Centrifugal Pumps

NTT Training
A DIVISION OF ECPI UNIVERSITY

Increase your understanding and knowledge of centrifugal pumps including their design, selection, operation and maintenance. Moreover, the course will aid you in increasing productivity and reducing costly downtime.

It is important to understand what a pump is and how it works in order to solve problems. There are strong misconceptions about pumps. We will explain the basics so that you will be adequately prepared to understand certain design considerations, including sizing. In addition, this course provides the inside information on why and how centrifugal pumps are designed.

WHAT THIS COURSE COVERS

- Centrifugal Pump Theory and Design
- Cavitation – NPSHA vs. NPSHR
- Pump Curves
- Multiple Pump Operation
- Differences Between Major Pump Types
- Mechanical Seals
- Impeller Diameters or Speed Changes Effect on System
- Pump Affinity Laws—Energy Savings or Losses at Different Conditions
- Calculate Energy Costs for Your Pumps
- HP, WHP, BHP Efficiency and Cost of Operation
- Install, Maintain, and Troubleshoot Pumps

COURSE OUTCOMES

- Carry Out Centrifugal Pump Theory, Design, Distinctions, and Operation.
- Calculate Pump Efficiency and Operation Costs
- Install, Maintain, and Troubleshoot Centrifugal Pumps.

WHO SHOULD TAKE THIS

- Mechanics and Maintenance Technicians
- Plant and Facility Maintenance Technicians
- Energy Management Personnel
- Building Engineers, Managers and Superintendents
- Stationary Engineers
- Safety Directors
- Multi-Craft Personnel
- Anyone Who Needs Cross-Training on Pumps and Pump Systems

COURSE AGENDA

- Pump Basics
- Pump Theory and Performance
- Pump Systems
- Pump Design and Selection
- Installation and Alignment
- Pump Maintenance and Troubleshooting

☐ Lecture ☑ Hands-on • ONSITE: 3-days (24 hours) • LIVE ONLINE: N/A