

Placement Student

Job Description

Role Purpose

To support the delivery of challenging research and development projects for the investigation, development and testing of new technological solutions for novel smart connected medical devices using a combination of advanced materials, electronics, formulated products, additive manufacturing, and software development.

The placement will focus on one of the following areas, depending on the area of interest selected:

- Product Design Engineering: medical product design and development.
- Electronics Engineering: electronic design, prototyping and testing.
- Software Engineering: software development and testing, including embedded software.

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 work with technologists, scientists and engineers in desktop research and analysing of emerging process, product, digital and manufacturing technologies, and their current and future application areas.
- To contribute to the analysis of published market analysis reports, technology roadmaps, scientific papers, and government policies.
- To contribute the authoring of thought leadership articles and white papers.
- To contribute to the shaping of innovation project and bid ideas to harness the opportunities offered by emerging technologies and to address real world needs.
- To support the engagement with stakeholders, partners and customers from industry, government, and academia by participating in projects, workshops, and meetings.
- To support the management and co-ordination of assigned technological projects and programmes, within CPI's platforms and/or across the High-Value Manufacturing Catapult.

Direct reports: No direct reports

Person Specification

Education and Qualifications

Essential	Desirable
Studying towards a degree in Product Design Engineering, Industrial Design, Mechanical Design Engineering, Electronic Engineering, Electrical and Electronic Engineering, Computer Science, Embedded Systems, or a related field.	

Competencies and behaviours

Leadership (Core)	Decision Making (Core)
<ul style="list-style-type: none"> • Respects and values our diverse people and the differing talents, skills and backgrounds that they bring to projects and day-to-day work. • Has a positive influence on those they are in contact with. • Gains the respect and confidence of colleagues and supports them in achieving their goals and targets. • Aligns their behaviours and actions to our PRIDE values, vision and goals. 	<ul style="list-style-type: none"> • Within area of expertise recognises, identifies and defines problems. • Generates and evaluates alternatives, draws conclusion and analyses risk. • 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.
Communication (Core)	Developing self and others (Core)
<ul style="list-style-type: none"> • Communicates in a clear and concise manner, covering all relevant points in a timely manner. • Uses the appropriate route and format to communicate. • Confirms understanding of others communication. • Asks questions to understand other people's viewpoints, keeping an open mind and embracing new ideas. 	<ul style="list-style-type: none"> • Knows own career aspirations and clearly communicates them to relevant colleagues whilst actively working to achieve goals. • Sets personal development goals and deploys strengths to achieve them. • Takes responsibility for one's own performance and actions, and invites and incorporates feedback from a variety of sources. • Regularly reflects on own capabilities to identify development priorities.
Collaboration (Core)	Delivery (Core)
<ul style="list-style-type: none"> • Establishes effective working relationships with other colleagues. • Builds and maintains a network of internal and external contacts. • Actively seeks, values and incorporates different views and ideas to broaden their prospective, embracing differing perspectives and unconventional ideas. 	<ul style="list-style-type: none"> • Plans, prioritises and leads own area of work to deliver specified and agreed outcomes (time and standard). • Accurately scopes out length and difficulty of tasks, and repeatedly estimates correct amount of time needed for tasks. • Refers to lessons learnt from other projects/ tasks with related scope. • Acts with minimal supervision or direction by being purposely empowered to make decisions when needed. • Pays attention to detail and delivers accurate and high quality outputs.

Knowledge and Experience

Essential	Desirable
<ul style="list-style-type: none"> • Working knowledge and broad experience of IT packages, particularly Outlook, Word, Excel, and PowerPoint. • Excellent team playing skills for establishing sustainable and professional relationships both internally and externally. 	

Area Specific Knowledge and Experience

Product Design

Essential	Desirable
<ul style="list-style-type: none"> • Practical understanding of mechanical product design and manufacture and the product development process. • Practical use of 3D CAD, rendering software and prototyping methods, including 3D printing. • An interest in medical technology. Some experience of electronics and integrating electronics into product designs. 	

Electronics

Essential	Desirable
<ul style="list-style-type: none"> • Knowledge of electronics, device development and testing and/or the healthcare sector. • Experience of electronic device design, prototyping and testing. 	<ul style="list-style-type: none"> • Experience of software development and languages such as C and Python. • Experience of embedded software application development and testing. • Experience of additive manufacturing or 3D Printing. • Knowledge of Internet of Medical Things.

Software

Essential	Desirable
<ul style="list-style-type: none"> • Knowledge of software, device development and testing and/or the healthcare sector. • Experience of software development and languages such as C and Python. 	<ul style="list-style-type: none"> • Experience of embedded software application development and testing. • Experience of electronic device design, prototyping and testing. • Experience of additive manufacturing or 3D Printing. • Knowledge of Internet of Medical Things.