



DIGITAL SOLUTIONS

TRANSPORTATION ANALYSIS OF OFFSHORE STRUCTURES

Course code: SE-36
Duration: 4 days

Prerequisite:

It is required that the participants have attended SE-01 and SE-06, alternatively SE-04, or SE-16, or have similar knowledge use of GeniE, HydroD, Wadam and Sestra.

DESCRIPTION

The course focuses on running transportation analysis by direct hydrodynamic and strength analysis methods, global structural analysis and spectral ULS calculations. The model used throughout this course consists of a topside, deck support frame (DSF) and transportation barge, prepared in GeniE.

Practical point of view, pre-seafastening and seafastening conditions will be investigated together. The hydrodynamic environment modelling is done in HydroD and the hydrodynamic analysis in Wadam.

Design wave will be selected in Postresp by long term response calculation. Selected design wave are transferred to the structural FE model by load transfer in HydroD, and structural analysis will be performed in Sestra.

Hydrodynamic and structural results for ULS analysis are presented in Xtract. Simplified strength evaluation of topside by using RAO tool will be introduced. Code checking of beams and plates for topside, DSF and barge is performed in GeniE.

Long term stress distribution for extreme condition will be investigated in Stofat.

The course focuses on practical use of the various modules of Sesam in the transportation analysis workflow.

LEARNING OBJECTIVES

You will learn how to perform necessary steps of assessing the structural integrity of barge and relevant structure for transporting condition.

TARGET GROUP

Structural engineers working in the field of transportation and installation for ship and offshore structures.