



BLACKFISH

ENGINEERING DESIGN AND PRODUCT DEVELOPMENT

Position Description

Job Title: Mechanical Engineer

Office Location: Bristol, UK

Employment Type: Full Time, Employee

About Blackfish

Blackfish Engineering Design Limited was founded in 2016 to provide engineering expertise to the offshore renewables sector. Initially focusing on supporting wave and tidal energy converter technology development, Blackfish quickly established itself as one of the leading specialist ocean energy consultancies. More recently, Blackfish has begun to support the offshore wind sector, with particular focus on innovative solutions for the O&M challenges faced by fixed bottom and floating wind farm operators.

Blackfish are now looking to expand the team to support a growing customer base, an increased presence in the offshore wind sector, and to continue providing INNOVATIVE ENGINEERING DESIGN FOR A SUSTAINABLE FUTURE.

Profile Description

Blackfish is seeking a Mechanical Design Engineer with experience working on innovative marine or offshore technologies to enhance our offshore renewable energy focused engineering team. The successful candidate will be UK based, preferably in southwest England, but there are potential opportunities around our various customer bases in Scotland and Wales. They will be responsible for undertaking mechanical engineering design and project engineering across a diverse range of projects and will be an integral part of the Blackfish team.

Direct experience in offshore wind operations or associated industries would be an advantage, as would practical experience of finite element analysis using Ansys or Nastran. However, transferrable skills and broader experience may also be beneficial as we seek to diversify our team.

Main Responsibilities

- Concept design of structures and systems to meet customer or internal requirements.
- Detailed design of structures and systems including CAD modelling, creation of engineering drawings and production of written engineering reports.
- Structural and engineering calculations, including from first principles, across a wide range of engineering topics (structures, hydraulics, lifting, shafts and bearings, bolted connections etc).
- Project engineering, including engaging suppliers, managing work package budgets and timescales, providing updates to project managers, and liaising with customers.
- Basic integration of mechanical hardware with electrical and control systems and instrumentation.

Qualifications & Experience

All candidates should have:

- Degree in Mechanical Engineering (or similar).
- At least 5 years mechanical design experience within marine or offshore applications.
- Excellent comprehension of issues and solutions relating to design for offshore and sub-sea environments.
- Significant experience with CAD (ideally Autodesk Inventor).
- Excellent comprehension of Microsoft Office applications, (Ideally Office 365).

It would be advantageous if candidates had any of the following:

- Good familiarity with Microsoft Teams.
- Significant experience with FEA (ideally Nastran or Ansys).
- Fatigue analysis experience, using software such as nCode.
- Significant experience with Autodesk Vault.
- Experience with electrical power systems.
- Experience with battery systems for electric vehicles and vessels.
- Experience of Naval architecture and/or moorings design.

Competencies

All candidates will have the following attributes:

- Honest and trustworthy, seeking guidance where necessary.
- Excellent communication skills, including good spoken and written English.
- Excellent time management with the ability to manage own workload to meet deadlines.
- Ability to empathise with the client's position.
- Proactive and independent, with the ability to follow a collaborative approach to problem solving.
- Positive, flexible and able to thrive in a dynamic environment.

Conditions, remuneration and benefits

Competitive salary – negotiable depending on experience.

Blackfish are an equal opportunities employer who are committed to inclusivity. As such we have a proactive approach to supporting employees requiring flexible working arrangements, and welcome people from all backgrounds into our team.

How to Apply

If you would like to apply, please email an up-to-date CV to careers@blackfishengineering.com, along with a covering letter stating why you are suited to this position and what you would bring to the Blackfish team. Please include the job title in the subject line of your email.