



# **SAEISS SKIP PROGRAM REPORT**

:	Off Highway and Special Types of Vehicles
:	19 <sup>th</sup> & 20 <sup>th</sup> August 2017
:	Dr. E. Rajasekar, M.E., Ph.D.,
:	Mr. B. SenthilKumar, SKIP Champion
:	Mr. R. Armstrong, MC Member, SAEISS
:	48 Students
:	3 colleges
:	SAEINDIA Southern Section, Guindy
	: : : : : :

#### Suggested Topics for Future SKIP Program:

- Automotive Cars , Advance Automotive System, Modern Upgraded Engines
- Sensors And Electrical Engines
- Nano Technology Influence In Automobile Engineering
- Workshop Regarding F1 Cars, SAE Supra and Baja
- Electric Vehicle And Sports Car
- Add Some More Off Road Vehicles Such As Concrete Mixture Machines.
- Specification Of Engine / Green Engine Technology
- Race Cars And Bikes
- Practical Classes Related To Component Using In The Vehicles
- Engines Performance , Brakes System, ABS, Engine Designing

#### **Special Suggestion Points:**

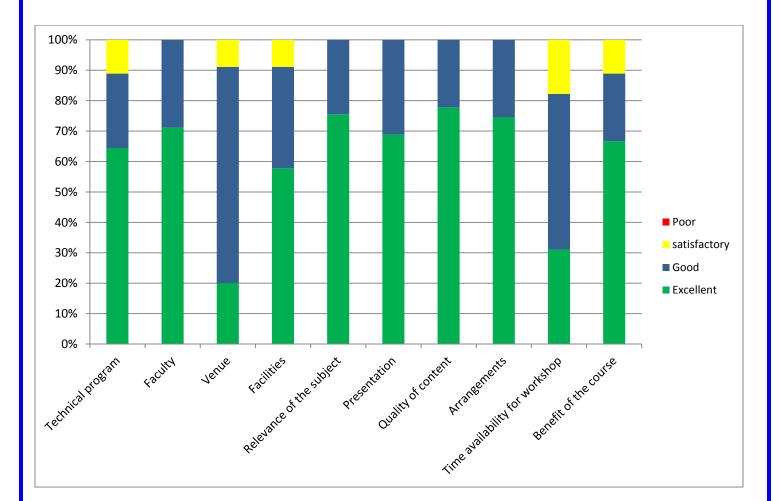
- Hands on Training should be needed
- Classes Can be more interactive and efficient
- More interesting and technical program
- Need more practical sessions
- Good program but need some work experience not only as a seminar
- It is good to know more about the off highway vehicles





### **Objective:**

- To understand the various requirements of ORVs.
- To gain knowledge about vehicle sub systems and operating members.
- To explore the system/component contribution towards vehicle performance.
- To know about the Hydro Pneumatic suspension, Body hoist mechanism, Tractor.
- Trailer brake, Skid steering, Clutch- brake mechanism, Differential brake etc.
- Learn to design components to meet specifications.
- Demonstration of functioning of ORVs.



## Criteria and Comments about the program:





# **Report**

SKIP program on topic of **"Off Highway and Special Types of Vehicles"** was organised by SAEINDIA Southern Section on 19<sup>th</sup> & 20<sup>th</sup> August 2017 at SAEINDIA Southern Section, Guindy, and Chennai.

Speaker: Dr. E. Rajasekar, M.E., Ph.D., (Professor, Faculty of Automobile Engineering, IRTT)

Off Highway and Special Types of Vehicles SKIP Program Introduction and Inauguration was done by Mr. B. Senthil kumar, SKIP Champion - SAEISS. He introduced the speaker Dr. E. Rajasekar to the participants. He explained the speaker's vast experience in the Automotive field. Then he handed over the session to the speaker.



Dr. E. Rajasekar started the program with a brief Introduction about Off Highway and Special Types of Vehicles. He explained about Requirements of Off Highway Vehicles with slides & Video. He presented the videos of different kind of Off Highway vehicles to the participants. Through video the participants are very much able to visualize the vehicles performance and their operation.

This Training explores about the basic aspects of understanding the construction, working and salient features of Heavy Goods Vehicles, Construction and Earth moving vehicles, Land clearing Vehicles, Wheeled and Crawler Tractors, Material Handling vehicles, Military Vehicles etc. This will pave a platform for the understanding of all Special types of Vehicles.







He also explained the working mechanism of Dump trucks, Excavators, Bull dozers, Military Tanks, Loaders, Wheeled and Crawler Tractors, Tree dozers, Scrappers and Bush cutters to the participants. Then he also explained the technical features of each vehicle. The participants are very much happy to be a part of this program.



During the valedictory session MC Member of SAEINDIA Southern Section Mr. R. Armstrong took over. Since he is a part of Off Highway manufacturing company he explained the participants about the technical working of the Off Highway vehicles.







Then he requested the participants to say about their view regarding the program and their feedback about it. Then all participants shared their feedback to the Dr. E. Rajasekar and Mr. R. Armstrong.



Mr. R. Armstrong, SAEISS MC Member distributed the certificate to the participants and also felicitated the speaker with the memento as the token of appreciation for conducting such a value added program to the student community and making the event a grand success.

SKIP Champions Dr. S. Karthikayan, MC Member/SAEISS Mr. B. SenthilKumar, Champion Prepared By, V. Murali, PET.