OE6004 – NUMERICAL MODELLING OF OFFSHORE STRUCTURES – NO DATA

Fixed Structures: Introduction to structural modeling and analysis of jacket structures; Main piled and skirt pile jacket models, In-service analysis for storm wave loads, load-out and launch analysis, sea transportation loads generation and analysis; Seismic analysis fixed offshore structures; Code guidance; Examples problems and case studies, tutorial problems;

Floating Structures: Static and dynamic stability of floating systems; ABS guidelines; Longitudinal strength calculation; Basics of motion analysis of floating structures; Motion analysis of flat bottom barges, heavy lift vessels and other floating systems such as SPAR, Tension leg platforms and semi-submersible; Generation of Response Amplitude Operators (RAOs); Motion analysis of multi-bodies; Heavy lift vessel and crane lifting system; Case studies and tutorial problems;

Mooring System analysis: Basics of mooring systems; Slack and catenary mooring systems; Spread mooring system analysis; Turret mooring system analysis; Case studies and tutorial problems.