

Position: Mechanical Design Engineer (Ref: MDE/01)

This is an outstanding opportunity to develop your career in a dynamic employee-owned design consultancy. Built around an ethos of building lasting partnerships between its leaders, people and clients, it has never been a better time to join the team as we are at the point of expansion with a number of new and existing clients.

An opportunity has arisen for a Mechanical Design Engineer who will play an important role in our technical team. The role will be a mix of mechanical engineering design and conducting theoretical and practical feasibility studies for projects where there is a high degree of uncertainty in the optimum technical solution.

About You

We are seeking an enthusiastic and trustworthy individual who is quick to learn and able to manage working on multiple projects without direct supervision. You want to be involved in speaking with clients to understand their requirements and explain technical concepts. You have an excellent attention to detail and always document your work to a high level of quality.

Key Responsibilities:

- Perform theoretical and experimental feasibility studies involving an element of mathematical modelling, simulation and experimental data analysis.
- Create simple programmable test rigs to assist in internal design verification.
- Document their own work including generating client facing reports.
- Verification of their own designs.
- Support the sales team by advising on potential design solutions.
- Ensure their work is completed in accordance with in-house ISO9001 and ISO13485 Quality Management Systems.

In addition we would like the candidate to be able to contribute to the main body of i4 project work including undertaking mechanical engineering design for a range of products as dictated by our diverse portfolio of clients.

Essential Qualifications/requirements:

- Mechanical Engineering Degree or an equivalent engineering degree with a strong numerical focus.
- Fast and self-motivated learner capable of researching and advising on a wide range of subjects within the field of mechanical engineering.
- Experience with MATLAB or equivalent CAE tool.
- At least 5 years professional experience in a relevant mechanical engineering function, where working efficiently is essential.
- Experience of using SolidWorks (or equivalent CAD package) to create 3D CAD models and 2D drawings.
- Have a thorough knowledge of mechanical principles, material properties and manufacturing processes.
- Hands on engineering and prototyping skills.
- Demonstrate excellent verbal and written communication skills

Desired Qualifications/requirements:

It is understood a candidate will be unlikely to have all of these skills but the more they can demonstrate a knowledge of the better.

- Good understanding of physics and / or electronics.
- Experience and / or understanding of:
 - electromechanical design including motor selection and control.
 - developing mathematical models & simulations (in Matlab or equivalent).
 - numerical data analysis and machine learning algorithms.
 - Finite Element Analysis for stress and thermal modelling

product design

- Experience of designing plastic injection moulded components as well as sheet metal and / or CNC components.
- Ability to design and build experimental test rigs utilising simple programmable controllers (e.g. Arduino / Raspberry Pi).
- Good knowledge of design regulations and quality standards (preferably in the medical sector).
- Supply of designs and product with a CE declaration of conformity.

This is a superb opportunity to join a forward thinking and successful SME business. In return you can expect a competitive package in a challenging and supportive culture and the opportunity to grow your career with a company that is growing.

Email jobs@i4pd.co.uk quoting job reference '**Mechanical Design Engineer Ref MDE/01**' and include the following;

- Your CV.
- A covering letter briefly describing the contribution your skills & experience would bring to the team.