

## JOB DESCRIPTION

### About Houlder Ltd:

At Houlder our Vision is to become the planet's preferred partner for maritime decarbonisation, famous for good sense, smart design, and practical solutions. Whether it is navigating the low-carbon energy transition, enhancing vessel efficiency with clean technology, or developing renewable energy infrastructure, we lead the way in crafting a more sustainable world.

For our employees and prospective candidates, we offer an environment where fresh thinking in engineering, design, and project delivery thrives. Our culture is one of collaboration, growth, and positive impact.

We have an excellent track record of developing graduates and those in the early stages of their careers across marine engineering, naval architecture, and the transition to a more data, digital and analytical industry. Promoting them up through the organisation and supporting their professional development. We are looking for individuals who are collaborative, curious, and always open to learn.

The company is growing strongly, with a strategy to be one of the leading global specialists in engineering design, clean technology, and technical consultancy for the marine and offshore environments, built upon a long history operating in the maritime environment.

**Job Title** Graduate & Early Careers - Naval Architect/Engineer/Analyst

**Location:** London/Fareham/Aberdeen/Hybrid

**Reports to:** Practice Team Leader

**Intake:** September 2024

### Overview of Role:

To undertake project work and oversee technical performance, including engineering, design, and analysis in support of the company's Naval Architecture, and engineering contracts. From the beginning you will be working on exciting projects alongside senior staff who will help you learn all the necessary technical skills and support you in your development.

As part of our graduate and early careers intake, we aim for you to gain exposure and experience in a range of disciplines across the Houlder organisation. We offer support for your professional development throughout the early stages of your career to help you achieve Chartership and continued personal development.

The job may require work at the Group's other offices, at client or subcontractor premises, and to undertake occasional business trips to offshore vessels or installations and shipyards in the UK and overseas.

You will join our active developing engineer's community with biweekly allocated time, dedicated to your development. You may wish to join our sustainability working group or support our R&D opportunities.

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### **Responsibilities and duties range from:**

- Calculate and give advice/assistance in assessing vessel performance (motions/stability/strength)
- Review and approve calculation packages prepared by Project Teams and third-party design consultants (motions/stability/strength)
- Carry out stability calculations for project teams.
- Undertake structural design calculations and drawings to Class requirements.
- Working with data analysis, creating models for simulations, studying hydrodynamics, and checking how ships perform under different conditions.
- Review and approve plans as part of a ship building contract for a variety of vessels including ferries, high speed craft, Ro-Ro ships, sophisticated cargo carriers and tankers.
- Interface with various Classification societies and Flag states
- Conduct design review meetings to assure that technical objectives are being achieved.
- Site visits, including deadweight surveys, inclining experiments, equipment tests and other activities such as yard capability review.
- Working on concept designs through to build support

### **Experience and Qualifications:**

- Essential: BEng (Hons), MEng or MSc (or equivalent) in Naval Architecture, Ship Science, or other relevant subject (minimum Class 2:1/Distinction (or equivalent foreign awarding academic body)
- A keen interest and ideally some broad understanding of marine engineering, naval architecture, ship design, etc.
- A positive, flexible approach with excellent interpersonal skills, numerate, with strong written communication skills.
- Reliable with a natural accountability for your own work
- MS Office applications and other software such as AutoCAD, with a basic understanding of beam element analysis software and finite element analysis (FEA) software e.g. Ansys or similar
- Skills in data analysis & visualisation, experience in developing software tools and databases.
- Basic competence of 2D/3D CAD software
- Applicant should have a solid engineering background, with demonstrable knowledge of vessels' structure.
- Ideally an awareness of Classification society and Flag state rules and regulations

May 2024