

# Aryatech SACS Intermediates Training Program

**SACS**

Aryatech Provide the training for SACS Software. Training session is 5 Days.

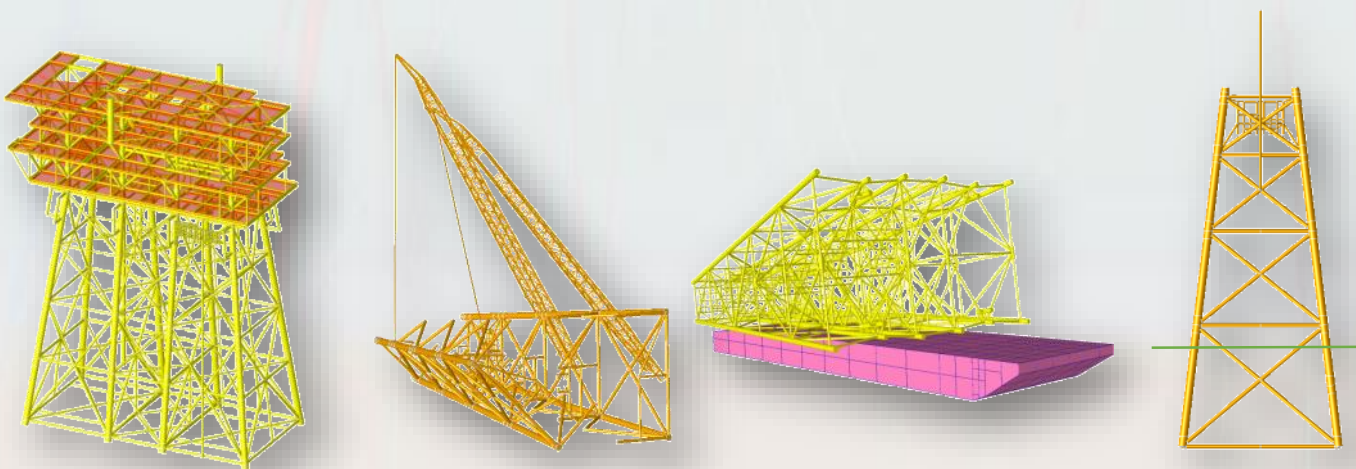
The training session provides a broad overview of the software and show new users where to find answer to questions and how to get started. The later session goes into more detail and show users how to solve specific problem. The software will be provided to the candidates on the course of training.

## **Certificates:**

Upon completion of training, training certificates will be provided by Bentley

## **Training Material:**

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



# SACS

## SACS TRAINING SCHEDULE

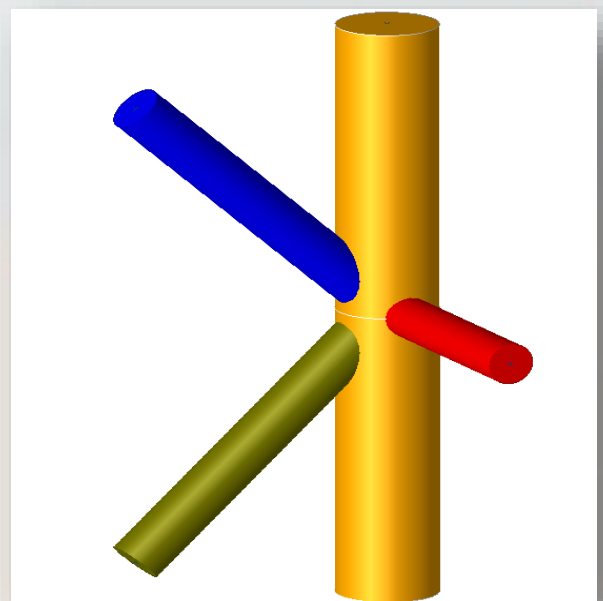
- Determine the system capabilities & the new features of SACS & be able to explain its system configuration.
- Introduction
- Fixed Platform Nomenclature
- Platform Concepts
- Analysis techniques
- Codes and Standards
- SACS Software Modules
- Module arrangement
- Global Settings
- File naming convention
- Setting up project, run files etc..
- Precede, Data Generator and Editor



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.

### Creating the Model

- Using Precede and Structural Wizard
- Members
- Wish bones
- Main piles
- Conductor Modeling
- Inputting Material Properties
- Plate Groups
- Local and Global Coordinate Systems
- Loading



## SACS TRAINING SCHEDULE

### Defining the Design Parameters

- Joint Connection Design
- Define Beam Offsets
- Define Member Code Check Properties

### Loading the Model

- 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

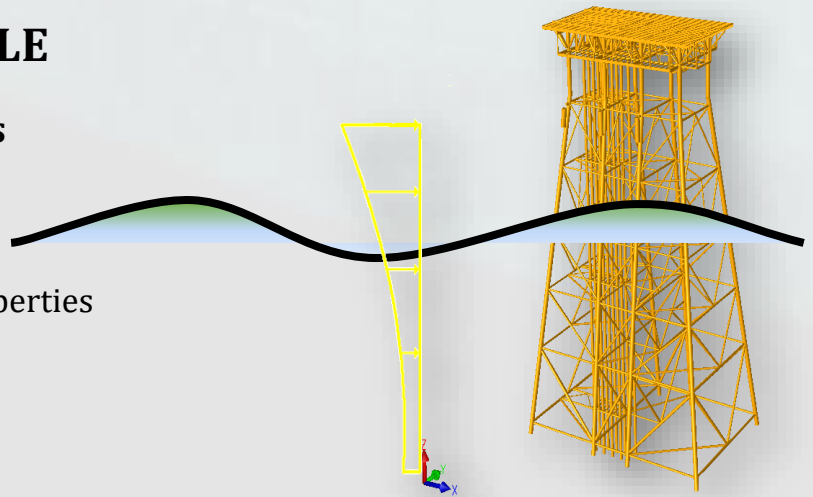
Understand the user-defined loading & be able to input environmental loading from waves, wind, current etc... Define the Load Combinations. Performing the Static Inplace Analysis based on the model that has been created. Also understand about the various factors to be considered for doing the Inplace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

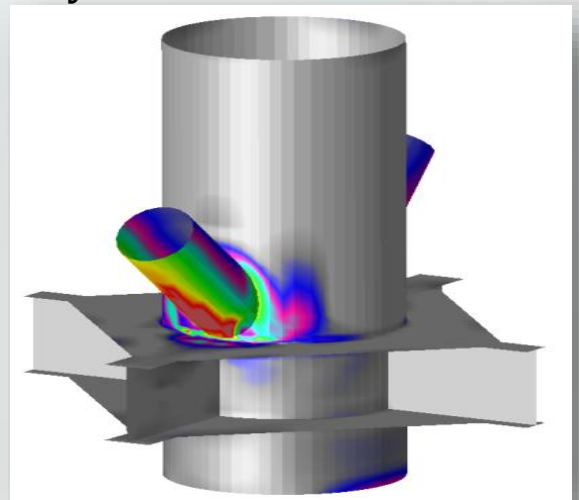
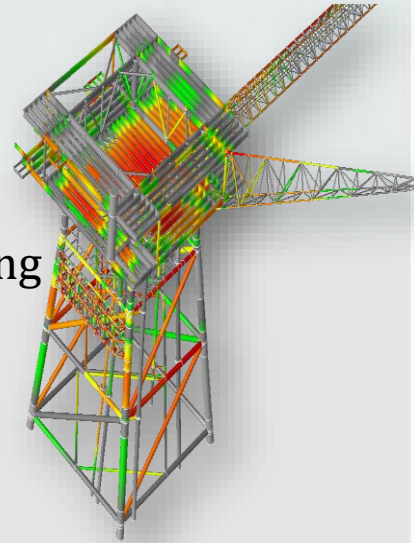




## SACS

### SACS TRAINING SCHEDULE

- **Full Plastic Collapse/Pushover**
- Collapse Basics
- Pushover Analysis – Reassessment of Existing Offshore Structures
- Codes & Standards Requirements
- Full Plastic Collapse/Pushover Analysis in SACS
- Joint flexibility options
- Preparing SAC IV Input file
- Preparing Collapse Input file
- Carrying out analysis
- Post-processing & Review of results



**General Discussion/Doubts Session**