

## INTRODUCTION

Hydraulics is one of the popular technology applied in many machinery and equipment as it has significant advantages over other technologies as a prime mover. Since it is involved with many elements for collective output, it is mandatory to know in depth about industrial Hydraulics.

## FOCUS AREAS

- Pretest
- What is the braking system?
- Who decides the speed of the vehicle?
- Study types of braking systems .
- Mechanical braking ,Hydraulics braking , CBS or ABS system basics
- Mechanical Lever and its applications
- Hydraulic Lever and its application
- Shoe brakes and Disc brake system
- Friction types and application ,merits and demerits
- Front wheel and Rear wheel disc brakes mechanism
- Basics of Hydraulics system Pascal Law, cylinder Area ,Load , Pressure ,Flow Units , force units and calculation
- Hydraulic system control valves, Delay vale, Pressure control valve, fluid reservoir, Brake fluid pipes , fittings
- Brake fluid types , properties , Air bleeding
- working principle of each system its merits and Demerits
- ABS system and CBC system Sensors , Proportional valve, ABS ECU
- Types of Brake system for two wheeler and four wheeler
- Post test , discussions , Question Answer

## KEY TAKE AWAYS

Master in braking system

## PARTICIPATION FEE

**Rs. 6600/-**  
+18% GST

**IMTMA Members/ Micro Companies/ Individuals/  
Educational Institutions / Students/ IMTMA Non  
Members/ Others**

**USD 260/-**  
**Overseas Participants**

**Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company**

## FACULTY

**This program shall be conducted by Mr. Deshpande**

**Mr. Deshpande** is a Domain expert with more than 38 years of hands-on experience in machine controls design, assembly, & commissioning. He is an expert in hydraulics, pneumatics, bearings lubrication & mechatronics (focus on factory automation). He has vast experience in circuit building, system designing, commissioning & fault finding. He has delivered extensive hands-on training in hydraulics and pneumatics to more than 2000 industry professionals across India. He represented India as Mechatronics trainer & expert of Mechatronics World Skills international Competition 2013 & Jury for Russian hi-tech World Skill competition 2014.

### For Registration Contact

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**REGISTRATION :** Prior registration for participation is necessary. Number of participants is limited and will be accepted on ‘First Come First Serve’ basis. A Certificate of participation will be issued to participants.  
**Important Information :** Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.