

**Business area:** Resources – Oil and Gas, Offshore Wind and Decarbonisation

**Requirements:** Minimum 2.2 Masters or MEng Degree in a relevant subject

**Our teams and what they do:**

**Mechanical - Offshore Structures**

South West, London and South East

Our Offshore Structures teams across the UK operate globally in both the Oil & Gas and Offshore Wind markets. As a graduate in one of these locations, you will be contributing to a variety of technically challenging and exciting projects, from designing new offshore wind farms, to helping clients improve their operational efficiency as part of the asset integrity management offerings, developing carbon capture and storage solutions, and even offshore visits to our client's global installations.

You'll be joining a team that actively encourages and fosters innovative solutions and new approaches to our client's problems. Your work could involve the following:

- designing large scale multi-disciplinary greenfield and brownfield oil & gas projects
- designing the next phase of the world's offshore wind farms
- creating safety critical finite element models in our advanced structural analysis teams using a variety of software's and programming languages
- developing life extension plans for ageing structures
- determining the fatigue and fracture reliability of structures with our highly specialised experts

**Mechanical - Offshore Structures, Oil & Gas**

Scotland

Our Offshore Structures team in Aberdeen operate both locally in the North Sea and globally across all regions in the Oil & Gas market. As a graduate in this team you will be contributing to a variety of technically challenging and exciting projects, from helping clients improve their operational efficiency as part of our asset integrity management offerings to solving some of industries most technically complex and unique engineering problems and even performing offshore visits to our client's global installations.

You'll be joining a team that actively encourages and fosters innovative solutions and new approaches to our client's problems. Your work could involve the following:

- creating safety critical finite element models in our advanced structural analysis teams using a variety of industry software and programming languages
- developing life extension plans for ageing structures
- interfacing directly with clients, representing our teams to discuss engineering solutions to complex problems
- supporting winning new work by providing technical and pragmatic input to support bidding activity
- driving efficiency in offshore inspection activities through development of risk-based inspection work scopes

**Fluids**

London and South East

Within the Fluids teams you will work on projects primarily in the Oil & Gas and Offshore Wind market across the UK and globally. Some of our recent projects include Prelude FLNG and Kincardine Offshore Wind Farm. We also provide analysis to support large infrastructure projects; notable examples include the Thames Tideway storm tunnel system and the Doha Metro rapid transit system in Qatar. We're looking for candidates who have a strong aptitude for and interest in fluid mechanics and heat transfer, from a degree background of either Process or Mechanical, modules in this area would be useful also.

## **Drilling Structures**

Scotland

Within this team, you will have the opportunity to work on several aspects of drilling structures, including riser analysis, subsea conductor analysis, and platform conductor analysis, for clients in the North Sea and worldwide. As well as supporting exploration drilling activities and conductor design, you will also provide day-to-day operational support to our clients' fixed assets, many of which are operating in life extension, with well components, such as conductors, connectors, guides, and guide frames suffering degradation and wear.

Although primarily working in the Drilling Structures team led by a Principal Engineer, you may also contribute to other aspects of structural integrity management in the wider structures team, including jacket and topsides analysis, inspection review, and brownfield design.

As we operate in a multi-discipline office, there may also be opportunities to be involved in work for our Subsea, Process, and Software Development teams.

## **Subsea**

Scotland

Our highly experienced Subsea team operates on some of the most challenging and exciting projects in the Oil and Gas sector, in the North Sea and across the globe. As a mechanical engineering graduate, you'll deliver engineering assessments for a wide variety of conceptual designs and consultancy studies. Your work could involve the following:

- Contributing to conceptual studies for challenging marginal, HPHT or deepwater subsea developments
- Using analytical or non-linear FE methods to help solve diverse and complex pipeline problems during design and operation
- Developing life extension plans for ageing pipelines
- Helping clients determine their decommissioning strategies
- Interfacing directly with clients, representing our teams to discuss engineering solutions to complex problems
- Supporting winning new work by providing technical and pragmatic input to support bidding activity

Within all of these teams we recognise the importance of creating an inclusive working and social environment. We hold quarterly socials, regular inter-office sports matches, and have built an office culture focused on maintaining an enjoyable, flexible and healthy environment to work in.

## **Locations for this business will include:**

Aberdeen, Bristol, Edinburgh, Epsom, London

**To apply, please return to the main job specification**