

JOB DESCRIPTION

Job Title	Senior Innovation Engineer
Reports To	New Product Development Manager
Function	Engineering
Version/Date	2.0 June 2023

Company / Function

Pearson Engineering Ltd is a world leading provider of counter-mine and combat engineering equipment. Our product range is wide and varied, including complex attachments for armoured vehicles and remote controlled mine clearance systems.

The Engineering function is a multi-disciplined team that provides technical support to all other functions and is responsible for technology research, innovative product development, product design and the delivery of complete manufacturing and technical data packs associated with our contracts. The team also provides hands-on support for installation, testing and commissioning of new equipment, both internally and at our customers' sites, all over the world.

Job Purpose

Reporting to our New Product Development Manager, the primary purpose of the role is tracking the latest scientific and engineering advancements and identifying technology that can be used to create novel solutions to previously unsolved complex problems faced by our customers.

As an experienced engineering product innovator, the role will work within the Pearson Engineering New Product Development team to define new pioneering product visions and complete initial proof of concept studies to determine technical feasibility. The role will build effective relationships with internal and external stakeholders, relentlessly striving to ensure the real-world problems are well understood and any technology solutions proposed are commercially and operationally viable.

The role may oversee the delivery of first of product, acting as the technical expert and product owner.

Key Responsibilities

Reporting to the New Product Development Manager, the Senior Innovation Engineer is responsible for:

1. Identifying and researching real world problems facing Pearson Engineering customers. Bringing clarity and definition to the challenges Pearson Engineering are best placed to pursue solutions for.
2. Researching and tracking latest market and engineering advancements in technology areas identified as strategically relevant to Pearson Engineering.
3. Using current skills, technical knowledge, and experience, and what has been learnt about new technology, to identify and develop opportunities for innovation and working alone, and with others to deliver those opportunities / solutions.
4. Sharing and communicating technology insights and trends within the Engineering group and wider business.
5. Facilitating brainstorming and ideation activities and distilling outcomes to identify credible ideas that could result in future products and solutions to solve real world problems.
6. Identifying credible collaboration opportunities to accelerate time to market with new solutions.
7. Driving development at pace, recognising that it is as important to stop wrong projects as it is to promote the good ones.
8. Rapid prototyping and experimentation to conduct initial proof of concept studies.
9. Collaborating with Business Development and Marketing teams to gain early end user feedback to guide, inform and optimise winning solutions.
10. Developing / defining a product design / specification in sufficient detail that enables others to complete detailed design and engineer for production.
11. Primarily focussing on the early stages of product development, however, actively engaging technically throughout the product lifecycle to ensure first of products are launched successfully.
12. Contributing to the wider engineering team through participation in design reviews to ensure optimal integration of new technologies and innovative solutions within PEL's range of new and existing products.
13. Communicating professionally with fellow staff, directors, and clients.
14. Maintaining strict deadlines and prioritise workflow accordingly.
15. Other related duties as assigned.

Skills/Experience

- A technical degree in Mechanical Engineering, Physics, Product Design Engineering or similar with a grade of at least a 2:1 or an equivalent qualification and experience.
- Significant experience in Concept and Product Design / Development within an Engineering business.
- Proven experience in a relevant industry with a history of taking creative ideas through to commercially successful products.
- Enthusiastic about new technology, naturally inquisitive, and an innate ability to identify and solve real engineering problem.
- Excellent problem-solving skills, reliant on core engineering understanding combined with common sense.
- Ability to identify proven technologies / capabilities in different industry sectors and leverage them to advance PEL's new and existing product offerings.
- Appetite for rapidly learning about new technologies and methodologies and integrating them into future product designs.
- Possess the ability to bring a fresh perspective and recognised by others as a disruptive, creative thinker.
- Experienced in the concept design of mechanical and hydraulic based products, with a working knowledge of electronic and electrical systems.
- Demonstrates commercial aptitude as well as technical competence when evaluating feasibility, desirability, and viability of new product ideas.
- Experience of rapid prototyping and comfortable designing and conducting proof of concept experiments.
- Experience in robotics and autonomous vehicle technologies advantageous.
- Experience in User-Centred Design.
- Strong written and verbal communication skills
- Contribute actively and enthusiastically, utilising high levels of creativity where appropriate
- Takes a logical and structured approach to problem solving, including in situations of ambiguity
- Excellent intellect, with the ability to absorb new information rapidly and can contribute innovatively and reliably to system implementation of a project.
- Self-motivated, proactive and results driven approach.
- Experienced at working in a multi-disciplined engineering team and able to establish professional working relationships with internal and external stakeholders.
- Able to work to deadlines whilst maintaining high quality.

Personal attributes and other requirements

- As a defence contractor, we have a number of security obligations placed upon the Company, which means that all our staff must be able to successfully achieve the relevant security clearances.
- Hold a valid UK driving license.
- You will be expected to support in-house training programmes, as required.

Working Conditions

- Mainly office based with visits to external customers (both UK and overseas) from time-to-time.
- Working conditions whilst on customer sites may include working outside of normal business hours and being required to work in inclement/uncomfortable field conditions.