Job Description

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| Job title: | Engineer – Electrical, Controls & Instrumentation (Nuclear) |

Role Overview and Key Purpose

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| **Role Overview**For this role, you will be an EC&I engineer with experience of working within the nuclear sector in the UK. You will typically have a degree in Electrical / Electronic Engineering and be chartered (or working towards Chartership) with an institution accredited to the Engineering Council. You’ll be part of an enthusiastic and committed team of Engineers and Designers working to deliver high quality output on projects. As well as demonstrating excellent technical skills, you will be required to develop and nurture relationships with our clients. **Key Purpose*** Develop E,C&I engineering deliverables to support the delivery of capital projects in the nuclear sector
* Understand and implement the technical integration of engineering deliverables with all relevant regulatory requirements.
* Contribute your own personal development and contribute to the continuous improvement of Baker Hicks Nuclear capability.
* On occasion, manage E,C&I Engineering involvementin small to medium-size projects, including time, cost, quality and client relationship management and delivery.
* Champion quality and compliance controls within local teams and projects
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Responsibilities and Accountabilities

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| **Responsibilities*** Provide engineering services design and consultancy work on behalf of Baker Hicks under the direction of the line manager or project lead.
* Produce design deliverables (including Control System Architecture, Control System Functional Specifications, datasheets, loop diagrams, calculations, and reports), site surveys, construction stage duties, client liaison with members of design/construction teams, costing and ensure progress against the project brief.
* Check deliverables, when required, produced by colleagues to ensure engineering designs meet appropriate quality and compliance controls, project brief and customer requirements.
* Collaborate closely with multi-disciplinary members of the design team to deliver safe, efficient, and buildable solutions.
* Contribute to the preparation of enquiry plans, tender reviews, fee estimate sheets, scopes of work and change controls as required.

**Accountabilities*** Compliance with company quality management and legislative requirements.
* Supervision of Engineers, Early Careers and Designers in the production of design deliverables dependant on level and requirements.
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Knowledge, Experience and Qualifications

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| **Essential*** Membership of relevant professional body (e.g. IEE/InstMC)
* Demonstrable experience of design and engineering in a high-risk industry.
* Experience of both concept / front end design, and detailed design.
* Experience of designing electrical supplies for process equipment including fixed and variable speed drives, and intelligent MCC systems.
* Understanding of IEC 61508/ 61511
* Experience of Programmable Electronic Systems including PLC, SCADA, DCS, and MIS.
* Experience of process instrumentation systems including remote sensors and analysers.
* Experience of standard electrical engineering calculations including cable sizing (Amtech).
* Experience of Profibus and Fieldbus communication protocols as well as traditional 4-20mA systems and remote I/O.
* Confident communication and presentation skills with the ability to simplify complex ideas.
* An ability to develop relationships with both internal and external stakeholders that deliver long term benefits.
* Considerable design, technical detailing and specification writing experience.
* Experience in using standard software packages including Microsoft Excel, Word, Powerpoint, and Outlook.

**Desirable*** Chartered Engineer Status.
* Experience of design engineering within the nuclear sector.
* Experience of working in a multi-disciplinary design team.
* Experience of managing small teams from Apprentices and Graduates to Engineer and Technician level.
* Experience of contributing to bids, proposals, and tender specifications.
* Experience of designing for hazardous areas including intrinsically safe instrumentation
* Experience of functional safety, e.g. TUV certification
* Security Clearance for working in the UK nuclear sector (if not already held, will need to be applied for if successful)
* Experience in using the following software:
	+ AutoCAD P&ID
	+ Visio
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