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| Job title | Senior Technician - CNC Turner/Machinist | Job family and level | Technical Services Level 4 |
| School/ Department | Faculty of Engineering | Location | Central Engineering Faculty Workshop University Park Campus |

Purpose of role

The role is part of the technical services team within the Faculty of Engineering. The team consists of over 130 technical staff working alongside students and staff to deliver outstanding teaching and research across the faculty. The role holder will be a member of the mechanical engineering team, based at our largest UK campus, University Park.

The role holder will provide expert technical support to students, researchers, technicians and academics within the Faculty and wider University. Working directly with colleagues, researchers and PhD students, interpreting their manufacturing needs, advising and leading on the best way forwards to allow their projects to progress. This will include advising on the design of items and manufacturing required parts from both drawings and CAD files on both conventional machines through to the faculty's cutting edge CNC machine tools and processes.

The role holder should be approachable and able to communicate clearly to assist and train undergraduate students within the Faculty of Engineering in relation to meeting the practical requirement of their course by providing teaching support to the Engineering Applications Workshop.

| | Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role) | % time per year |
|---|---|------------------------|
| 1 | <p>Manufacturing</p> <p>Manufacture and modification of components, prototypes and test equipment to a high degree of precision using both conventional machine tools and advanced CNC machine tools for students, researchers and academics throughout the University. Providing advice on design and manufacture when required. Taking the technical lead on CNC lathes, acting as the technical expert on these machines to provide support in their use and operation to other Faculty technicians. Providing specialist knowledge to allow the CNC machining centre's to operate efficiently and</p> | 50% |

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| | to the required tolerances and surface finishes within minimal machining lead time. | |
| 2 | <p>CAD/CAM</p> <p>Provide expert knowledge on CAD/CAM (Mastercam) and the programming of, predominantly CNC machines from both drawings and CAD files. Off line programming, setting, operating and running other machine tools as required.</p> <p>Providing advanced offline programming support to the wider Faculty staff and students.</p> | 20% |
| 3 | <p>Teaching support</p> <p>Assisting in the Engineering Applications workshop by delivering basic practical teaching sessions in both manual and CNC machining techniques to groups of up to six students. Teaching the setting and operation of CNC lathes and the provision of supervision to 1st and 2nd year undergraduates as they carry out their Design and Make Projects</p> <p>Demonstrate off line programming and fault finding of undergraduate student CNC programs to allow their components to be manufactured, and provide a focal point for advice and assistance.</p> | 15% |
| 3 | <p>Health and safety</p> <p>Activities to support the adherence to University Health and Safety policies and relevant standards, procedures and codes of practice.</p> | 5% |
| 4 | <p>Maintenance</p> <p>Operation, maintenance, servicing, repair and adjustment of workshop machinery and laboratory equipment. Responsible for PPM and machine manufacturer involvement on the CNC machining centres.</p> | 5% |
| 5 | Any other duties appropriate to the grade and role of the post holder. | 5% |

Person specification

| | Essential | Desirable |
|--|---|--|
| Skills | <ul style="list-style-type: none"> • Substantial proven experience of CNC and Conventional Turning in a precision environment. • A technical understanding of drawings and component applications • Excellent technical problem solving and fault finding skills | <ul style="list-style-type: none"> • Knowledge and use of a range of machining and workshop production methods including CNC Milling |
| Knowledge and experience | <ul style="list-style-type: none"> • Fully skilled and conversant with CNC/conventional turning skills and techniques. • Understanding of complex technical drawings / CAD models | <ul style="list-style-type: none"> • Experienced in the use of Mastercam • Experience of using XYZ ProtoTRAK, Hurco, and WinMax. • Knowledge of and experience of using CAD/CAM software to design and manipulate |
| Qualifications, certification and training (relevant to role) | <ul style="list-style-type: none"> • HNC in relevant subject, or equivalent qualifications and considerable work experience in a relevant role or; • Substantial work experience in a relevant role. | <ul style="list-style-type: none"> • Good computer skills including Word, Excel and Outlook |
| Statutory, legal or special requirements | <ul style="list-style-type: none"> • An understanding of good Health and Safety practices in the workplace. | <ul style="list-style-type: none"> • The implementation of work related regulations and procedures and an understanding of the implications of non-compliance on other staff and the University |



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



