

# career opportunities

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Business: PMES

Ref: 10/010

Location: Rugeley

## Motor Design Engineer (Mechanical)

### Job purpose

Reporting to the Engineering Manager in Power, the Motor Design Engineer will be responsible for providing **Mechanical** design expertise to support the design and development of specialist high power electric motors and generators.

The candidate will provide expertise in the mechanical packaging of power dense motor solutions and will provide design support throughout the design lifecycle; from feasibility studies and concept designs for new products, through to detailed design and production delivery.

### Key responsibilities

- Provide the business with mechanical design expertise for high power induction motors rated in the range of several kW to a few MW
- Provide a focal point for all motor mechanical design activity, encompassing mechanical, structural and thermal design and analysis, within a multi-disciplined engineering environment
- Generate concept design proposals and feasibility studies to support future product development programmes
- Carry out the detailed mechanical design of motors
- Work with production engineering to develop manufacturing technologies, process plans and quality systems and to initiate and support cost improvement activities
- Develop appropriate external design, analysis and manufacturing partners in support of our ongoing business opportunities
- Contribute to the development of engineering excellence within the business

### Personal attributes

- An honours degree in mechanical engineering or close equivalent
- Experience in the electrical design of motors and generators
- Expertise in the design of induction motors would be an advantage
- Broad knowledge of all aspects of motor design and systems applications of motors, motor drives and pumps
- Use of FEA tools for structural design and analysis and fatigue life assessments
- Good knowledge of best practice design lifecycle processes; gated design phases, and design reviews
- Strong analytical skills and a good working knowledge of material science
- An enthusiastic and hands-on approach to design and development
- Design experience using 3D CAD
- Working knowledge of safety and environmental legislation is essential
- Excellent communication skills (verbal, written and IT literate)

Applications should be forwarded to Human Resources at: [vacancies@ultra-pmes.com](mailto:vacancies@ultra-pmes.com)

**Closing date for application: 13 August 2010**

**Ultra Electronics is committed to equal opportunities and career development both within and across all businesses. If you are interested in the vacancy listed above, please speak to your Manager or local Personnel contact in the first instance.**