction to the layout and working of major vehicle systems, such as, engine assembly, cooling, lubrication, and fuel systems.
  - ❖ Live demonstrations were performed on both petrol and diesel engines, where students observed procedures such as engine oil change, air filter cleaning, coolant replacement, and spark plug inspection.
  - ❖ Focused on chassis and suspension systems, including brake bleeding, wheel alignment basics, and tire inspection.
  - ❖ Learned the practical steps for diagnosing uneven wear, brake failure, and shock absorber faults.
- Day 2 – 11th November 2025
  - ❖ Emphasized electrical and electronic systems of modern vehicles.
  - ❖ Safety practices, emphasizing the importance of PPE, tool handling, and waste management in the workshop environment Detailed explanation of BS VI Compliant Systems.
  - ❖ Diagnostic approaches using OBD tools and scanner-based analysis
  - ❖ Interactive session with Q&A and real-life troubleshooting examples

### **Learning Outcomes:**

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

- Understand the systematic procedures of preventive and corrective vehicle maintenance.
- Identify, diagnose, and troubleshoot mechanical and electrical faults in automobiles.
- Operate workshop tools, instruments, and diagnostic equipment with confidence.
- Follow proper safety measures and standard servicing protocols.
- Gain hands-on experience with vehicle systems, improving their readiness for industrial training and employment.
- Appreciate the importance of documentation and customer handling in automotive service operations.

### **Conclusion:**

The Two-Day Workshop on Vehicle Maintenance proved to be highly beneficial for the third-year Diploma students of Memari Government Polytechnic College, Memari. It effectively strengthened their technical knowledge and enhanced their confidence in performing real-world automotive servicing tasks. The sessions offered a balanced blend of theory and practice, preparing students for the dynamic challenges of the automotive service industry.



Two-Day Workshop on Vehicle Maintenance conducted by the Department of Automobile Engineering for 3rd-Year Diploma Students (AUE) of Memari Government Polytechnic College from 10/11/2025 to 11/11/ 2025