

# C.V Raman Bosch Rexroth Centre of Excellence



## **Advanced Hydraulics**

#### **Overview:**

- The in-depth hydraulics training combines hydraulics, electro-hydraulics. In this course, you will become familiar with electro-hydraulics valves.
- The extensive practical part provides you with an opportunity to design circuit and adjust parameters.

#### **Participant Profile:**

- Operation, Maintenance, Assembly & Planning personnel designers.
- Engineering Students.

#### **Contents:**

- Design and function of hydraulics valves for controlling direction, speed, position and force.
- Hydraulics drives and rotary movements.
- Electric signal control for hydraulic power section with switching solenoid and proportional solenoid interface.
- Design, function and characteristics data for directional control, pressure and flow control.
- Development and interpretation of proportional hydraulic circuit diagrams.
- Intensive practical training involving design of control systems, based on circuit diagrams commissioning and testing.

#### **Learning Target:**

The Participants will be able to

- Identify and describe design, features and operation of electro-hydraulics and electrical components.
- Know the features of special application and piloted valves, special cylinders and hydraulics motors.
- Read and interpret hydraulic and electro-hydraulics circuit.
- Understand the principles of proportional hydraulics.
- Develop and read proportional hydraulics circuit diagrams.
- Complete a basic practical exercises (hands-on).

### **Prerequisites:**

- Knowledge on basic hydraulics.
- Basic knowledge on computer application
- Communication Skills in English.

## **Evaluation:**

- Theory & Practical Exam
- Project work based on Industrial Application.

#### Fee:

Contact us for more details.

### **Teaching & Learning Media:**

- Multimedia Presentation.
- Cut-section & Transparent models.
- Sample units & Power units.

## **Time Durations:**

- 36 Hours
- 6 Hours/ Day

