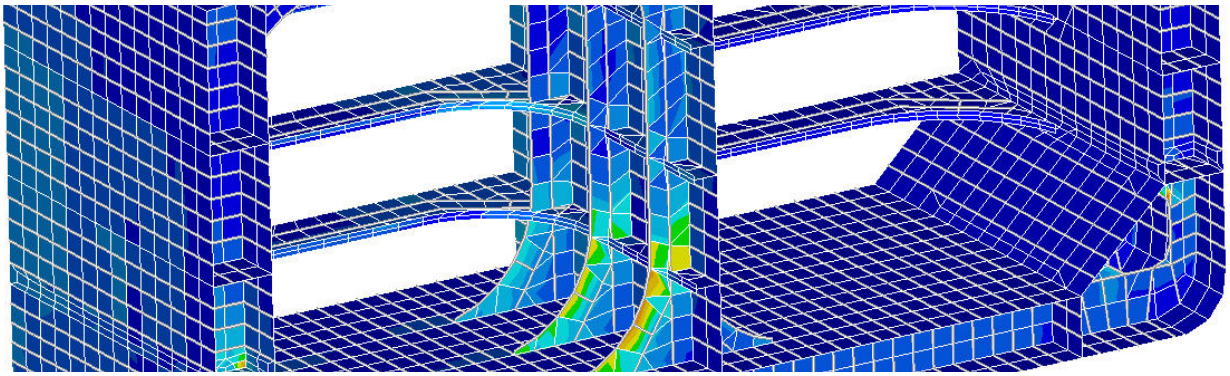

DIGITAL SOLUTIONS

FPSO CARGO HOLD ANALYSIS

Course code: SE-16
Duration: 3 days

Prerequisite:
Basic understanding of ship structures and hull strength and use of FE analysis for strength calculations. Knowledge in Nauticus Hull as covered in NA-02. It is beneficial if the participants have attended SE-01.

DESCRIPTION

This course is an introduction to programs for modelling and FE analyses of FPSOs according to the Offshore Standard DNVGL-OS-C102. Focus is put on extruding a cross section from section scantlings, 3D modelling and mesh control in GeniE, applying loads, corrosion additions and boundary conditions according to DNVGL-OS-C102 and DNVGL-RP-C102, running a Sestra analysis and post-processing using Xtract.

The course will be a combination of lectures and hands-on training. The hands-on example consists of building and meshing a cargo hold model, analysing it and performing stress level assessment. The cross section for the cargo hold model is extruded from a midship section modelled in section scantlings in NA-02 Nauticus Hull rule check analysis.

The course will also provide an introduction of the DNV Offshore Rules and their requirements to strength assessment analyses of the cargo hold area.

LEARNING OBJECTIVES

After the course you should be albe to create FPSO cargo hold models and execute FE analyses for strength and stress level assessment.

TARGET GROUP

Structural engineers working with design of FPSOs.