6 MONTHS INTERNSHIP

ANALYSIS OF DEEPWATER RISER SYSTEMS

PRINCIPIA

INTRODUCTION:

PRINCIPIA is a leading consultancy providing engineering services to deliver some of the latest, most challenging subsea projects in the Europe and around the globe, for the Oil & Gas and Marine Renewable industries.

In the recent years, projects have been looking at developing systems in deep and ultra-deep waters with requirement to innovate in the technical solutions proposed for the riser systems.

To meet these demands, we are currently looking for interns to work on Deepwater riser systems.

SCOPE OF WORK:

The work to be performed is related to detailed analysis of deep water riser systems.

The main objectives will be to develop database and results allowing the candidate and Principia to increase their understanding of the behaviour of such system under a range of applicable conditions and loadings and most efficient ways to analyse these systems.

The key activities to be performed by the intern are:

1. Develop a sizing tool for subsea buoyancy modules (attached to windfarm cables, steel riser, flexibles) based on Supplier database
2. Investigate the pros & cons of the various modelling approach for buoyancy modules in FEA
3. Perform screening design of steel catenary risers for a range of input parameters using FEA.
4. Perform screening design of steel lazy wave catenary risers for a range of input parameters using FEA.
5. Analyse results from studies 3) & 4) to derive main conclusion such as suitability of configuration as function of water depth, environmental conditions etc
6. Optional: Provide calculation support to a Project in execution and be integrated into the Project Team.

GENERAL:

- ✓ Duration: 6 months
- ✓ Start date: Early 2022
- ✓ Location: PRINCIPIA offices in La Ciotat (Bouches du Rhône)
- ✓ To apply: job@principia.fr