



Technical Program for Members

Certificate of Participation

Program : Design of Hydraulic System

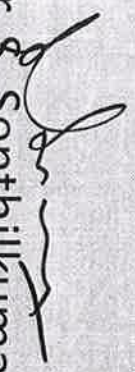
Faculty : Mr. R. VenuGOPal

Date : 24<sup>th</sup> & 25<sup>th</sup> June 2016

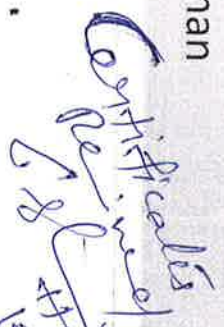
Participant : Dr. S. Senthilkumar

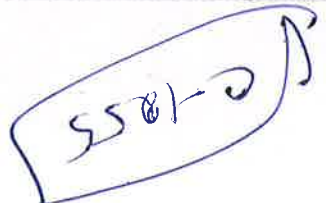
Organization : VEL TECH UNIVERSITY, CHENNAI.

  
Mr. S. Sriraman  
Chairman

  
Dr. S. Senthilkumar  
Champion

  
Mr. R. VenuGOPal  
Faculty

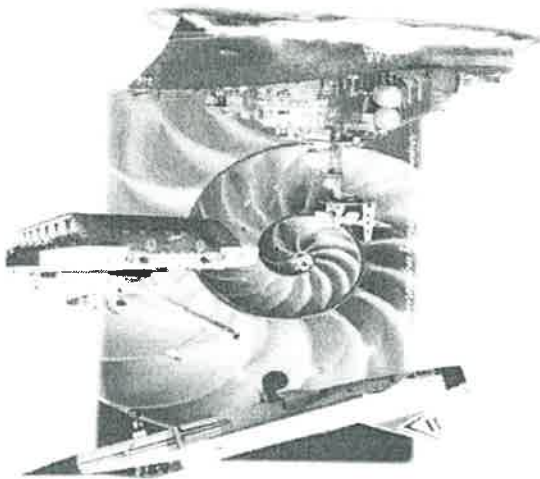
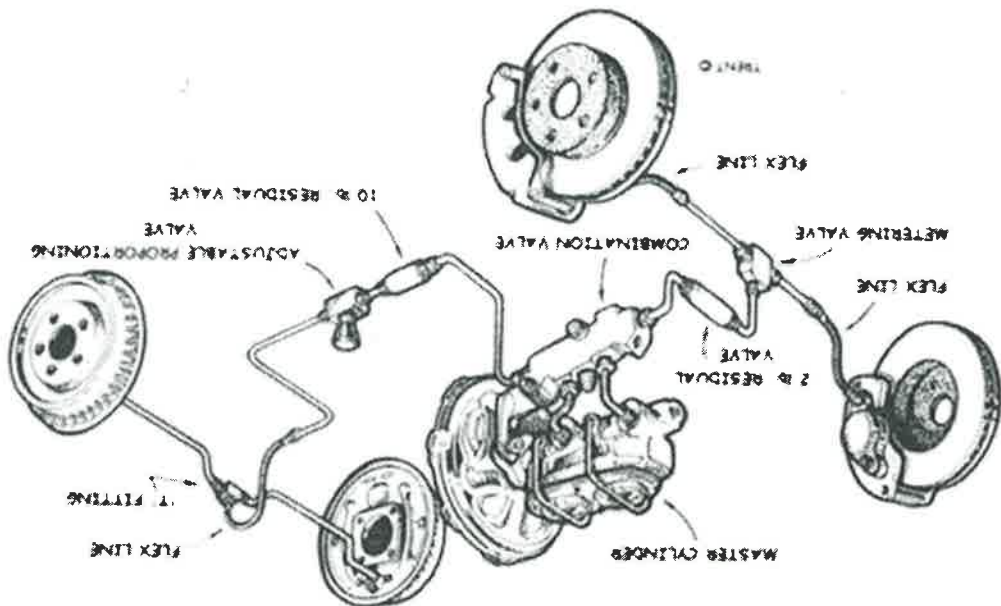
  
Certified  
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CE-1055

C-1255

**SAEINDIA**  
SOUTHERN SECTION

# SAEINDIA Southern Section Toptech Program



# Design of Hydraulic Systems

On 24<sup>th</sup> & 25<sup>th</sup> June 2016

at Hotel Lemon Tree, Chennai

Time: 9.00 A.M to 5.00 P.M

## About the Course

The course on "Design of Hydraulic Systems" covers entire details of hydraulics like, basics, component design and its circuit for different applications. The course also includes some case studies about Hydraulic circuit and its elements for Automotive and Aerospace Applications.

## Course Objectives

Hydraulic control plays vital role in Industrial, Automotive and Aerospace Applications. Because of its high power to weight ratio and flexibility in design, hydraulic drives are used in many Automotive Applications. This course will give clear insight for design of Hydraulic components and its circuits for different applications in Industrial, Automotive and Aerospace Systems.

## Benefits of Attending the Course

Two day course will cover all aspects of Hydraulic systems. This will benefit the practicing engineers for designing the hydraulic elements and its circuit for different applications. The practical case studies for Aerospace and Automotive Applications, will be a great benefit for the participants.

## Course Content

Day 1:

Hydraulic power system & Introduction, Basic of Hydraulic principles, Hydraulic pumps and its classifications, Pressure control valves, Direction control valves, Flow control valves, Non return valves, Hydraulic cylinder and its Sizing, Hydraulic motors & selection, Hydraulic filters.

Day 2:

Hydraulic Accessories like oil Tank, Accumulator, Breather, Hoses and Fittings Hydraulic oil and its properties, Electro Hydraulic valves, Servo valves, Sealing devices, Hydrostatic Transmission, Hydro dynamic Transmission, Hydraulic maintenance, Trouble shooting and case studies in Automotive and Aerospace Applications.