

## 6. Technical Paper Presentation

**The concept:** The student selects a topic, collects information and presents a synopsis or abstract and compare the different papers, review it thoroughly. Even they can submit and present their project work in the form of technical paper.

### Alignment with curriculum:

- Subject from the curriculum
- Self-learning
- **Paper format SAE International Format**

### Expectations

Tier-I	Tier-II	Tier-III
Basic data collection Logical reporting	Good depth of data collection Correlation of data collected from different sources Some hint of an original idea or conclusion	Quantitative validation of original idea either through theoretical investigation or experimental investigation (note: the participant must submit 2-d, 3-d modelling and analysis in software, depending upon the type paper presented)

### Topics:

- Alternate Propulsion Technologies
- Advanced Engine Technologies
- Fuel Injection Systems
- Hybrid and Electric vehicles
- Emerging Fuels and Fuel Cells
- Energy Storage Systems and Infrastructure
- Safety and Crash
- NVH and Cabin Comfort
- Automobile Emissions and After treatments
- 3R-reduce, reuse and recycle
- Automotive electronics
- Vehicle Communications Network
- Nano technology
- Advanced lightweight materials
- Aero structure and technologies
- Off highway vehicles

- Vehicle body structures and frames
- Vehicle dynamics and handling
- Fuel economy and Co2
- Dynamic modelling processes
- Automotive testing and instrumentation
- Vehicle architecture
- Product development tools and techniques
- Policies, regulations and standards
- Public, private and academic partnerships
- Mechanical science applied to mobility domain
- Mechatronics applied to mobility domain

**Competition rules:**

- Paper should be submitted one week ahead of competition date.
- Presentation in the competition
- 7-minute presentation
- 3-minute question and answer

**Teams:**

- Team size: 2 students
- Number of teams for Tier-I: as many as possible
- One team from each college moves to Tier-II
- Two teams from each division moves to Tier-III

**Judging Criteria:**

Tier-I	Tier-II	Tier-III
70% for quality for paper Criteria: according to SAE international. 30% for presentation Criteria: technical content, beneficiaries, quality of slides, literature review and design clarity in the presentation, confidence in answering queries Data collection.		40% for quality for paper Criteria: according to SAE international. 30% for design Criteria: based on drawing views objective and conformity of 2-D, 3-D and Analysis design. 30% for presentation Criteria: Same as tier I and II, along with product development with 2-D, 3-D and Analysis. Data collection.