

Job Specification

Structural Engineer - Marine (Principal or Senior Engineer)

A Structural Engineer with experience in designing, analysing, and ensuring the structural integrity of a wide range of vessels, equipment and systems operating within the marine environment. A working knowledge of marine engineering principles, regulations, and classification society standards. An understanding of composite design, material selection and manufacturing processes and the ability to translate this information into technical drawings and reports. Will closely collaborate with interdisciplinary teams including Naval Architects and Systems Engineers, assisting or leading on structural aspects at concept, basic and detailed design level.

The ideal candidate will be able to:

- Supervise and review the work of more junior engineers, drafters, and technicians.
- Make judgements and recommendations on technical matters within their area of experience.
- Work independently or as part of a team or leading where appropriate.
- Share knowledge and act as mentor to more junior staff within their area of experience.
- Adhere to quality, safety, and environmental procedures/standards.
- Manage projects to scope and within time, cost and quality requirements.
- Demonstrate knowledge of relevant software, systems, and processes.

Essential:

- Proficiency in design and analysis of structures operating within the marine environment including ship hulls and on board systems.
- Experience of finite element analysis (FEA) to assess structural integrity and performance of marine components and assemblies.
- Ability to generate comprehensive reports and documentation on analysis results and design recommendations.
- Stay updated with industry standards, regulations, and best practices related to marine structural engineering.
- Excellent problem-solving skills and attention to detail.
- Excellent written and verbal communication skills.
- Ability to work effectively in a collaborative team environment.

Desirable:

- Degree qualified in related engineering field.
- Proficiency in Siemens NX and Simcenter for 3D modelling and structural analysis.
- Experience of design and analysis using composite materials and understanding of manufacturing processes.
- Interested in the development of innovative and sustainable design solutions to improve the efficiency and environmental impact of marine structures.
- Chartered or working towards chartership with relevant professional body.
- Knowledge of the design, build, integration, support, and operation of Naval ships.