Report

A 3 day national level technical training workshop on automobile engineering & vehicle dynamics held on “06 oct – 08 oct 2015” is organized by department of mechanical engineering in association with formula 1 racing marshalls, elite techno groups-director of AMK industries. Coordinated by Md.Fakhruddin H.N., Associate Professor and Convened by Dr. A Rajasekhar, Head – ME.

Training Programs included introduction to Automobile Engineering, steering, braking, suspension and tyre mechanism, derivation of drifting equation and turning equation, design parameters of engine, FAE on different designs & its physical significance & intake manifold tuning for performance engines, where expert faculties conducted the workshop in an interactive manner with the participants working on the application of what they were taught during the course of the workshop. Various individual and team based exercises are conducted so that our future engineers are comfortable working with others as they are with themselves. Also, in light of the recently developing racing event in India which has captured the interest of all the major colleges and students, offer specially designed courses to give students a head start as they begin to design & fabricate their cars for BAJA-SAE, SUPRA-SAE/F-SAE, Go-kart events.

Main Highlights of the 3 day / 24 hours Training Program:

- Statics of Automobile Engineering: 1 day (8 hours)
- Dynamic Balancing: 1 day (8 hours)
- Engine Designing: 1 day (8 hours)

1)Static: In this, static parts of automobile were discussed that how each and every component works.

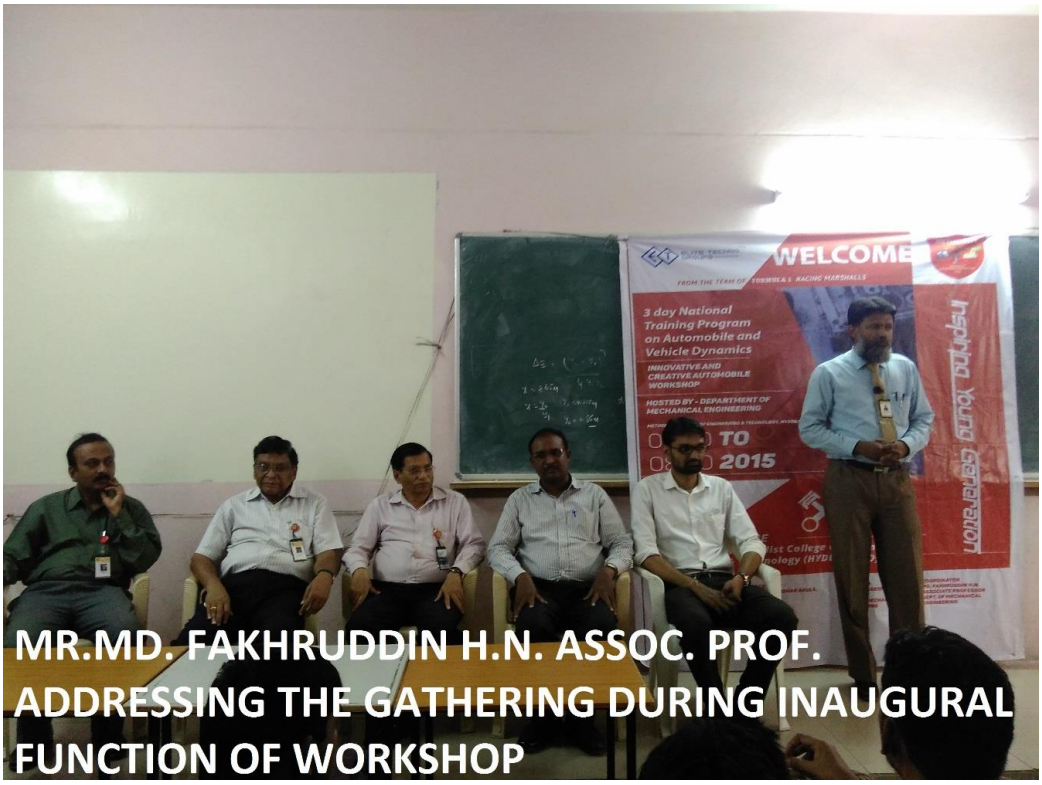
- Fundamentals of chassis design
- Suspension system
- Braking system
- Engine working and fundamentals
- Types of chassis, braking, steering, suspension and their disadvantages and advantages

2) Dynamics: In this part dynamics of automobile is discussed in deep.

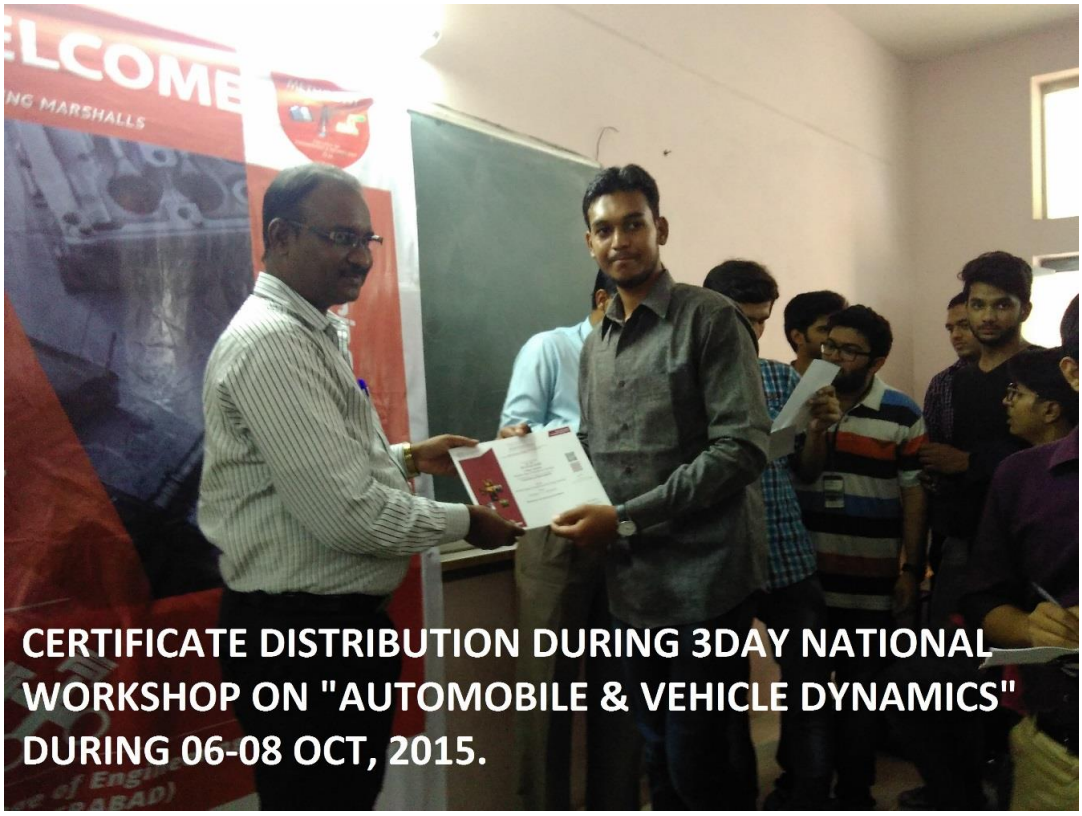
- Steering dynamics
- Braking performance triangles
- Derivation of drifting equation and turning equation
- Designing parameters for suspension designing
- Balancing of chassis, rigidity to weight ratio optimization, stress analysis.
- F.E. A
- Engine valve timing diagram

3) Practical: This was the implementation of the things that learned in above two parts

- Chassis designing and simulation
- Stress analysis on different F-SAE chassis
- Engine dynamics
- Hand on experience: Disassembly and assembly of a multi cylinder IC engine by participants.



Inaugural function of A 3-day national work shop on “AUTOMOBILE & VEHICLE YNAMICS” on 06 Oct – 08 Oct 2015



Certificate distribution at valedictory function of A 3-day national work shop on “AUTOMOBILE & VEHICLE DYNAMICS” on 06 Oct – 08 Oct 2015

Account Statement for
3 Day National Level Technical Training Workshop on
Automobile Engineering & Vehicle Dynamics
"06 Oct – 08 Oct 2015"

Fee collected From Students @1710/- x 90 Student =		**Rs.1, 53,900/-**
Fee per Student – Forenoon Snacks (1710 – 60) = Rs.1650/-		
Rs.1650/- x 90Students =	Rs.1, 48,500/-	
Less Conveyance	Rs. 3200/-	
Paid to Consultant		**Rs.1, 45,300/-**
Difference		Rs.8600/-

Expenditure

Forenoon-snacks	Rs. 6150/-
Afternoon-snacks	Rs. 3000/-
Conveyance	Rs. 3200/-
Miscellaneous	Rs. 2951/-
Total	Rs.15,301/-
Expenses beard by Consultant	Rs. 8000/-
Expenses beard by College	**Rs. 7301/-**

Organized By
Department of Mechanical Engineering

In Association with
Formula 1 Racing Marshalls

ELITE - TECHNO GROUPS
Inspiring young generation.

Coordinator
Md.Fakhruddin H.N
Associate Professor

Convenor
Dr. A Rajasekhar
H.O.D.