

Senior Refrigeration Systems Design Engineer

About us

Nusku is accelerating the move to electrified, low carbon heating in domestic homes. The company is developing a cutting-edge home heating system that will transform the way heat pumps are installed in the country.

Our aim is to reduce the carbon emissions from the UK's 27 million homes, which currently account for around 20% of the UK's CO₂ footprint.

What the job involves

You will collaborate closely with the founder and other employees within the development team to design and develop a custom-built refrigerant system for the company's novel heating system.

Due to the size of the organisation, we would expect you to be involved in all aspects of the product development journey, through to manufacture.

Who you are

We are seeking a skilled and motivated engineer to join our development team. We seek creative and analytical thinkers who can solve problems in various areas. If you are curious and able to deliver solutions, we want to hear from you.

To succeed in this role, you should have excellent collaboration skills, ask important questions, present your analysis, and refine your solutions.

The requirements for this position are:

- A degree in Mechanical Engineering, Chemical Engineering or related fields.
- Knowledge of refrigerant cycles, including interpreting P-h curves, calculating cycle efficiencies, and performing heat transfer calculations.
- Experience with refrigerant selection and understanding of their relative merits and disadvantages.
- Knowledge of F-GAS refrigeration standards and certifications.
- Competency with refrigeration system design software.
- Understanding of variable speed compressors and technological advances in refrigeration.
- Experience selecting components such as compressors, expansion valves, heat exchangers, etc.
- Practical experience putting together a complete refrigeration system.

In addition to the above, it would be great if you have:

- Ability to read and create P&IDs.
- Experience with mechanical CAD software.
- Understanding of auxiliary equipment that interfaces with refrigerant circuits.
- Experience with material compatibility and selection, such as lubrication, for refrigeration systems.
- Hands-on experience detecting faults and diagnosing refrigeration circuits.

How we work

This is a predominantly a site-based role, developing the refrigerant system with the team. We operate flexible working around this, enabling you to work where and when you work best.

Nusku is based at Future Space on the UWE Frenchay campus. This is a vibrant community of start-up and scale-up businesses in the science, tech and engineering sectors.

Application procedures

Please apply with CV and covering letter to joinus@nusku.co.uk