

Mechanical Design Engineer (Edinburgh)

Company: Nova Innovation

Location: Edinburgh, UK

(We are also advertising for a Project Engineer and a Junior Electrical Engineer. We welcome applicants with a combination of skills from these job descriptions)

If you would like to apply, please email your CV **with a tailored covering letter** to applications@novainnovation.com, stating why you think you would be suited to this position. For the Subject field in your email, please use: “**Job application: 22004 Mechanical Design Engineer**”.

Summary

Nova Innovation is recruiting for Mechanical Design Engineers to join our talented and energetic team working at the forefront of the tidal energy industry.

The role

Nova Innovation is looking for Mechanical Design Engineers of various experience levels (with at least 3 years industrial experience) to complement the existing skills within our Mechanical Engineering team. Work will include turbine and array design from concept, all the way through to turbine operation.

Responsibilities

Responsibilities will be tailored to the experience of the successful candidate(s), and to ensure best fit within the engineering team. They will include:

- Creating innovative engineering product solutions to meet challenging cost and timescale constraints
- Completing detailed engineering analysis, often in the absence of specific codes and standards
- Preparing manufacturing definitions (drawings, specifications, procedures) for design
- Taking responsibility for delivering your designs alongside procurement through manufacture, assembly and into service; this may include working closely with manufacturers, as well as in the production facility, or on site
- Analysing performance to validate designs, and drive product improvements
- Other engineering and company duties required by the business.

Attributes

We are looking for applicants with the following essential attributes:

- Able to combine creative and analytical skills with in-depth knowledge to deliver practical cost-effective solutions to a wide range of engineering challenges
- Positive and friendly personality, with a ‘can-do’ attitude
- Track record of designing mechanical/structural systems for a relevant application e.g. marine, wind, hydro.
- Good product cost optimisation and manufacturability knowledge
- Competent user of 3D CAD (preferably Inventor) to create production drawings

- Able to work flexibly and communicate well within a small, cross-discipline team
- Self-motivated and capable of meeting deadlines
- A keen interest in tidal energy
- A relevant Engineering degree, or equivalent experience.

Examples of other beneficial experience include:

- Experience within a relevant industry e.g. wind, marine, or marine renewables
- Design experience of key systems e.g. rotor/propellor design, large drivetrains, large actuation systems, substructures/foundations, marine deployment tools
- Experience of applying finite element analysis to detailed component design
- Engineering data analysis skills, for example using tools such as MATLAB
- Manufacturing or marine operations experience
- Cross-discipline knowledge e.g. hydraulic, electrical, control systems
- Track record of management of suppliers and external contractors
- Chartered Engineer status.

Background to Nova Innovation

Nova Innovation is a world-leading tidal energy company delivering a proven technology with global potential. We design, build, and operate tidal energy turbines and have offices in Scotland, Ireland, Wales, Canada, and Belgium.

Nova has a strong track record for growth and delivery including deploying the world's first offshore tidal array in Shetland, Scotland in 2016; successfully building the world's first baseload tidal power station in partnership with Tesla in 2018; and winning our first international projects in Canada in 2020.

With a full order book, Nova is looking for a Mechanical Design Engineer to help drive the continued development of Nova's tidal technology and scale-up of the business.

Conditions, remuneration and benefits

The position can either be part-time or full time depending on the candidate and/or level of experience.

Competitive salary is negotiable depending on experience. We also offer a pension scheme with an employer matching contribution up to maximum of 5% of salary.

Annual holidays are 25 days per annum plus 8 public holidays (with a pro rata adjustment for part-time roles).