multisoft
Systems

OpenFlows Worksuite Training

COURSE CONTENT

GET IN TOUCH

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About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

OpenFlows Worksuite Training by Multisoft Systems is designed to help professionals gain comprehensive knowledge of hydraulic and hydrologic modeling for water, wastewater, and stormwater infrastructure systems. This industry-oriented program provides practical exposure to OpenFlows applications used for designing, analyzing, and managing complex utility networks.

Module 1: Introduction to OpenFlows Worksuite

- ✓ Overview of OpenFlows platform and applications
- ✓ Understanding hydraulic and hydrologic modeling
- ✓ Industry applications and use cases
- ✓ Installation and software interface navigation
- ✓ Project setup and workspace configuration

Module 2: Fundamentals of Hydraulic Engineering

- ✓ Basics of fluid mechanics
- ✓ Hydraulic principles and flow concepts
- ✓ Pressure, velocity, and head calculations
- ✓ Pipe flow fundamentals
- ✓ Network analysis concepts

Module 3: Water Distribution System Modeling

- ✓ Creating water distribution networks
- ✓ Junctions, reservoirs, and tanks configuration
- ✓ Pipe and pump modeling
- ✓ Demand allocation and pattern setup
- ✓ Pressure zone management

Module 4: Hydraulic Simulation and Analysis

- ✓ Steady-state analysis
- ✓ Extended period simulation
- ✓ Flow and pressure analysis
- ✓ Energy consumption analysis
- ✓ Calibration and validation techniques

Module 5: Pump and Valve Operations

- ✓ Pump curve configuration
- ✓ Pump scheduling and controls
- ✓ Valve types and operations
- ✓ Pressure reducing valves and control valves
- ✓ Operational optimization strategies

Module 6: Sewer Network Modeling

- ✓ Sewer system components
- ✓ Gravity and pressure sewer modeling
- ✓ Wet well and lift station analysis
- ✓ Sewer load calculations
- ✓ Network performance evaluation

Module 7: Stormwater and Drainage Modeling

- ✓ Stormwater management concepts
- ✓ Catchment and runoff analysis
- ✓ Drainage network design
- ✓ Flood analysis and mitigation
- ✓ Rainfall data integration

Module 8: Water Quality and Demand Analysis

- ✓ Water age analysis
- ✓ Chlorine decay modeling
- ✓ Demand forecasting techniques
- ✓ Consumption pattern analysis
- ✓ Water quality management strategies

Module 9: Transient and Advanced Hydraulic Analysis

- ✓ Water hammer analysis
- ✓ Surge protection techniques
- ✓ Transient simulation concepts
- ✓ System reliability assessment
- ✓ Risk and failure analysis

Module 10: GIS and Data Integration

- ✓ GIS integration fundamentals
- ✓ Importing and exporting engineering data
- ✓ CAD and BIM interoperability
- ✓ Database connectivity
- ✓ Asset management integration

Module 11: Network Optimization and Troubleshooting

- ✓ System optimization methods
- ✓ Leak detection analysis
- ✓ Pressure management optimization
- ✓ Troubleshooting hydraulic issues
- ✓ Performance improvement strategies

Module 12: Reporting and Documentation

- ✓ Generating engineering reports
- ✓ Visualization and graph creation
- ✓ Simulation result interpretation
- ✓ Project documentation standards
- ✓ Exporting project deliverables

Module 13: Industry Case Studies and Projects

- ✓ Municipal water distribution project
- ✓ Wastewater infrastructure case study
- ✓ Stormwater management project
- ✓ Real-world hydraulic simulation exercises
- ✓ Best practices for infrastructure planning

Module 14: Best Practices and Future Trends

- ✓ Smart water management concepts
- ✓ Sustainable infrastructure planning
- ✓ Digital twin concepts in utilities
- ✓ Emerging trends in hydraulic modeling
- ✓ Career opportunities and project implementation strategies