

SAEISS SKIP PROGRAM REPORT

Topic : Automotive Transmission
Date : 23rd and 24th September 2017
Speaker : Mr. R. Venugopal, DRDO Fellow, CVRDE
Inaugurated By : Mr. Krishnan Sadagopan, Ashok Leyland Ltd
Presided By : Mr. S. Shanmugam, Vice President SAEISS, Director in DDIPL,
Total Strength : 21 Students
Total colleges : 07 colleges
Venue : SAEINDIA Southern Section, Guindy

Suggested Topics for Future SKIP Program:

- ❖ Recent trends in automobile industry, emission standards and process
- ❖ Suspensions System
- ❖ Breaking systems, Automobile Safety
- ❖ Vehicle Dynamics
- ❖ Hybrid Vehicles
- ❖ Vehicle Emission
- ❖ Engine tuning, ECU, Exhaust system, Aerodynamics
- ❖ Design of automobiles
- ❖ Types of sensors used in automobiles
- ❖ Advanced IC engine
- ❖ CFD Software
- ❖ Suspension & control automobile assembly of parts
- ❖ Suspensions especially that are used now a days
- ❖ IC engines (assembling and dismantling)
- ❖ Basic parts assembling and dismantling of car and other automobiles
- ❖ Engines
- ❖ New technology in automobile
- ❖ Hybrid and electric vehicles

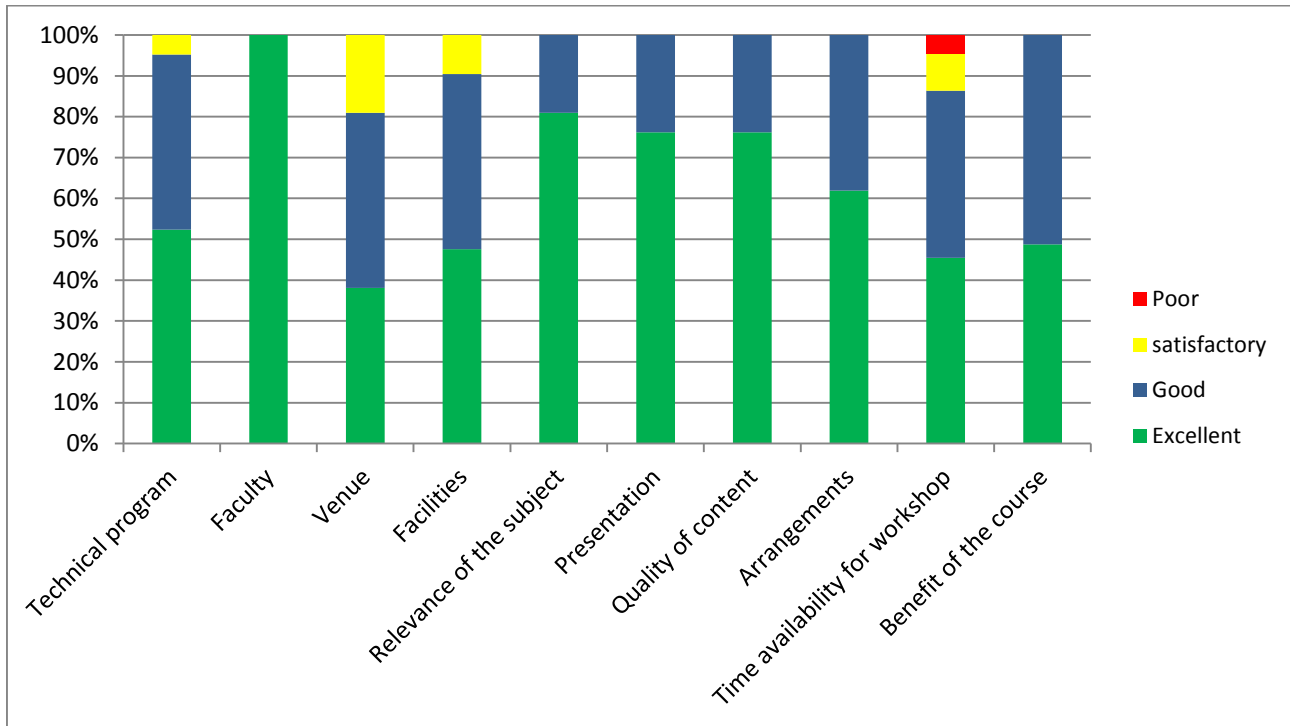
Special Suggestion Points:

- ❖ Abetter Venue for next time
- ❖ Kindly reduce the Registration fee
- ❖ More real time on road vehicle spec can be discussed
- ❖ Little more practical based program will be good
- ❖ More Related videos can be shown.
- ❖ Maintain some samples to see. Like pars of Transmission.
- ❖ Give hands on training with some transmission system on the second day. Let the first day be a theory class
- ❖ If possible make some arrangements for accommodation for students from various districts
- ❖ Give a practical trainings
- ❖ We want to have practical experience
- ❖ Suggesting area for accommodation would be helpful for students like us from other districts, states
- ❖ If the things are shown practically it will more useful for us
- ❖ Practical representations is required
- ❖ Can concentrate much on commercial vehicle transmission.

Objective:

- ❖ Many modern cars, buses, trucks, off highway vehicles, mining equipment's, and military Vehicles use Automatic Transmissions. The driving comfort and improved life of drive train Components by the use of automatic transmissions is attracting the attention of vehicle users As well as vehicle manufacturers. Automatic transmissions offer ample opportunities to Practicing engineers in various fields of product development.
- ❖ All executives irrespective of their involvement in different phases of product development cycle will benefit from this course.

Criteria and Comments about the program:



Report

SKIP program on topic of **“Automotive Transmission”** was organised by SAEINDIA Southern Section on **23rd and 24th September 2017** at SAEINDIA Southern Section, Guindy, and Chennai.

Speaker: Mr. R. Venugopal, DRDO Fellow, CVRDE

1st Day Program

Automotive Transmission SKIP Program Introduction and Inauguration was done by Mr. Krishnan Sadagopan, Ashok Leyland Ltd



Mr. R. Venugopal starts the program with a brief Introduction about Automotive Transmission and Objective of this program. Then he explained on types of gear and their categories like spur gear, Spur rack, Helical gear, Helical rack, Double helical gear, Straight bevel gear, Spiral bevel gear, Screw gear, Worm gear.



In afternoon session, Speaker explain about synchromesh gear box, Synchronizer mechanism, Simple and compound epicycle trains. Speaker explaining about gear cost vs. quality with slide



Speaker started second day session with explaining about the Transmission control like brake system, Neutral start switch, Throttle position sensor, Water temperature sensor, Speed sensor, Stop light switch, over dive main switch, control of lock-up

During the valedictory session Mr. S. Shanmugam, Vice President SAEISS, Director in DDIPL, took over. Then he requested the participants to say about their view regarding the program and their feedback about it. Finally the Students gave the feedback about the program at the end of the Session to Mr. S. Shanmugam and Speaker.



Mr. S. Shanmugam, Vice President SAEISS, Director in DDIPL, distributed the certificate to the participants and felicitated the speakers 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/SAEISS