

Pumps & Pumping Systems for Operators

Tentative agenda subject to change

Day 1

8:00-9:00	Course review and agenda Introductions and operator discussion Industrial and electrical safety part 1 Day 1 pre-test
9:00-10:00	Basic hydraulics
10:00-10:15	Break
10:15-12:00	Pump curve overview Pump curves
12:00-1:00	Lunch
1:00-2:30	Centrifugal pump overview Hands on parts examination
2:30-2:45	Break
2:45-3:45	Hydraulic pump testing
3:45-4:45	Pump disassembly and parts inspection
4:45-5:00	Day 1 post-test and discussion

Day 2

8:00-8:30	Opening remarks, day 2 pre-test
8:30-9:00	Industrial and electrical safety part 2
9:00-10:00	Pump troubleshooting exercise
10:00-10:15	Break
10:15-12:00	Basic electrical systems
12:00-1:00	Lunch
1:00-2:00	Introduction to multimeters
2:00-3:00	Multimeter use exercises
3:00-3:15	Break
3:15-4:45	AC induction motor basics Single versus three phase motors Single phase motor control box basics
4:45-5:00	Day 2 post-test and discussion

Day 3

8:00-8:30	Opening remarks, day 3 pre-test
8:30-10:00	Group discussion AC induction motor troubleshooting Interactive Lecture AC induction motor electrical checks Exercise/Activity
10:00-10:15	Break
10:15-12:00	Motor control panel components Interactive Lecture Basic Controls Exercise/Activity
12:00-1:00	Lunch
1:00-2:00	Maintenance, inspections, and record keeping Interactive Lecture
2:00-3:00	Instructor generated problem solving Exercise/Activity
3:00-3:15	Break
3:15-4:30	Instructor generated problem solving continued Exercise/Activity
4:30-5:00	Day 3 post-test and workshop closing discussion Group discussion