

Integrated Systems Engineering Hydraulics • Pneumatics • Electronics

Course-2024

Basic Industrial Hydraulic System Design

On-Line via ZOOM (6 half day sessions - one per week)

This is an "Introductory Level" course.

WHO IS IT FOR?

Technical Sales and Support Personnel Hydraulic Project and Application Engineers Hydraulic Component and System Designers Maintenance and Specification Engineers Technical Purchasing & Procurement Personnel Trainers and Lecturers This course provides a very <u>down to earth approach</u> to how industrial hydraulic systems are specified and designed to meet customer's needs. It illustrates how to match the characteristics of individual components to the system requirements and highlights what can go wrong in the process. The course adopts a very practical approach, concentrating on 'rules of thumb' rather than mathematical analysis.

Each Session is of 3 Hours Duration and will involve homework exercises between sessions.

THE PLAN- Each Session will start at 9am and finish at 12:15

25 th October 2024	1st November 2024	8 th November 2024	15 th November 2024	22nd November 2024
Session 1. Course format and Objectives Basic Principles The Design Process	Session 2. • Hydraulics Actuators Cylinders & Motors • Industrial Closed Circuit Transmissions	Session 3. • Flow Controls • Pressure Controls • Load Holding & Load Controls	Session 4. Direction Controls Slip-in Cartridge Valves Proportional Valves	Session 5. • Hydraulic Pumps & Pump Controls
Sessional Exercises will be as follows: • Exercise 1- Design Specification Exercise 3- Control Valve Selection Exercise 5- Circuit Design • Exercise 2- Actuator Selection Exercise 4- Direction Valve Selection EXERCISE DESIGN REVIEW				
Course Tutor: Steve Skinner (NFPC Associate) Employed in the hydraulics industry for more than 45 years and a long-term member of the BFPA Education & Training Committee and Systems Committee, Steve's work experience includes, Applications, Sales, Training and Product Management and he is the Author of a number of key Hydraulic Books				 Fluid Management Reservoirs Power Supply & Energy Storage Circuit Design Exercise Review
The cost per person to attend this course will be £995 plus VAT Minimum Candidate Number = 4 Maximum Candidate Number = 8				To reserve your place(s) on this special course please contact:
Recomm Progress Jse NFPC Online Self-A	sion Stage 1 Hydraulics Assessment to check your cur	Stage 2 Industrial Hydraulics	BASIC Industrial Hydraulics System Design	Anne Clarke Bookings & Customer Liaison Email: <u>aclarke@nfpc.co.uk</u> Tel No: 0190904539

knowledge www.nfpc.co.uk before booking on this course

You will receive a comprehensive set of course notes to support the Webinar Sessions- <u>You must</u> have a working knowledge of Industrial Hydraulic Components, be able to read and interpret hydraulic symbols and circuitry and carry out basic calculations using formulae applied to hydraulic components and their performance