



Newsletter: June 2022 – November 2022
Department of Automobile Engineering

NEWSLETTER

Welcome to this special expanded edition of the Tech Torque Newsletter. In this issue, we take a deeper look at the incredible momentum generated between June and November 2022. From massive campus-wide academic challenges to targeted safety protocols, our department has relentlessly pursued excellence in both theoretical knowledge and practical engineering application.

FAST AND FURIOUS: Auto Quiz

JULY25 - AUG25,2022 | 500PARTICIPANTS

Spanning an entire month, the "Fast and Furious" Auto Quiz was a monumental undertaking designed to comprehensively evaluate the technical knowledge of engineering students across the campus. The multi-stage event tested participants on a wide array of topics, ranging from fundamental internal combustion engine mechanics and historical automotive milestones to the latest developments in electric powertrains and autonomous vehicle sensors. The overwhelming response required intricate logistical planning, ultimately serving as a massive success for inter- departmental academic engagement.

STRATEGIC BENEFIT & OUTCOME

By gamifying academic concepts, this event massively enhanced student engagement and reinforced fundamental engineering principles. The large-scale competition fostered a healthy academic rivalry that continues to drive technical curiosity and independent learning outside the standard curriculum.

Q3-Q4 2022 Event Participation Scale

Auto Quiz: 500 Participants

Hybrid Seminar: 200

Maint. Workshop: 120

INDUSTRY COLLABORATION & ADVANCED TECH

Hybrid Technologies Seminar

SEPTEMBER 13, 2022 | TOYOTA-KIRLOSKAR PVT LTD

As the automotive landscape rapidly pivots toward sustainable mobility, the department hosted a premier seminar in direct collaboration with industry giant Toyota-Kirloskar Pvt Ltd. Drawing an impressive crowd of 200 engaged participants, the session provided a deep dive into the architecture of modern hybrid synergy drives. Industry experts led discussions on the intricate balance between internal combustion engines and electric motor generators, exploring topics such as high-voltage battery thermal management, planetary gearsets in power-split devices, and the efficiency gains of advanced regenerative braking systems. Students had the rare opportunity to analyze real-world case studies directly from one of the pioneers of hybrid technology.

STRATEGIC BENEFIT & OUTCOME

This seminar successfully bridged the critical gap between theoretical classroom learning and cutting-edge industry practice. It directly prepared our engineering students for the evolving job market by providing specialized knowledge on sustainable mobility, making them highly competitive candidates for modern automotive manufacturing and R&D roles.

Introduction to Design of Experiments

AUGUST 8, 2022 | KSPDR. ALBIN JOSEPH

Moving beyond standard theoretical models, the department organized a highly focused, advanced academic session centered on the Design of Experiments (DoE). Led by KSP Dr. Albin Joseph, this intimate session catered to 10 selected participants involved in core research. The workshop covered critical statistical tools, Taguchi methods, and orthogonal arrays. Participants learned how to systematically manipulate multiple input variables to observe and analyze their impact on output responses, a critical skill for optimizing complex automotive manufacturing processes and improving component reliability testing.

STRATEGIC BENEFIT & OUTCOME

Attendees were equipped with robust analytical frameworks capable of drastically reducing the time and cost associated with product testing. This elevates the overall quality of institutional research methodologies and empowers future engineers to make data-driven decisions in process optimization.

SKILL DEVELOPMENT & PRACTICAL TRAINING

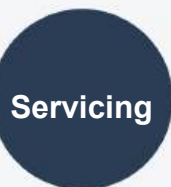
Basic Vehicle Maintenance Workshop

NOVEMBER 4 & 24, 2022 | 120 PARTICIPANTS

Recognizing the absolute necessity of hands-on mechanical competency, the department engineered a comprehensive, two-day workshop focused entirely on practical vehicle upkeep. With 120 students participating across the two dates, the workshop moved out of the lecture hall and into the garage. Instruction modules included live demonstrations of engine diagnostics, proper fluid level management and replacement procedures, brake system bleeding and adjustment, and tire wear analysis. Students worked directly on actual vehicles, translating schematic diagrams into tactile mechanical experience.

STRATEGIC BENEFIT & OUTCOME

This intensive hands-on experience empowered students with highly practical mechanical troubleshooting skills. By removing the intimidation factor of real-world vehicle servicing, the workshop drastically increased student self-reliance and solidified their foundational competency in diagnostics.



Career Takeoff Exam

NOVEMBER 5, 2022 | 26 PARTICIPANTS

Transitioning from academia to the professional world requires thorough preparation. The Career Takeoff Exam was structured as an intensive evaluation to assess professional aptitude and overall career readiness among graduating students. The exam simulated industry-standard technical interviews and quantitative aptitude tests, challenging 26 participants under strict time constraints to gauge their immediate employability.

STRATEGIC BENEFIT & OUTCOME

Provided a crucial, uncompromising benchmark for student readiness. By exposing candidates to real-world testing conditions, it helped them identify specific knowledge gaps, allowing them to intensely focus on skill improvements to maximize their interview success rates.

SAFETY INITIATIVES & COMPLIANCE

First Aid & Trauma Care Workshop

NOVEMBER 29, 2022 | 50 PARTICIPANTS

Automobile engineering is inherently tied to the realities of road safety. This critical health and safety workshop focused heavily on equipping 50 students with emergency medical response techniques specifically related to road trauma and industrial shop-floor accidents. Medical professionals guided students through the protocols of the "golden hour," teaching vital skills such as CPR, hemorrhage control, and the safe extraction of victims from compromised vehicle cabins.

STRATEGIC BENEFIT & OUTCOME

Actively cultivates a safer campus and broader community environment by training engineering students to respond swiftly, calmly, and effectively to traumatic medical emergencies, potentially saving lives before professional EMTs can arrive on the scene.

Road Safety Training Session

AUGUST 12, 2022 | SSET COLLEGE BUS DRIVERS

Our commitment to automotive excellence extends beyond the classroom and onto the roads our community travels daily. This targeted safety training initiative was exclusively designed for and conducted with the 35 drivers of the SSET College Bus fleet. The session emphasized modern defensive driving techniques, proper pre-trip vehicle safety inspections, blind-spot awareness for heavy vehicles, and stress management while navigating dense regional traffic.

STRATEGIC BENEFIT & OUTCOME

Directly improves daily campus transit safety and mitigates accident risks. Investing in the continuous education of our institutional logistics staff promotes highly responsible driving behaviors, ensuring the daily protection of hundreds of commuting students.

Departmental Administration: KSP Dept Files

Conducted on September 17, 2022, this specialized internal session gathered 10 key faculty and staff members. The initiative aimed at standardizing internal documentation, streamlining operational procedures, and rigorously updating academic record-keeping formats. This critical backend work ensures strict compliance with national academic accreditation standards, significantly improving overall administrative efficiency and departmental transparency for the academic year.