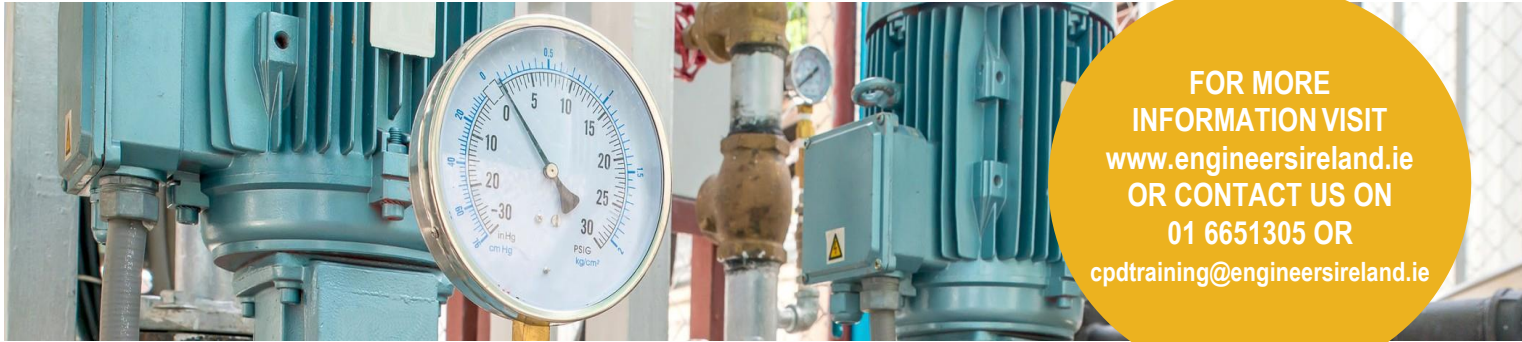


CPD TRAINING COURSE

INTRODUCTION TO PUMPS AND PUMPING SYSTEMS



FOR MORE
INFORMATION VISIT
www.engineersireland.ie
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01 6651305 OR
cpdtraining@engineersireland.ie

Learning Objectives

This course will provide an insight to pump application, selection, operation and maintenance. It is an introductory course that will focus on hydraulic system behaviour, pumps and components within the pumping system and how these are interconnected. Delegates will gain knowledge in understanding pump performance characteristics and how it relates to the overall system. The effects of system and/or changes to energy usage and pump reliability will also be highlighted.

Course Programme

The primary objective is to give each delegate a fundamental knowledge of the basic principles of pumps. It will focus on the definitions of various pumps such as positive displacement and rotodynamic pumps and explanation of the important technical concepts relating to pumps. These are the different types of pumps, pump selection criteria, pump performance curves, system curves, cavitation and pump operation.

The course will cover, but is not limited to;

- Properties of Fluids
- Introduction to pump types
- Pump components
- Pump operating principles
- System curve
- Pump curve
- Suction conditions and Net Positive Suction Head (NPSH)
- Selection and sizing
- Pumping various liquids
- Pump drivers
- Installation and operation of pumping equipment

Who Should Attend?

This course is focused to the needs of chemical, instrumentation, maintenance, and mechanical engineers and technicians working with pumps across the biopharma, food, water and waste water, chemical and power generation sectors.

Trainer's Profile

Gerard Nagle has previously worked for Emerson Process Management with extensive experience with Fisher control valves. He also has extensive experience with Farris pressure relief valves. Currently, Gerard is a lecturer in DIT Bolton Street in the department of Mechanical Engineering. He lectures modules on Fluid Mechanics and Unit Operations. Gerard has a M.Sc. in Process Systems Engineering from Cranfield University.