



<b>Job title</b>	Mechanical Engineering Technician	<b>Job family and level</b>	Technical Services Level 3
<b>School/ Department</b>	Faculty of Engineering – L4 Technical Workshop	<b>Location</b>	University Park Campus

### Purpose of role

To support the design, manufacture and assembly of test rigs, ongoing and scheduled maintenance within the Faculty of Engineering Technical Workshop. The role will require a diverse range of engineering techniques and skills. The role will mainly support research/Teaching activities, but will additionally be required to support undergraduate projects and basic training of Engineering machining using traditional methods of basic Turning, Milling, Drilling and Fabrication. The role holder will communicate well at all levels from professorial to undergraduate.

	<b>Main responsibilities</b> (Primary accountabilities and responsibilities expected to fulfil the role)	<b>% time per year</b>
1	<b>Rig Construction &amp; Manufacture</b> <ul style="list-style-type: none"> <li>▪ The construction of a wide range of custom research rigs and associated systems</li> <li>▪ Manufacture and assembly of research test rigs and apparatus to a high degree of precision to support individual research experiments, including operation, maintenance, servicing, repair and adjustment of these rigs and associated equipment.</li> <li>▪ Production of CAD drawings to support rig design and construction.</li> <li>▪ Specify and order outsourced components and assemblies</li> <li>▪ Complete in-house machining and other techniques to required standards</li> </ul>	60%
2	<b>Pressure vessels</b> <ul style="list-style-type: none"> <li>▪ Preparing and testing of steam pressure vessels for annual insurance testing. Maintaining safety devices and repairing/replacing as and when necessary.</li> </ul>	20%
3	<b>Health and Safety</b> <ul style="list-style-type: none"> <li>▪ Working with research staff, PhD students and colleagues to ensure risk assessments and method statements associated with rigs and processes are completed and revised when required.</li> <li>▪ Carrying out relevant workplace/building audits when scheduled.</li> </ul>	15%

4	<b>Engineering Applications Workshop/General duties</b> <ul style="list-style-type: none"><li>▪ To assist demonstrate and advise undergraduate students on appropriate techniques with the teaching of basic level engineering.</li><li>▪ Advise Group Design and Make (GDM) project groups to realise their designs.</li><li>▪ Any other duties appropriate to the grade and role of the post holder.</li></ul>	5%
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## Person specification

	<b>Essential</b>	<b>Desirable</b>
<b>Skills</b>	<ul style="list-style-type: none"> <li>▪ Key skills on a range of standard engineering machine tools including milling and turning.</li> <li>▪ Assembly and fitting skills.</li> <li>▪ Skilled in mechanical assembly and fine tolerance work with hand tools.</li> <li>▪ General computer skills, including Microsoft Office</li> <li>▪ Clear communication skills</li> <li>▪ A good understanding of Health and Safety in the workplace.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Trained on XYZ CNC mills and / or lathes.</li> <li>▪ Basic knowledge of plumbing techniques.</li> <li>▪ Basic understanding of pipes and pressure systems</li> </ul>
<b>Knowledge and experience</b>	<ul style="list-style-type: none"> <li>▪ Principles of mechanical assembly</li> <li>▪ Substantial experience in fine tolerance work with hand tools</li> </ul>	<ul style="list-style-type: none"> <li>▪ Working knowledge of CAD/Cam.</li> <li>▪ Knowledge of welding techniques i.e., Mig/Tig</li> <li>▪ Substantial proven experience in a mechanical engineering background.</li> </ul>
<b>Qualifications, certification and training (relevant to role)</b>	<ul style="list-style-type: none"> <li>▪ HNC or equivalent in Mechanical Engineering OR Substantial equivalent engineering experience.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mechanical Engineering Apprenticeship.</li> <li>▪ Degree or other higher level engineering qualification</li> </ul>
<b>Statutory, legal or special requirements</b>	<ul style="list-style-type: none"> <li>▪ The interpretation and implementation of work related regulations and procedures and understanding on other staff and the wider University (Health and Safety)</li> </ul>	



The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

## 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** Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
- Taking ownership** Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
- Forward thinking** Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
- Professional pride** Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
- Always inclusive** Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

## Key relationships with others



