

Training on Offshore Structural Analysis Computer System (SACS®)



**Course Title
Offshore Structural Analysis Computer System (SACS®)**

**Course Duration
Three Days**

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SACS TRAINING

Training Methodology

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 30% Workshops & Work Presentations
- 30% Case Studies & Practical Exercises
- 10% Videos, Software & General Discussions

Schedule:

1. The training on the application and usage of the SACS software will be carried as per the attached proposed plan. However on confirmation of the training, the same can be altered as mutually suitable.
2. The training will be carried out in Three days.

Training Material:

1. Software access and Training Material to each individual candidate will be provided by Aryatech Marine & Offshore.

Faculty:

The Design Engineering programs are developed by industrial experts having a 15- 20 years of experience in Oil & Gas,Petrochemical Industries and worked with different offshore & onshore projects.

Certificates:

1. Upon completion of training, certificates will be provided by Aryatech.

Placement Assistance:

Aryatech is providing placement assistance to all our candidates. We have dedicated placement cell which will work on candidate resume from the day one of the completion of the course. Further we have tied-up with few consultants who are directly working with different organization across the world, the candidates CV will be sent across to those consultants and organizations for further placement process.

SACS TRAINING SCHEDULE

Day	Description
1	<p>Determine the system capabilities & the new features of SACS & be able to explain its system configuration</p> <ul style="list-style-type: none"> • Introduction • Fixed Platform Nomenclature • Platform Concepts • Analysis techniques • Codes and Standards • SACS Software Modules • Module arrangement • Global Settings • File naming convention • Setting up project, run files etc.. • Precede, Data Generator and Editor
2	<p>Creating Structural models with SACS using the graphical interface and be able to demonstrate the method of creating a new model using the wizard & also inputting the Member properties.</p> <p>Creating the Model</p> <ul style="list-style-type: none"> • Using Precede and Structural Wizard • Members • Wish bones • Main piles • Conductor Modeling • Inputting Material Properties • Plate Groups • Local and Global Coordinate Systems <p>Defining the Design Parameters</p> <ul style="list-style-type: none"> • Joint Connection Design • Define Beam Offsets • Define Member Code Check Properties <p>Loading the Model</p> <ul style="list-style-type: none"> • Dead Load • Applied Loads – Joint and Member loads • Over rides (Member and Group) • Simulation of non-structural elements such as anodes, walkways, stairs etc... • Loading the Structure (Using the Weight feature): Surface Loads, Equipment Footprint Loads, Appurtenant Structure Loads, Inertia Loading

3

Understand the user-defined loading & be able to input environmental loading from waves, wind, current etc... Define the Load Combinations. Performing the Static Inplace Analysis based on the model that has been created. Also understand about the various factors to be considered for doing the Inplace analysis.

Environmental Loading

- Wind Area Definitions
- Wind Loads
- Wave and Current Loading
- Buoyancy Loads
- Marine growth
- Hydrodynamic Coefficients
- Wave Kinematics and Current Blockage Factor
- Hydrostatic Collapse check

Preparing for Analysis

- Load Combinations
- Allowable Stress Modification factor
- Unity Check Partition Table
- Code Check & other Analysis options
- Defining Boundary Conditions

Creating Joint Can Data File

- Joint Check Options
- Joint Can File

Analysis Results

- Codes and Standards
- Analysis and review of results
- Interpretation of List files
- PostVue Files
- Viewing Results in 3D
- Member Unity Checks and Unity Check Plots
- Member Review and Redesign
- Joint Design Review and Redesign
- Data Extraction and Report Preparation

Regards

Tarun Rewari
Director
Aryatech Marine & Offshore Services Pvt. Ltd