SAEINDIA Student Chapter Activity Report

SAE Collegiate Club,

Mar Baselios College of Engineering and Technology (MBCET)

Academic Year 2025–2026 (August 2025 – April 2026)

1. Introduction

The SAE Collegiate Club of Mar Baselios College of Engineering and Technology (MBCET) is a professional student body that aims to promote excellence in automotive and mobility engineering among undergraduate students. The club functions under the guidance of the Department of Mechanical Engineering and aligns its activities with the broader objectives of SAEINDIA and SAE International, namely technical competence, innovation, and industry readiness. During the academic year 2025–2026, the club organized a series of programs focusing on orientation, membership development, leadership formation, technical talks, competition preparation, internal contests, and international interaction.

This report presents a comprehensive account of the activities carried out by the SAE MBCET Collegiate Club during the academic year 2025–2026. Each major event is described separately in terms of objectives, date, venue, participation, and outcomes, so that the document can serve both as an academic record and as a reference for planning future activities. The following sections detail the orientation program, formation of active student membership, selection of new office bearers, invited talk “From Campus to Competitions,” participation in the BAJA SAE 2026 overview workshop, the college-level quiz competition “Throttle and Think,” and the International Student Mobility Program interaction with Malaysian students.

2. Orientation for First-Year Students on SAE

To introduce the new batch of students to the Society of Automotive Engineers and the functioning of the SAE Collegiate Club at MBCET, an orientation session for first-year students was organized early in the academic year 2025–2026. The primary objective of this program was to create awareness about SAE, its national and international presence, the range of student competitions (such as BAJA, Supra, Formula and other mobility events), and the benefits of becoming an SAE student member. The session also aimed to motivate students to participate in hands-on projects, technical events, and design competitions through the platform provided by the club.

Faculty coordinators and senior student members explained the structure and legacy of the SAE MBCET Collegiate Club, highlighting past achievements and opportunities for involvement. Students were briefed on how the club supports skill development in areas such as vehicle design, analysis, fabrication, and testing, while also nurturing soft skills including teamwork, communication, and leadership. The orientation concluded with a discussion on the proposed activity plan for 2025–2026 and instructions on how interested students could register as members and join different functional teams within the club.

3. Formation of SAE Active Student Membership (104 Registrations)

Following the successful orientation, the SAE MBCET Collegiate Club initiated a membership drive to enroll interested students as active members for the academic year 2025–2026. Through classroom announcements, notice board displays, peer outreach, and interaction sessions, the club encouraged students from Mechanical Engineering and other relevant branches to join the collegiate chapter. As a result of this coordinated effort, a total of 104 students completed their registrations and became active SAE members for the year.

The membership drive focused not only on increasing numbers but also on ensuring that students understood their roles and the expectations associated with club participation. After registration, the members were grouped based on their interests into areas such as technical/design, event management, publicity, documentation, and competition teams. This structured approach to membership formation ensured that the SAE MBCET Collegiate Club had a strong and diverse volunteer base to plan and execute its calendar of activities, including workshops, talks, competitions, and project initiatives.

4. Selection of New Office Bearers – SAE MBCET Student Collegiate Club

Event: Election and Selection of Office Bearers

Date: 19 September 2025

Venue: Seminar Hall, Department of Mechanical Engineering, MBCET

To provide effective leadership and ensure smooth functioning of the club, the SAE MBCET Student Collegiate Club conducted the selection of new office bearers for the academic year 2025–2026 on 19 September 2025. The meeting was held in the Department of Mechanical Engineering under the guidance of the faculty advisor, with the participation of active student members who had enrolled during the membership drive. The primary objective was to

constitute a committed leadership team capable of organizing and coordinating all SAE-related programs throughout the year.

Nominations were invited for key positions such as Student Chairperson/President, Vice Chairperson/Vice President, Secretary, Joint Secretary, Treasurer, and coordinators for technical, event, and publicity committees. Interested candidates briefly presented their motivation, prior contributions, and proposed ideas for strengthening the club's activities. Based on nominations, peer consensus, and faculty endorsement, the new panel of office bearers was finalized and entrusted with their responsibilities. With the office bearers formally installed on 19 September 2025, the club obtained a clear leadership structure to steer initiatives such as competition teams, workshops, guest talks, and outreach programs, thereby enhancing continuity, accountability, and communication within the chapter.

5. **Technical Talk: "From Campus to Competitions – An Intro to SAE"**

Event Title: From Campus to Competitions: An Intro to SAE

Guest Speaker: Er. Aswin K – Design Engineer, MRF

Date: 15 September 2025

Time: 1:00 PM – 1:30 PM

Venue: James Watt Hall (Mechanical Seminar Hall), MBCET

As part of its efforts to connect academic learning with real-world engineering challenges, the SAE MBCET Collegiate Club organized a technical talk titled “From Campus to Competitions: An Intro to SAE” on 15 September 2025. The invited speaker was Er. Aswin K, a Design Engineer at MRF, who brought valuable industrial experience and familiarity with SAE student competitions. The program, held from 1:00 PM to 1:30 PM at the James Watt Hall (Mechanical Seminar Hall), was attended by students keen to understand the pathway from classroom concepts to participation in national and international SAE events.

During the session, the resource person introduced students to the structure of SAE and SAEINDIA, the rationale behind competitions like BAJA and Supra, and the skills developed through these events, including design thinking, engineering analysis, project management, and teamwork. He elaborated on the stages involved in forming a competition team, conceptualizing a vehicle, adhering to event rules, managing time and resources, and interacting with juries and industry experts. The talk also highlighted career advantages of such experiences, especially in automotive and tyre industries, mobility solutions, and R&D domains. The program concluded with an interactive question-and-answer segment in which students clarified their doubts regarding team formation, funding, and preparation timelines for future competitions.

6. College-Level Quiz Competition – “Throttle and Think”

Event: College-Level Quiz Competition – “Throttle and Think”

Purpose: Selection of students for SAE South Zone competition

Date: 23 September 2025

Time: 1:00 PM

Venue: Seminar Hall, Mechanical Engineering Department, MBCET

Organized by: SAE Club of MBCET

To foster technical curiosity and identify students for representation in the SAE South Zone quiz competition, the SAE MBCET Collegiate Club conducted a college-level quiz competition titled “Throttle and Think” on 23 September 2025. The event was held at 1:00 PM in the seminar hall of the Mechanical Engineering Department and attracted enthusiastic participation from students across different semesters. The quiz focused on topics such as basics of automotive engineering, fundamental mechanical engineering concepts, mobility trends, safety and sustainability in transportation, and general SAE knowledge.

The competition was structured in multiple rounds, including preliminary written questions, oral rounds, rapid-fire segments, and situation-based problem questions, which tested both conceptual clarity and presence of mind. Teams were evaluated on accuracy, speed, teamwork,

and logical reasoning under time constraints. At the end of the competition, high-performing students were shortlisted to represent MBCET in the SAE South Zone quiz event. Beyond selection, "Throttle and Think" contributed to strengthening a culture of technical quizzing and peer learning within the college, while also giving the club experience in conducting structured academic competitions.

7. **Workshop: "VOLTZWHEELS – Powering the Future of Mobility"**

Event Title: VOLTZWHEELS – Powering the Future of Mobility

Date: 21 February 2026

Time: 8:30 AM

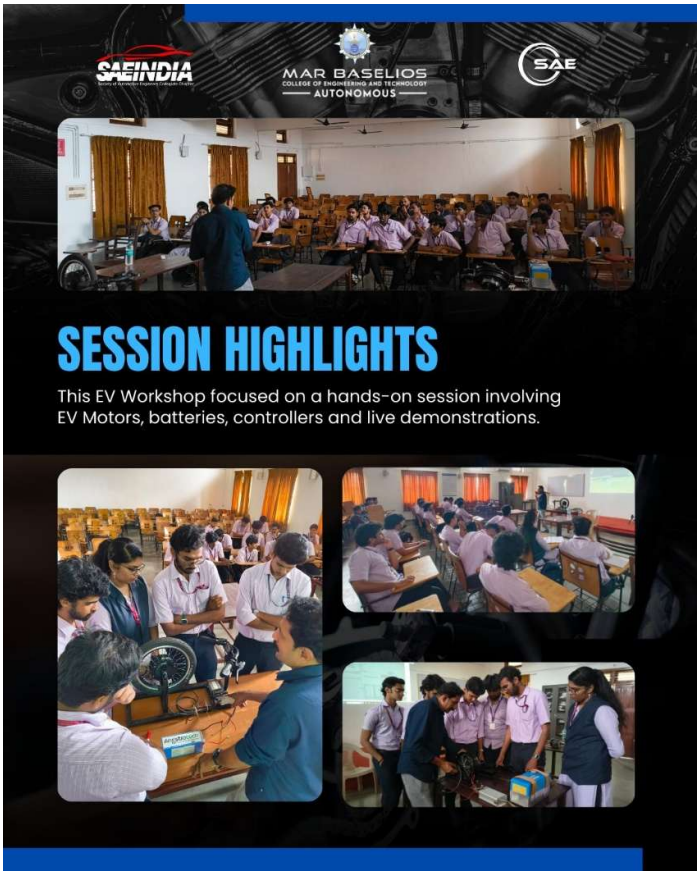
Venue: Seminar Hall (H-311), MBCET

As part of its initiative to promote awareness and hands-on learning in emerging automotive technologies, the SAE MBCET Collegiate Club organized a one-day workshop titled "VOLTZWHEELS – Powering the Future of Mobility" on 21 February 2026. The workshop

was conducted at the Seminar Hall (H-311), MBCET, and witnessed the participation of around 25 students who showed keen interest in electric mobility and sustainable transportation systems.

The workshop focused on providing a comprehensive introduction to the fundamentals of electric vehicles (EVs) and the technologies driving the future of mobility. Participants were introduced to key components such as electric motors, battery systems, controllers, and power electronics. The session also included practical demonstrations and hands-on exposure, enabling students to better understand the working principles and integration of EV subsystems.

In addition to technical knowledge, the workshop emphasized the importance of sustainable transportation and the global shift towards electrification in the automotive sector. Participants gained insights into current industry trends, challenges, and opportunities in electric mobility. The program concluded with an interactive session, where participants clarified their doubts and discussed prospects in the EV domain.



8. **Technical Talk: "AI in Mechanical Engineering – The Industry Revolution"**

Event Title: AI in Mechanical Engineering – The Industry Revolution

Guest Speaker: Mr. Shanmugam Sivaraman –Chairman, Membership and Member Care Board, SAEINDIA

Industry Veteran (30+ Years Experience, 150+ Product Developments)

Date: 13 March 2026

Time: 10:00 AM

Venue: Seminar Hall (H-311), MBCET

As part of its continuous effort to bridge the gap between traditional engineering education and emerging technologies, the SAE MBCET Collegiate Club organized a technical talk titled “AI in Mechanical Engineering – The Industry Revolution” on 13 March 2026. The session was delivered by Mr. Shanmugam Sivaraman, an industry veteran with over three decades of experience and a remarkable portfolio of more than 150 product developments. The program was held at the Seminar Hall (H-311), MBCET, and witnessed the participation of around 60 students from mechanical and allied engineering disciplines.

During the session, the speaker provided valuable insights into how Artificial Intelligence is transforming conventional mechanical engineering practices. He discussed the integration of AI with core mechanical principles, emphasizing applications in smart manufacturing, predictive maintenance, automation, and design optimization. Real-world Industry 4.0 case studies were presented to illustrate how AI-driven technologies are reshaping industrial processes and improving efficiency and productivity.

The talk also included a special briefing on upcoming SAE India events and initiatives, encouraging students to actively participate in technical competitions and professional activities. The session concluded with an interactive discussion, where students engaged with the speaker to clarify concepts and explore career opportunities in AI-driven engineering domains.

9. Technical Events under VORTECHX 2026

Event Title: Technical Events under VORTECHX 2026

Organized by: SAE MBCET Collegiate Club

Date: 23 March 2026

Time: 10:00 AM

Venue: Mechanical Engineering Department, MBCET

As part of the technical fest VORTECHX 2026 organized by the Mechanical Engineering Department of Mar Baselios College of Engineering and Technology, the SAE MBCET Collegiate Club conducted a series of engaging and skill-oriented technical events on 23 March 2026. The events were held at the Mechanical Engineering Department from 10:00 AM onwards and witnessed active participation from students across various departments.

The events organized included Controlled Impact, Paper Plane Design and Flight Competition, Pit Stop, CAD Competition, ECOrun, Reaction Time Test, and Time Attack Challenge Test. Each event was designed to test different aspects of engineering knowledge and skills such as design thinking, problem-solving, creativity, precision, and time management.

Participants actively engaged in these competitions, showcasing their technical abilities and innovative approaches. The CAD competition focused on design and modeling skills, while events like Pit Stop and Controlled Impact tested practical understanding and teamwork. The Paper Plane Design competition encouraged creativity and aerodynamic thinking, whereas ECOrun highlighted energy efficiency concepts. Reaction Time Test and Time Attack Challenge evaluated reflexes, accuracy, and performance under time constraints.

The event saw the participation of approximately 100 students, making it a vibrant and competitive platform for learning and interaction. Overall, the activities conducted by SAE MBCET under VORTECHX 2026 successfully fostered technical enthusiasm, teamwork, and hands-on learning among the participants.

10. Outcomes and Impact of Activities

The activities conducted by the SAE MBCET Collegiate Club during the academic year 2025–2026 resulted in a measurable enhancement of both technical competency and professional readiness among students. The orientation and structured membership drive successfully established a committed base of 104 active members, creating a strong foundation for sustained engagement. The timely constitution of office bearers ensured effective governance, improved coordination, and continuity in executing planned initiatives. Expert-led sessions, including technical talks and workshops on emerging domains such as electric mobility and artificial intelligence, significantly strengthened students' understanding of industry practices, current trends, and future opportunities. Competitive and participatory events such as "Throttle and Think" and the VORTECHX 2026 technical competitions cultivated analytical thinking, teamwork, and problem-solving abilities, while also identifying talent for higher-level representation. Overall, these initiatives fostered a culture of experiential learning, innovation, and collaboration, while enhancing student confidence in participating in national-level SAE competitions and interdisciplinary technical activities.

11. Conclusion and Future Plan

The academic year 2025–2026 marked a phase of structured growth and active engagement for the SAE MBCET Collegiate Club, with a balanced focus on awareness, skill development, leadership, and industry interaction. The club effectively created a dynamic platform that bridged academic learning with practical application through a combination of technical talks, workshops, competitions, and collaborative activities. Building on this momentum, the future plan emphasizes the formation of dedicated competition teams for flagship SAEINDIA events

such as BAJA and other mobility challenges, along with increased emphasis on hands-on project development and prototype building. The club also aims to expand its outreach through industrial visits, expert mentoring sessions, and international collaborations, while strengthening interdisciplinary participation across departments. With sustained institutional support and active student involvement, the SAE MBCET Collegiate Club is well-positioned to evolve into a center of excellence for automotive and mobility innovation, contributing significantly to the holistic development and industry readiness of engineering students.