

## INTELLIGENT AUTOMATION WORKSHOP SENIOR TECHNICIAN

Job Ref: REQ171196

**As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.**

### School/Department summary

The Wolfson School of Mechanical, Electrical and Manufacturing Engineering is one of the UK's largest engineering schools. It is home to around 250 academic and research staff, 92 professional staff, 2000 undergraduate students, 180 post graduate MSc students and 215 research students.

Wolfson's Intelligent Automation Centre is supported by major aerospace companies including Rolls Royce, Airbus UK, and the Manufacturing Technology Centre (MTC). The Centre has the overall aim of researching the means of automating processes that are currently considered to be very difficult to automate, and in doing so reducing product variability and quality issues that sometimes arise from human involvement. Typical examples are hand-finishing and visual inspection, assembly activities of high value and/or delicate components and certified operator processing of high integrity components.

### Job Description

**Job Grade:** Technical Services Grade 6

#### Job Purpose

Reporting to the Director of the Intelligent Automation Centre, you will be responsible for the overall maintenance of the workshop area and supervision of its staff/users. To participate in, and oversee the provision of technical support for; the design, development, build, test and calibration of unique mechanical, electrical and electronic equipment and dedicated instrumentation and associated paperwork as required. To promote and participate in the Centre's strategic plan to enable the achievement of Centres objectives.

#### Job Duties

- **Laboratory Support Duties**
- To take overall responsibility of technical service for research and development of appropriate, leading edge industrial intelligent automation solutions.
- To assist the Lab Manager in relevant investigations in existing and new manufacturing processes at the industrial members of the Centre and elsewhere as appropriate.
- To engage with vendors to provide automation solutions suitable for internal and external stakeholders of the Centre
- To engage and contribute in Centre meetings as required and to cascade information relating to Centre and University aims and objectives, policies and plans to the team.
- Support the Centre Manager in the recruitment process for Technical Staff, create and develop job descriptions and person specifications. Carry out shortlisting, interviews and selection of technical posts.

- Working closely with Centre staff ( including the Centre Manager and Lab Manager) to develop and implement new procedures and processes which will enhance both student and staff experience.
- To oversee and co-ordinate the provision and execution of “Portable Appliance Testing” requirements of the Centre. Including, initial equipment test, creation of item history, schedule output and maintenance, test equipment maintenance and availability, reports and closure of resulting actions.
- Maintain best practice and compliance with statutory Health, Safety and Environmental legislation and University operational procedures and codes of practice including Risk Assessments, COSHH etc. and to carry out periodic audits to ensure the University and legislative requirements are being met.

- ***Workshop Duties***

- To facilitate the Staff/Users associated with the centre workshop, acting as the first point of contact for Academic staff and students visiting the workshop. To allocate duties to individuals; to take receipt of work requests from staff and students, providing accurate advice on timescales and costs associated with its completion; to undertake or distribute work as it is received for the design and development of new equipment, maintenance or repair of existing electrical or electronic equipment such as lasers, electron microscopes and automated control systems such as robots.
- Take ownership of the organisational structure of the centre workshop. Use initiative in terms of development of reorganisation of the centre workshop. To manage the cleanliness and tidiness of the workshop and to ensure that workshop users maintain the same high standards.
- To assist with technical duties on any Centre project, if required or requested by the Centre Director, due to variations in business needs, staff shortages or re-organisation.
- To provide skilled Mechanical, Electrical and Electronic technical support. To provide substantial and complex technical instruction of students and staff, in mechanical and electrical techniques. To monitor technical staff workloads and flexi-sheets, managing staff holidays and sickness absences, to ensure that work can be delivered within agreed timescales.
- To ensure that a safe working environment is maintained at all times through compliance with Health and Safety at Work legislation and the University’s Operational Procedures. Carry out Health and Safety and Housekeeping Audits and report on; overseeing the safe use and maintenance of equipment in the workshop, including the training and supervision of colleagues from other parts of the Centre who may need to use facilities on an ad-hoc basis.
- To monitor the workshop budget, order supplies as required and ensure that stock levels are maintained, using appropriate purchasing and supplier selection techniques in line with University financial purchasing policy.

**Wider Technical Duties & Responsibilities**

- To work closely with School’s Technical Resource Manager and the Lab Manager to improve working practices (Best Practice) to ensure that service levels are identified and reviewed effectively. To develop and regularly review processes and systems, also to ensure that these systems are safe and effectively communicated and practiced.
- To oversee and if necessary, undertake the manufacture, assembly and installation of equipment and rigs from drawing and verbal instructions for research staff.
- To extensively liaise with University Facilities Management department in conjunction with the School’s Technical Resource Manager, external contractors and industrial sponsors with regard to small works, equipment maintenance. servicing etc.
- To participate fully in the School’s PDR process and undertake training and development identified through this process. and to conduct PDR’s in a constructive and professional manner and produce actions to manage and enhance performance and the personal development of the team member reviewed.

## **Behavioural Expectations**

- To maintain an active approach to CPD (Continual Professional Development). Participate fully in the University's PDR (Performance and Development Review) Scheme, identifying and agreeing developmental opportunities for personal and professional development and in response to changing needs within the Centre.
- To ensure relationships are maintained and developed at all times, by using Relationship Management techniques, specifically, Cost, Quality and Delivery of services provided, to be the solution provider. To build a reputation of excellence and professionalism.
- To work towards achieving the ILM Level 4 award.
- To support colleagues in the workshop; to develop broader skills to deliver taught/ supervised sessions within the workshop
- To fully engage with the School and Centre life, by participating in open days, visit days and outreach activities. Participation will include but not restricted to, the setting up & dismantling of events, giving demonstrations and act as a Centre ambassador giving help and guidance and using initiative as needed
- Portray a positive "can do" "make it happen" attitude to enable staff to achieve their goals and the school achieve its ambitions.
- A flexible approach to working hours is required due to the inevitable evening and occasional weekend working requirements of the position.

## **Performance Measures**

Performance measures will be used to ensure delivery and performance are maintained. The PDR process will outline specific measures; however the following examples could be used in the first instance.

- To complete Health and Safety, COSHH & House Keeping Audits throughout the area of responsibility. Ensure actions are completed and any formal reports completed. Maintain a record of audits and future planning.
- To ensure facility availability. (Opening hours, planned maintenance, breakdown management)
- Overseeing refurbishment project to ensure minimal disruption to staff and students..
- The on-going development of learning material and learning tasks.
- Continual Personal Development (Expectation of 5 days per year as a minimum)
- Budget control and purchase performance (Value for Money)
- Ongoing planned development of each specific area. (Learning, Equipment, Process)

## **Points To Note**

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

## **Special Conditions**

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity and, where appropriate, Recruitment and Selection.

### **Organisational Responsibility**

Reports to the Centre Director

Supervision received:- Minimal

Directly responsible for:- Technician Resource

Task Managers:- Centre Manager, Lab Manager and Wolfson School Technical Resource Manager

## Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

- 1 – Application
- 2 – Test/Assessment Centre/Presentation
- 3 – Interview

### Essential Criteria

Area	Criteria	Stage
Experience	Substantial experience of working in an engineering environment.	1, 2, 3
	Evidence of a recognised Engineering apprenticeship or equivalent experience	1, 3
	Proven track record of managing / supervising a skilled technical workforce	1, 3
	Demonstrable experience of using OEE (Overall Equipment Effectiveness) & Lean Manufacturing tools	1, 3
Skills and abilities	Experienced professional with a strong customer focus	1, 3
	Excellent interpersonal skills and the ability to lead and gain buy-in from colleagues at all levels.	1, 3
	Demonstrable ability to manage resource effectively and efficiently throughout the academic year.	1, 3
	Demonstrable ability to apply emotional intelligence and self-awareness to resolve conflict	1, 3
	Proven ability to adapt to change and to manage a change process in a team setting	1, 3
	Skilled in the use of a full range of hand tools associated with Electrical/Electronic engineering.	1, 2, 3
	Skilled in the use of workshop machines and hand tools	1, 2, 3
	Evidence of experience in delivering training and mentoring apprentices, students and / or researchers.	1, 2, 3
	Proven reliability and able to apply own initiative, with minimal supervision.	1, 2, 3
	Understanding of 'Fits and Tolerances' in design work along with the required level of machining accuracy and speed	1, 2, 3
	Evidence of being a strong team player who can lead by	1, 3

	example	
	High level of flexibility.	1, 3
	Evidence of being Highly organised and able to plan team objectives to meet deadlines.	1, 3
	High level of competence in IT skills e.g. MS Office suite	1,2, 3
	Sound knowledge and understanding of current Health, Safety and Environmental legislation	1, 2, 3
Training	Evidence of Continual Professional Development (CPD) together with a willingness to undertake further training as appropriate and to adopt new procedures in line with the changing needs of the business.	1, 3
	Demonstrate evidence of having undertaken further training	1, 3
Qualifications	Advanced C&G or BTEC Higher National Certificate / Diploma in Electrical/Electronic Engineering or equivalent	1, 3
	Licenced to drive in the UK	1, 3
Equality and Diversity	Evidence a good working knowledge of equal opportunities and understanding of diversity in the workplace	1, 3
Other	Commitment to observing the University's Equal Opportunities policy at all times.	1, 3
	Willing to travel	3

#### Desirable Criteria

Area	Criteria	Stage
Experience	Previous experience in a Higher Education institution	1, 3
	Previous experience of working in a tool room, manufacturing or research and development workshop and an understanding of the issues to be faced in such a workshop	1, 3 1, 3
	Previous experience of working with Industrial Robots	1, 3
	Demonstrably active in providing industrial or applied research automation solutions	1, 3
Skills and abilities	Knowledge of the changing needs of HE and contextual implications for LU	1, 3
	NEBOSH or Managing Safety certificate	1, 3
	Able to use Linux, C, C++	1, 3
	High level of competence in Computer Aided Design (CAD) software packages (SolidWorks)	1, 2, 3

	Able to use industrial robots	1, 3
	Previous experience of wiring safety systems (light gates, interlocks, etc.)	1, 2, 3
Qualifications	ILM 4 Management qualification	1, 3

## Conditions of Service

The position is FULL TIME and FIXED TERM contract until 31 December 2019. Salary will be on Technical Services Grade 6, £29,799 per annum.

The appointment will be subject to the University's normal Terms and Conditions of Employment for Academic and Related staff/Operational and Administrative staff, details of which can be found [here](#).

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at <http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html>.

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: <http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html>)

In addition, the University is supportive, wherever possible, of flexible working arrangements.

We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN see <http://www.lboro.ac.uk/services/hr/athena-swan/>

## Informal Enquiries

Informal enquiries should be made to Jonty Clarke, Lab Manager by email at [J.H.Clarke@lboro.ac.uk](mailto:J.H.Clarke@lboro.ac.uk) or by telephone on +44 (0)1509 227604.

## Applications

The closing date for receipt of applications is 11 February 2018.