

# SAGE Profile Advanced 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

SAGE Profile Advanced Training by Multisoft Systems is designed for professionals who want to build expertise in advanced profile management, workflow automation, reporting, and enterprise-level system administration using SAGE solutions. This training program focuses on practical implementation techniques that help learners optimize business operations, improve data accuracy, and streamline organizational processes efficiently.

## **Module 1: Introduction to SAGE Profile & Pipeline Simulation**

- ✓ Overview of SAGE Profile
- ✓ Role of pipeline simulation in offshore/onshore engineering
- ✓ Applications in oil & gas industry
- ✓ Understanding pipeline behaviour under different conditions

## **Module 2: Pipeline Geotechnics Fundamentals**

- ✓ Soil properties and classification
- ✓ Pipeline–soil interaction basics
- ✓ Load transfer mechanisms
- ✓ Environmental impact on pipelines

## **Module 3: Advanced Pipe-Soil Interaction (XSPIM)**

- ✓ Introduction to XSPIM modeling
- ✓ Defining soil parameters
- ✓ Interaction models and assumptions
- ✓ Simulation setup and calibration

## **Module 4: Upheaval Buckling Analysis**

- ✓ Causes of upheaval buckling
- ✓ Critical temperature and stress conditions
- ✓ Modeling uplift scenarios
- ✓ Stability analysis techniques

## **Module 5: Lateral Buckling Analysis**

- ✓ Lateral buckling mechanisms
- ✓ Thermal expansion effects

- ✓ Design considerations
- ✓ Simulation of lateral deformation

## **Module 6: Pipeline Walking Analysis**

- ✓ Concept of pipeline walking
- ✓ Cyclic loading effects
- ✓ Axial displacement analysis
- ✓ Mitigation techniques

## **Module 7: Advanced Finite Element (FE) Modeling**

- ✓ FE model setup in SAGE Profile
- ✓ Element types and meshing concepts
- ✓ Parameter configuration
- ✓ Model accuracy and validation

## **Module 8: Advanced Boundary Conditions**

- ✓ Types of boundary conditions
- ✓ Applying constraints and loads
- ✓ Real-world boundary scenarios
- ✓ Sensitivity analysis

## **Module 9: Free Span Analysis**

- ✓ Causes of free spans in pipelines
- ✓ Span assessment techniques
- ✓ Stress and vibration analysis
- ✓ Design limits and corrections

## **Module 10: Simulation Execution & Results Interpretation**

- ✓ Running simulations in SAGE Profile

- ✓ Analyzing outputs and graphs
- ✓ Identifying critical stress points
- ✓ Engineering decision-making

## **Module 11: Project Setup & Customization**

- ✓ Setting up real project data
- ✓ Customizing simulations based on requirements
- ✓ Handling complex pipeline scenarios
- ✓ Best practices