

SURGE ANALYSIS SYLLABUS (PIPENET VISION TRANSIENT MODULE)

❖ **SURGE ANALYSIS:**

- What is surge analysis?
- About PIPENET
- Basics of PIPENET
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- Analysis of Water Hammer Phenomenon
- Stresses in the pipe wall

❖ **STARTING SURGE ANALYSIS**

- INPUT STUDY
- PFD, P&ID, PMS, LAYOUT, ISOMETRICS.
- FLUID, PIPE MECHANICAL PROPERTIES, PUMP PERFORMANCE CURVE.
- SCENARIO'S, BOUNDARY CONDITIONS.
- APPLICABLE CODES & STANDARDS
- BASICS OF FIRE WATER DEMAND CALCULATION STUDY
- SURGE FORCE

❖ **TRANSIENT MODELLING –SOFTWARE(PIPE NET)**

- Creating nodes and elements
- Filling between nodes
- Setting Element Attributes

❖ **TRANSIENT MODELLING ANALYSIS**

- IDENTIFY SCENARIOS
- STEADY STATE ANALYSIS
- PERFORMING THE SCENARIO
- Solving the errors
- MITIGATION AND RECOMMENDATIONS
- VALIDATE THE INPUT & OUTPUTS & RESULTS
- REPORT PREPARATION & CONSOLIDATION

❖ **TRANSIENT MODELLING ANALYSIS**

- TO CASE STUDIES

❖ **QUESTIONS & ANSWERS**

DURATION : 25 – 30 HRS (Variable - Based on candidate)

FEES : Rs 24999 only.