



Special discount on Group  
Booking (minimum 10 attendees  
for same session 10% Discount)

**SAEINDIA**  
**SKIP** SAEINDIA STUDENT KNOWLEDGE IMPROVEMENT PROGRAM

## Off Highway and Special Types of Vehicles

**Two Days Workshop by SAEISS**

**Date : 10<sup>th</sup> & 11<sup>th</sup> September 2016**

**Trainer : Dr. E. Rajasekar M.E., Ph.D.,**

**(Professor, Faculty of Automobile Engineering, IRTT)**

**SAEINDIA**  
SOUTHERN SECTION

**Venue:**

**SAEINDIA Southern Section**

**Block-1, Modules 29 & 30, SIDCO Electronic Complex  
Thiru-Vi-Ka Industrial Estate, Guindy, Chennai 600032**

**Mobile: +91-9566502887**

**E-mail Id: [skip@saeiss.org](mailto:skip@saeiss.org)**

**Website: [www.saeiss.org](http://www.saeiss.org)**

## Course Content

- Overview of Heavy Vehicle Technology.
- Requirements of Off Highway Vehicles.
- Classification of Off Highway Vehicles.
- Construction and Earth Moving Vehicles.
- Heavy Goods Vehicles and Multi Axle Vehicles.
- Land Clearing Vehicles.
- Compactors and Vibrators.
- Material Handling Equipments and Vehicles.
- Military and Fighting Vehicles.
- Wheeled and Crawler/ Tracked Tractors.
- Various attachments and functions.
- Power and Capacity of Various Machines.
- Sub systems, Mechanisms, Types of control of ORV.

## Objectives

- To understand the various requirements of ORVs.
- To understand Heavy vehicles classifications.
- To gain knowledge about vehicle sub systems and operating members.
- Learn to select vehicles according to specific purpose.
- 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.
- Exposure to the salient features of World Mega Machines.
- Exploring the applications of various heavy vehicles.
- Learn to design components to meet specifications.
- Demonstration of functioning of ORVs.

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.

## Benefits of attending this course

Students can learn about functions, types, exclusive operating members and various components of all possible Special types of Vehicles. They can understand the various mechanisms involved, type of control, Power train components, Steering & Suspension components and actual performance of the vehicles. This course is highly beneficial for students who would like to explore the salient features of Off Highway Vehicles and other special types of vehicles.

## Who should attend?

The students studying in pre-final year and final year in Mechanical/Automobile/allied stream of Mechanical Engineering should attend the program. This program is designed to learn about all types of Automotive vehicles other than the conventional vehicles like Passenger cars, Trucks, Buses and Two wheelers in under graduate level. SKIP program is very useful for the students who are having Off Highway Vehicles/ Off Road Vehicles (ORVs)/ Special types of Vehicles/ Heavy vehicles and Heavy Commercial vehicles as one of their subject and it also covers all Universities syllabus and its beyond.

## Course Date & Time

<b>Off Highway and Special Types of Vehicles</b>	<b>10<sup>th</sup> &amp; 11<sup>th</sup> September 2016</b>
<b>Start: 9.30 a.m. to 1.00 p.m. &amp; 2.00 p.m. to 5.00 p.m. (Lunch 1.00 p.m. to 2.00 p.m.)</b>	

## How to register?

### Fee Structure (Two days)

<b>Student Member</b>	<b>1500/-</b>	<b>Last date for Registration is 7<sup>th</sup> September 2016</b>
Registration fee for two days		

- Admissions would be on first come first serve basis and will be strictly through Enrolment procedure.
- **60** seats per batch.
- Special discount on group booking (minimum 10 attendees for same session - 10% Discount).

## Facilities provided during course.

- Networking Tea/Snacks
- Networking Lunch
- Course Materials
- Delegate Kits
- Participation Certificate

## Pay course fee through DD/Cheque or Transfer to our account

Name of the account holder : SAEINDIA Southern Section Student Convention  
Account No : 32506106802 (Saving Account)  
Bank Name : State Bank of India  
Branch Name : Kottur, Chennai  
IFSC Code : SBIN0001669

## Enrolment Procedure

- Send us following details to [skip@saeiss.org](mailto:skip@saeiss.org) for registration
- Online Registration Link: [http://onlineregistration.saeiss.org/event\\_register.php](http://onlineregistration.saeiss.org/event_register.php)

## Faculty Profile of Dr. E. RAJASEKAR

Shri E. Rajasekar, born in 1963, obtained his B.Sc. degree in 1983 with first class and distinction from RDM Government College of Arts and Science, Sivaganga. He obtained his **B.Tech.** Degree with Automobile Engineering specialization in 1986 with first class from M.I.T., Anna University, Chennai.

He obtained his **M.E.** degree with Automobile Engineering specialization in 1992 with Gold medal from M.I.T., Anna University, Chennai. He obtained his **Ph.D** in Mechanical Engineering discipline from Anna University, Chennai.

### Total Automotive Teaching Experience: 30 Years

**Publications** – 26 papers published in Refereed National Journals / International journals and 28 papers presented in International / National Conferences.

He is Editorial member for 3 international journals and Review member for 2 international journals.

**Program organized** - He conducted 4 National level workshops and SAEINDIA Southern Section sponsored Employee Development for Graduate Engineers training program

(EDGE) for Graduate Engineers of M/s. Wabco India Limited, Chennai two times. He has given special training for Motor Vehicle Inspector Courses several times.

Conducted a two days training program on Sensors and Actuators for Practicing Engineers of Mahindra & Mahindra in Mahindra Research Valley, Mahindra World City, Chennai.

**Membership** in Professional Societies:

- Life member in Combustion Institute [UK]
- Member in Institute of Engineers (India)
- Member in Indian Society for Technical Education
- Member in Society of Automotive Engineers India
- Member in Society of Automotive Engineers International

**Honor Received:** He has been nominated to Management Committee and elected as Governing Council Member and Secretary of the SAEINDIA Southern Section for the period 2016 – 2018.

He has delivered plentiful Invited Lectures in various Faculty Development Programs, Mechanical and Automobile Engineering Association Functions and SAEINDIA SS Collegiate Clubs etc. He is a Visiting Faculty and Member - Board of Studies for various Colleges and Universities.

## **About SAEINDIA Southern Section**

SAEINDIA Southern Section is a premier society that serves the cause of mobility engineering. It is a unique society that includes professional engineers who serve different OEMS and Suppliers, academia as well as budding engineers (students) who aspire to be part of the professionally attractive field of mobility engineers. We believe that Mobility Engineering is a knowledge rich field and that learning and sharing can be fun and rewarding. To this end, SAEISS organizes several events throughout the year, runs programs that enrich and engage and conducts lectures and symposia. It is the largest affiliate and most vibrant Section of SAEINDIA.

SAEINDIA is a Premier Professional society that serves the Mobility Engineering Community engaged in the design, manufacture and service of self-propelled vehicles and systems that move in land, sea, air and space. It is an affiliate society of SAE International which is head quartered in USA and has a glorious record of over 100 years of service to the mobility community. SAEINDIA works closely with other fraternal societies such as Society of Indian Automobile Manufacturers (SIAM), Automotive Component

Manufacturers of India (ACMA) and American Society of Engineers of Indian Origin (ASEI) for spreading knowledge and relevant information to a wider cross section of the Indian community. It is also a member of International Federation of Automotive Engineering Societies (FISITA).

**For more Information**

**[www.saeiss.org](http://www.saeiss.org)**

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**Further please contact:**

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