

## Placement Student - Mechanical Engineering

### Role Purpose:

To support the design, development, test and manufacture of photonics-enabled products and processes for a wide range of applications, especially in Medical technologies, Healthcare and Life Sciences markets.

### Key Responsibilities:

- Embrace and role model the desired behaviours to exemplify our Company values, promoting an ethical, positive company culture.
- To maintain consistent and documented compliance with all relevant Safety, Health and Environmental (SHE), Good Manufacturing Practice (GMP), Data Integrity (DI), quality and best practice requirements.
- To help provide in-house mechanical design and development support of projects.
- To learn how to gather and develop customer requirements.
- To generate conceptual designs, layouts, and bill of materials.
- To assemble and test prototypes.
- To work as part of a multidisciplinary project team with both engineers and scientists and be responsible for the management of external suppliers.
- To learn how to provide clearly documented records of technical data, decisions, methodologies, calculations, and software use in accordance with ISO/FDA quality standards.
- To support the Procurement and Engineering teams for specification, tendering, factory, and site acceptance tests for new equipment.
- To help prepare and provide reports for clients as required.
- To take ownership in agreeing weekly workplans with line manager, mentor, project manager(s) and other relevant stakeholders, and delivering plan to agreed schedule.

**Direct reports:** No direct reports

### Person Specification

### Education / Qualifications:

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Essential:	Desirable:
<p>Educated to <b>A-Level</b> level (or equivalent) in Mathematics and Science (Chemistry, Biology or Physics) or related subject.</p> <p>Currently studying for <b>Degree</b> level (or equivalent) in:</p> <ul style="list-style-type: none"> <li>• Mechanical Engineering (or related)</li> <li>• Manufacturing Engineering (or related)</li> <li>• Product or Industrial Design (or related)</li> <li>• Biomedical Engineering (or related)</li> </ul>	<p>Studying for Masters (or equivalent) <b>MEng</b> or <b>MSc</b>.</p>

Competencies and behaviours	
<p style="text-align: center;"><b>Leadership (Core)</b></p> <ul style="list-style-type: none"> <li>• Respects and values our diverse people and the differing talents, skills and backgrounds that they bring to projects and day-to-day work.</li> <li>• Has a positive influence on those they are in contact with.</li> <li>• Gains the respect and confidence of colleagues and supports them in achieving their goals and targets.</li> <li>• Aligns their behaviours and actions to our PRIDE values, vision and goals.</li> </ul>	<p style="text-align: center;"><b>Decision Making (Core)</b></p> <ul style="list-style-type: none"> <li>• Within area of expertise recognises, identifies and defines problems.</li> <li>• Generates and evaluates alternatives, draws conclusion and analyses risk.</li> <li>• Takes timely and correct action using established methods to ensure effective solutions are implemented by working as a team and with and focused outcomes to be delivered.</li> </ul>
<p style="text-align: center;"><b>Communication (Core)</b></p> <ul style="list-style-type: none"> <li>• Communicates in a clear and concise manner, covering all relevant points in a timely manner.</li> <li>• Uses the appropriate route and format to communicate.</li> <li>• Confirms understanding of others communication.</li> <li>• Asks questions to understand other people's viewpoints, keeping an open mind and embracing new ideas.</li> </ul>	<p style="text-align: center;"><b>Developing self and others (Core)</b></p> <ul style="list-style-type: none"> <li>• Knows own career aspirations and clearly communicates them to relevant colleagues whilst actively working to achieve goals.</li> <li>• Sets personal development goals and deploys strengths to achieve them.</li> <li>• Takes responsibility for one's own performance and actions, and invites and incorporates feedback from a variety of sources.</li> <li>• Regularly reflects on own capabilities to identify development priorities.</li> </ul>
<p style="text-align: center;"><b>Collaboration (Core)</b></p> <ul style="list-style-type: none"> <li>• Establishes effective working relationships with other colleagues.</li> </ul>	<p style="text-align: center;"><b>Delivery (Core)</b></p> <ul style="list-style-type: none"> <li>• Plans, prioritises and leads own area of work to deliver specified and agreed outcomes (time and standard).</li> </ul>

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| <ul style="list-style-type: none"> <li>• Builds and maintains a network of internal and external contacts.</li> <li>• Actively seeks, values and incorporates different views and ideas to broaden their prospective, embracing differing perspectives and unconventional ideas.</li> </ul> | <ul style="list-style-type: none"> <li>• Accurately scopes out length and difficulty of tasks, and repeatedly estimates correct amount of time needed for tasks.</li> <li>• Refers to lessons learnt from other projects/ tasks with related scope.</li> <li>• Acts with minimal supervision or direction by being purposely empowered to make decisions when needed.</li> <li>• Pays attention to detail and delivers accurate and high quality outputs.</li> </ul> |
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### Knowledge and Experience:

Essential:	Desirable:
<p>Has a good working knowledge and practical experience of design, development, and manufacture of mechanical devices.</p> <p>Has an understanding of the product development cycle from research concepts through to production.</p> <p>Has an understanding of key mechanical engineering principles e.g., material selection, assembly techniques and manufacturing processes. Knows techniques for design for manufacturing, assembly, test, and maintenance.</p> <p>Has the ability to source suitable components and manufacturers.</p> <p>Has experience in 3D CAD software (ideally Solidworks).</p>	<p>Has experience in the following areas:</p> <ul style="list-style-type: none"> <li>• The design, development or manufacture of photonic systems or photonics-enabled products</li> <li>• Design, development, or manufacture in a medical device or IVD context</li> <li>• Understanding of rapid prototyping techniques (design and operation)</li> <li>• Experience with additive manufacturing (3D printing) equipment</li> </ul>