JOB DESCRIPTION
Graduate Engineer (Mechanical); ProAMP Project
Vacancy Ref: N1498

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Graduate Engineer</th>
<th>Present Grade: 5</th>
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<tbody>
<tr>
<td>Department/College:</td>
<td>Engineering Department</td>
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<tr>
<td>Directly responsible to:</td>
<td>Dr Allan Rennie</td>
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<td>Supervisory responsibility for:</td>
<td>N/A</td>
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</tbody>
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Other contacts

**Internal:**
Includes: Departmental academic staff, knowledge exchange staff, administrators, technicians, researchers and students.

**External:**
Includes: Industrial project partners, suppliers, funding body and visitors.

The Role:

A dynamic and capable Mechanical Engineering Design graduate is required to contribute to the design and construction of a novel additive manufacturing (3D printing) machine. The successful candidate will join a large project consortium of National and International companies working alongside Lancaster University. If you wish to follow your technical areas of interest, play a pivotal role in the development of a new manufacturing technology and be at the start of an important industry-academic enterprise, then this opportunity may be for you.

A highly motivated team has been established within the Department of Engineering at Lancaster University, working with industrial partners to develop a novel, large-scale additive manufacturing / 3D printing machine for production applications. The team already includes software and electronic expertise.

We are looking for a recent graduate to support the design, and manufacture of the mechanical elements of the machine. The work will include optimisation of mechanical and thermal performance of the machine using FEA techniques. You will be working closely with those colleagues developing the electronic, software and other systems within the machine, ensuring that all design activities are fully integrated.

The successful candidate will be based at Lancaster University and will work closely with the Development Team and the Project Sponsor and will be an instrumental contributor to the success of the project and its downstream exploitation.

The successful candidate will have a first degree (awarded during the last three years) in Mechanical, Mechatronic or Computer Aided Engineering or a related subject area, and be proficient in mechanical design, design techniques, the use of CAD and FEA software packages. You will be creative and exhibit excellent problem solving skills. You must have an understanding of the methods of design management and be prepared to liaise with external suppliers. An enthusiastic attitude, with a positive approach will be important. This is an exciting opportunity to work and gain valuable experience supporting an interesting and innovative project in this field.

Major Duties:

- Meet with other members of the team on a regular basis to discuss progress, problems arising and to exchange ideas.
- Design and coordinate the manufacture of mechanical components, program and test electronics systems, using appropriate software tools, in a timely manner and against a mutually agreed plan with project partners.
- Test designs using appropriate simulation software.
• Provide full documentation for work that is produced.
• Maintain effective communication with team members, suppliers and other stakeholders regarding progress and updates on agreed work.
• Undertake travel as required to visit suppliers and/or partners.
• Undertake any other duties appropriate to the grade of the post as required by the Line Manager or Project Sponsor.

This post will be supported for 24 months in the first instance.

This project is co-funded/supported by Innovate UK, Lancaster University and the Industrial Project Partners