Purpose of role

The role acts as the Senior Technical Specialist for Electrical Drives research and development within the Driving Electrical Revolution Industrialisation Centre – Nottingham Drives Specialist Services (DER-NDSS). The Centre has ~15 core staff and has the ambition to be internationally leading in the R&D and test services that it delivers.

The role provides leadership and technical direction across all strands of Electrical Drives including test, validation and manufacturing. Being the University leading technical expert in Electrical Drives technologies. The specialist technical knowledge and experience that is given strongly influences decisions at all levels across the Centre, the wider University and to national and international research partners. The role requires nationally recognised technical expertise to influence strategic research and development discussions at all levels. The role sets the strategic direction and leads the development of the DER-NDSS’ ~1000m2 of specialist Electrical Drives Testing and Manufacturing facilities.

This role is integral to the delivery of the faculty’s research vision and has responsibility for leading and developing a specialised technical team in DER-NDSS. Ensuring sufficient skills, capability, capacity, and expertise is available to provide support to the Centre’s staff and students engaged in practical research activities.

<table>
<thead>
<tr>
<th>Main responsibilities</th>
<th>% time per year</th>
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<tr>
<td>1 Strategic leadership, direction, and management of technician led activities across DER-NDSS. Providing independent advice, ideas, proposals, and schemes based on the role holder’s knowledge and experience across a wide range of specialist experimental Electrical Drives test and validation techniques. Leading discussions and developments on new novel approaches and stretching approaches to research. Contributing detailed technical information and costings to DER-NDSS proposals.</td>
<td>20%</td>
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<tr>
<td>2 Leading and managing delivery of all practical workstream elements against projects. Budgetary control in relation to rig, process and technology delivery. Working with the Faculty’s University Procurement team, taking responsibility for tendering for equipment and services as required against grant awards. Taking responsibility from the initial design</td>
<td>40%</td>
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and detailing of requirements through to ensuring items and/or test programmes meet the acceptance criteria and are delivered to the correct specification and timescales. Dealing with complex issues and concerns from equipment and infrastructure initial design through to successful installation and usage by the group. Both setting and taking responsibility for delivery against project timescales, accountable to the Director of DER-NDSS.

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<th>Strategic management, direction, development and overall control of the DER-NDSS’ ~1000m² of specialist laboratory spaces. Ensuring they are fully H&amp;S Compliant, and all processes are fully assessed and documented. Ensuring all periodic and statutory inspections, tests, and maintenance activities are completed within the designated time periods and fully recorded to demonstrate compliance. Leadership of Health &amp;Safety across the centre’s facilities. Ensuring robust training records exist covering all users of the group’s facilities and laboratories and that suitable induction and training support is accessible and in place to cover all research activities. Ensure all maintenance / calibration and safety related activities are completed and recorded.</th>
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<td>3</td>
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<th>Deputizing for the Chief Engineer, as required, to cover specialist technical and project related activities. Leading ad-hoc / special projects for the group. Working in partnership with the Technical and Sales directors in developing and delivering the centre’s current and future technical equipment infrastructure that closely aligns to the current and future research and development portfolio. Both setting and taking responsibility for delivery against project timescales.</th>
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<td>4</td>
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<th>Provide high level specialist technical knowledge, expertise and advice across a full range of technical areas into the DER-NDSS team, the wider University of Nottingham and to research partners both UK and international, to support the delivery of current projects, grants and details of further research grant proposals. Working at sites both national and overseas as required.</th>
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<th>Leading management of the PEMC and DER-NDSS technical teams to ensure professional support is delivered to all staff and students across the group. Managing staff workload, motivation, direction, training, and development. Dealing with all Human Resources related issues, including capability, grievance, and disciplinary cases as they arise in a professional and supportive manner. Managing the Annual Development Conversation (ADC) process and technical staff succession planning. Leading on the recruitment of technical staff from the Authority to Fill stage through to induction and mentoring of the successful applicants. Forward planning the requires skill levels and numbers of technical staff match the group’s current and planned future needs.</th>
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<td>6</td>
<td>5%</td>
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<td>Person specification</td>
<td>Essential</td>
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| **Skills**           | ▪ Advanced analytical and problem-solving capabilities across the field of Electrical Drives research.  
▪ Excellent planning, time management and organisation skills.  
▪ Excellent, effective verbal and written communication skills including the ability to adapt to different audiences, such as high-level management at industrial partners or senior academics at collaborating universities.  
▪ Excellent IT skills, including MS office and 3D CAD drawing and printing packages.  
▪ Advanced ability to understand, conceptualise and interpret the technical / experimental/ scientific requirements of staff and students across the research group environment.  
▪ Excellent time and project managements skills. | |
| **Knowledge and experience** | ▪ Leading experience, knowledge, and practical experimental skills across the full breath of advanced Electrical Drives test and manufacturing research and development fields.  
▪ Extensive knowledge and experience managing, auditing and implanting suitable Health & Safety arrangements across Electrical Drives technologies within a research and development environment.  
▪ Ability and experience activity contributing to strategic discussions and planning activities within a fast-moving research and development environment.  
▪ Experience working with and supporting senior academic and research staff within a research environment. | |
| Qualifications, certification and training (relevant to role) | ▪ HNC / Level 4 qualification in an engineering / science related subject and / or substantial, relevant managerial experience or in-depth experience in a similar role  
Or ▪ Proven track record of relevant work experience, demonstrating experience in the management of projects, technical staff and engineering resources.  
Or ▪ Time service mechanical apprenticeship | ▪ Formal Health and Safety qualification |
|---|---|---|
| ▪ Experience leading and managing international external partners engaged in research activities.  
▪ Experience detailing, costing and managing physical laboratory infrastructure changes to support complicated research requirements while maintaining a safe and secure working environment.  
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Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University’s strategy, vision and values. The following are essential to the role:

**Valuing people**
Understands that it is essential to provide a structure that people can thrive in. Knows how to communicate with people to create a healthy working environment and get the best out of people.

**Taking ownership**
Communicates vision clearly, providing direction and focus. Knows how to create a productive environment where people are inspired and can work cross-departmentally in partnership.

**Forward thinking**
Has the ambition to be a pioneer in own area, anticipating the future change, needs and challenges. Knows how to innovate within their work context and champions others to be inspired to be part of this ambition.

**Professional pride**
Keeps up to date on latest thinking, trends and work practices. Supports team to be thought leaders; willing to challenge if obstacles get in the way.

**Always inclusive**
Establishes far reaching partnerships, well beyond own area across a broad range of networks. Understand role to pay due regard to the needs of the whole community.

Key relationships with others

- **Line manager**
  - Technical Services Manager - Jubilee Campus and Director of DER-NDSS

- **Role holder**
  - Senior Technical Specialist - Electrical Drives

- **Key stakeholder relationships**
  - Other DER-NDSS staff
  - DER-NDSS customers and stakeholders