

OFFSHORE STRUCTURE PLATFORM DESIGN USING SACS SOFTWARE TRAINING

"Design, Analyze, and Optimize Offshore Structures with Confidence Using SACS."

Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** In-House Training

Introduction

Designing offshore structures, such as oil & gas platforms, wind turbine foundations, and marine installations, requires high precision, compliance with international codes, and consideration of harsh marine environments. SACS (Structural Analysis of Complex Structures) software is a leading structural engineering tool widely used in offshore engineering to model, analyze, and design complex structures efficiently and safely.

The Offshore Structure Platform Design Using SACS Software Training course equips participants with practical skills to model offshore platforms, analyze structural behavior under environmental loads, and design steel and composite members according to international offshore codes. Participants will gain hands-on experience in creating 3D models, applying wave, wind, current, and live loads, performing response analysis, and generating design documentation for safe and optimized offshore structures.

Objectives

By the end of this course, participants will be able to:

- Understand SACS interface, commands, and modeling environment.
- Build accurate 3D models of offshore platforms and structural members.
- Apply environmental loads including waves, wind, currents, and seismic forces.
- Perform static and dynamic structural analysis of offshore platforms.
- Design steel and composite members according to API, ISO, and other international standards.
- Analyze platform response under extreme load conditions.
- Generate detailed reports, drawings, and material schedules.
- Optimize structural design for safety, durability, and cost-effectiveness.
- Apply best practices for offshore project documentation and collaboration.

Why Attend

The offshore engineering sector demands precise, safe, and efficient structural solutions. Mastering SACS software allows engineers and designers to confidently analyze and design offshore platforms to withstand extreme marine conditions. This course provides real-world, hands-on training that enhances your technical competence and prepares you to meet industry standards, making you an asset to any offshore or marine engineering project.

Target Audience

This course is suitable for:

- Offshore and Structural Engineers
- Design and Analysis Engineers in Oil & Gas or Marine Sectors
- CAD/CAE Engineers and Draftsmen
- Project Managers and Site Engineers handling offshore projects
- Engineering Graduates and Students interested in offshore structural design
- Professionals involved in platform, wind turbine, or marine structural projects

Individual Benefits

- Gain hands-on experience in SACS for offshore platform modeling and analysis.
- Learn to apply environmental loads and design code compliance.
- Enhance accuracy in structural analysis and offshore design documentation.
- Improve problem-solving and analytical skills for offshore projects.
- Increase employability and professional value in marine and offshore engineering.
- Develop confidence in executing real-world offshore structural design projects.

Organizational Benefits

- Improve efficiency and accuracy in offshore structural design workflows.
- Ensure compliance with international offshore codes and safety standards.
- Reduce project risks and minimize costly errors.
- Enhance collaboration among engineering, project management, and field teams.
- Optimize design for durability, safety, and cost-effectiveness.
- Build in-house expertise for offshore platform and marine structure projects.

Instructional Methodology

The training employs a practical, project-based approach through:

- Interactive SACS software demonstrations and guided exercises
- Real-world offshore platform case studies
- Step-by-step tutorials and instructor-led modeling sessions
- Group workshops and collaborative structural analysis exercises
- Assignments focused on offshore platform design challenges
- Continuous feedback and Q&A sessions for individual improvement

Course Outline

- Module 1: Introduction to SACS Software Interface and Project Setup
- Module 2: Creating and Editing 3D Models of Offshore Platforms
- Module 3: Application of Environmental Loads – Waves, Wind, Currents, and Seismic
- Module 4: Static and Dynamic Structural Analysis of Offshore Platforms
- Module 5: Design of Steel Members – Columns, Beams, Bracings
- Module 6: Design of Composite and Special Members
- Module 7: Load Combinations and Platform Response Analysis
- Module 8: Optimization Techniques for Offshore Structures
- Module 9: Output Interpretation, Reports, and Documentation
- Module 10: Capstone Project – Complete Offshore Platform Design Using SACS

Certification

Upon successful completion, participants will receive a Certificate in Offshore Structure Platform Design Using SACS Software, recognizing their proficiency in offshore structural modeling, analysis, and design using the industry's leading software for offshore engineering.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
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In-House / Customized Training

Interested in running this course for your team?

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