

Placement Student – Biotechnology Job Description

Role Purpose:

The purpose of this role is to support the process engineering function of the Biotechnology Business Unit of CPI, providing assistance with day to day process engineering activities whilst also supporting plant operations. This work will include both engineering and operational support to projects involving generation of new designs and plant modifications, and working alongside other disciplines.

Key Responsibilities:

- To maintain consistent and documented compliance with all relevant Safety, Health and Environmental (SHE), quality and best practice requirements.
- To provide engineering support to the process engineering team to develop new laboratory, pilot and demonstration scale plant designs and to provide engineering support to CPI's facilities. This may involve the development of engineering calculations, flowsheets, P&ID's etc. as front end packages for potential new processes.
- To provide plant and laboratory operational based support to the Biotechnology operations team. This is a key feature of this role, and key to the development of a well-rounded process engineer.
- To use fundamentals of chemical engineering and add value to the projects and technologies run by CPI.
- To provide engineering support to work with customers (both internal and external to CPI) in order to understand their needs and deliver work programmes. Working within a broad based instruction but with a fixed time framework, the job holder must organise the work efficiently to deliver accurate and timely results.
- To ensure all results, conclusions and recommendations are captured using the appropriate IT based monitoring and archive system to enable the storage, retrieval and use of the data.
- To collaborate closely within the process engineering and plant operations teams to ensure flexible and efficient organisation of work and ongoing development of skills
- To manage own time to meet project constraints and raise any issues, to maintain the effectiveness and efficiency of the Biotechnology business.
- To manage contribution to the delivery of own projects to ensure all Process Engineering deliverables are met, coordinating with other Biotechnology resource and asset constraints.
- To ensure own compliance to the required Safety Health and Environment (SHE), Quality and CPI standards/procedures such that these are consistently delivered. Help develop systems to ensure ongoing safety and efficiency.
- To be responsible for discussing project needs; set up, plan and execute scientific experiments and report results to agreed timescales.
- To be responsible for agreeing weekly work plans with line manager and project manager(s) and delivering plan to agreed schedule.
- To be responsible for providing clearly documented records of technical data, decisions, methodologies, calculations and software use in an agreed format.
- To contribute to the delivery of Biotechnology projects through the delivery of chemical engineering knowledge.
- To share professional knowledge with colleagues and be responsible for own continuous professional development.
- To contribute to a culture of continuous capability development within teams in alignment with company strategy and project deliverables.
- To support with internal and external customers as required identifying and understanding their needs and contributing to the design and delivery of agreed outcomes within agreed timescales.
- To work closely with business development and project delivery teams in order to understand, interpret and communicate customer needs to plant operations teams.

Direct reports: No direct reports

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Person specification

Education / Qualifications:

Essential:	Desirable:
Currently undertaking education at Degree level (or equivalent) in a Chemical Engineering or related subject	Currently undertaking education at Masters Degree level (or equivalent) in a Chemical Engineering or related subject

Competencies and behaviours	
Leadership (Core)	Decision Making (Core)
<ul style="list-style-type: none"> • Respects and values the diversity of talents, skills and backgrounds that others bring to joint projects / work. • Has a positive influence on those in contact with. • Gains the respect and confidence of colleagues and supports them in achieving their goals and targets. • Aligns own behaviours and actions to CPI's 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. •
Influencing (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. 	<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 perspective. 	<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. • Pays attention to detail and delivers accurate and high quality outputs.

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Knowledge and Experience:

Essential:	Desirable:
<p>Good understanding of chemical engineering fundamentals, with some experience of application through university design projects or similar.</p> <p>Experience of IT packages, such as Excel, Word, PowerPoint and Outlook.</p>	<p>Understanding of process manufacturing facilities, engineering design or pilot scale operation.</p> <p>Direct industrial experience through placements or similar.</p> <p>Experience of process modelling & simulation, and specifically Computational Fluid Dynamics (CFD) modelling.</p>