



DIGITAL SOLUTIONS

NON-LINEAR HYDRODYNAMICS ANALYSIS OF OFFSHORE FLOATERS

Course code: SE-07

Duration: 2 days

Prerequisite:

It is required that the participants are familiar with hydrodynamic analysis.

In particular it is assumed that the participants are familiar with the topics covered by SE-06.

DESCRIPTION

This course introduces the participants to the Sesam programs for wave load analysis of offshore floaters based on time domain methodology. The course covers some theory description, numerical challenges in a time domain analysis, description of the non-linear effects included, various types of environmental data that can be used as input, execution and animation of the time domain simulations, and load transfer of hydrodynamic results to structural analysis.

HydroD is the main tool, supported by Wasim and Xtract. You will also learn how to create panel models using Wasim.

LEARNING OBJECTIVES

Learn how to perform non-linear global hydrodynamic response analysis, transfer loads to structural analysis, and animate results. The exercise is based on a semi-submersible.

TARGET GROUP

Naval architects involved in conceptual studies and detailed engineering of any offshore floating structure.