

CANDIDATE BRIEF

Additive Manufacturing / 3D Printing Technician

Faculty of Engineering



Salary: Grade 6 (£26,495 - £31,604 p.a.)

Reference: ENGME1116

Closing date: 14 December 2017

Additive Manufacturing / 3D Printing Technician School of Mechanical Engineering

Are you looking to pursue a career in the rapidly growing field of Additive Manufacturing / 3D Printing and gain proficiency with a wide range of additive manufacturing technologies? Are you looking for a new and exciting challenge as part of one of the leading Mechanical Engineering Schools in the country? Do you want to make a difference to world class research, additive manufacturing, teaching and learning activities?

We are looking for a professional and proactive individual to join our team and support research, manufacturing and teaching related activities within the <u>School of Mechanical Engineering</u>. You will work closely with technicians, students, external companies and academic staff involved in all aspects of additive manufacturing / 3D printing activities within the School of Mechanical Engineering.

You will support, maintain and operate a wide variety of Additive Manufacturing machines that are used to support both teaching and research activities. These include a large number of desktop Fused Deposition Modelling (FDM) printers used in undergraduate modules, as well as high-end systems including an Objet1000 multi-material printer and a Realizer SLM-50 laser sintering system.

You will receive the necessary training to operate all these systems and their associated software packages, providing an excellent opportunity to develop new skills. You will join a research and teaching leading School that is committed to delivering the highest standards in both research and student education.

What does the role entail?

As an Additive Manufacturing / 3D Printing Technician, your main duties will include:

- Carrying out all of the necessary tasks to operate the suite of Additive Manufacturing Systems (AMS) in the School of Mechanical Engineering in order to produce high-quality printed parts in a timely manner;
- Performing routine maintenance and troubleshooting of the AMS;
- Printing components for staff, students, and external customers and keeping them updated on the progress of their submissions;
- Proactively approaching academic staff to determine their requirements,



- adapting the technical support provided as appropriate;
- Providing guidance on the capabilities and limitations of the different AMS;
- Developing and following strict operating procedures of the AMS to ensure optimal machine performance and generation of high quality parts
- Have a methodical working attitude and the ability to handle a high degree of responsibility;
- Provide cost estimates, formal quotations and process paperwork related to submitted jobs;
- Conducting portable appliance testing (PAT) of the equipment, performing repairs and calibration and keeping records of these activities as appropriate;
- Maintaining records of consumable levels and spare parts, purchasing requisition stock and advising relevant staff with regard to the purchase/refurbishing of equipment;
- Wearing appropriate personal protective equipment (PPE) for the processes associated with the post;
- Playing a proactive role in the university's technicians' network, for example to share best practice.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

The successful applicant will have:

- Proven experience of using dedicated CAD software such as Solidworks;
- A BTEC or HNC in an engineering discipline, an engineering degree, or extensive equivalent experience;
- Good practical / hands-on skills, as needed to operate, maintain, disassemble and reassemble complex equipment;
- The ability to work proactively and independently, and effectively as part of a wider technical team;
- A willingness to learn new techniques and the ability to work in a changing environment;
- Good IT skills, including MS Office (e.g. Microsoft Word, Excel, Outlook and Power Point) and the proven ability to learn new IT systems, software and hardware;



- Excellent interpersonal and communication skills, with the proven ability to liaise effectively with staff and students at all levels and contacts from external companies, and a demonstrable enthusiastic and proactive approach to customer service:
- The proven ability to keep abreast of the latest developments in additive manufacturing technology;
- Demonstrate accuracy and dependability. This is of the utmost importance: a failure of standards could have significant implications;
- Demonstrable willingness and ability to propose initiatives and accept responsibility for delivery;
- Developed organisational skills with the proven ability to prioritise work and deliver against demanding deadlines;
- The ability to perform manual handling duties associated with a laboratory/workshop environment;
- Willingness to develop and train on the latest additive manufacturing technologies.

You may also have:

- Experience in additive manufacturing / 3D printing;
- Experience in conventional manufacturing approaches;
- Basic knowledge of analogue and digital electronics and/or working knowledge of electronic instrumentation;
- The ability to write risk assessments and safe operating procedures;
- An IOSH certificate.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> information page. Applications should be submitted by **23.59** (UK time) on the advertised <u>closing date</u>.

Contact information

To explore the post further or for any queries you may have, please contact:



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Additional information

Working at Leeds

Find out more about the benefits of working at the University and what it's like to live and work in the Leeds area on our <u>Working at Leeds</u> information page.

Faculty and School Information

Further information is available on the research and teaching activities of the <u>Faculty of Engineering</u> and the <u>School of Mechanical Engineering</u>.

A diverse workforce

The Faculty of Engineering is proud to have been awarded the <u>Athena Swan Silver Award</u> from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our <u>equality and inclusion webpage</u> provides more information.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk</u>.

Criminal record information

A criminal record check is not required for this position, however, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be accordance with our <u>Criminal Records policy</u>. You can find out more about required checks and declarations in our <u>Criminal Records</u> information.

