

# Structural Analysis Computer System (SACS) 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

The Structural Analysis Computer System (SACS) training offered by Multisoft Systems is an intensive program aimed at engineers and professionals in the maritime and offshore industries. This course delves into the comprehensive suite of software that SACS offers for the structural analysis and design of offshore structures, including platforms and wind farms.

## Module 1: Introduction to offshore structures

## Module 2: Introduction to SACS software & Program Capabilities

## Module 3: Modelling in SACS - Precede

- ✓ Joint Modelling
- ✓ Joint Fixity
- ✓ Joint Design
- ✓ Member Modelling
- ✓ Member releases
- ✓ Member Properties
- ✓ Member group
- ✓ Member Offsets
- ✓ Modelling Wishbone
- ✓ Modelling X brace
- ✓ Loading

## Module 4: Loading

- ✓ General Loading
  - Joint load
  - Member load
  - Inertia Load
  - Member area & Plate area Loads
  - Simulation of non-modelled load (Anode, Walkway, stairs etc.)
- ✓ Environmental Loading
  - Wind Area

- Wind Loads
- Preliminary wave loading concepts
- Hydrodynamic Coefficients
- Wave & Current loadings
- Marine growth Load
- Corrosion allowance

## Module 5: Analysis

- ✓ Load Combination
- ✓ Allowable stress modification factor
- ✓ Unity check partition factor
- ✓ Hydrostatic Collapse check
- ✓ Code check
- ✓ Boundary condition

## Module 6: Post Processing

- ✓ Output listing file
- ✓ Viewing result in 3D
- ✓ Member review and redesign
- ✓ Data extraction and Report Preparation

## Module 7: Joint can Analysis

- ✓ Preparation of Joint can file
- ✓ Interpretation of Joint can result

## Module 8: Gap Input file

- ✓ Creation of Gap input file
- ✓ Interpretation of results

## Module 9: Pile Soil Interaction

- ✓ Creation of PSI input file
- ✓ Interpretation of results

## Module 10: Pre -Service Analysis

- ✓ Load out Analysis
- ✓ Lift Analysis (Skew & NonSkew)
- ✓ Transportation Analysis (For Deterministic Sea state)
- ✓ Launch Analysis
- ✓ Floatation & Upending Analysis

## Module 11: Fatigue Analysis

- ✓ Basic concepts of fatigue
- ✓ Creation of fatigue input file
- ✓ Interpretation of results

## Module 12: Seismic Analysis

- ✓ Creation of Dynamic Input file
- ✓ Interpretation of results