Teaching Award Summer Placement

REQ210561

This year the University Teaching Awards have 7 **summer student placements** available. The University Teaching Innovation Awards are one way that the University recognises, celebrates, and promotes excellence in learning and teaching. Winners of Teaching Innovation Awards are given funds to further an innovative teaching development idea that will benefit the student learning experience. Some of these winning projects are looking for enthusiastic and hardworking students to join their project team and work to create, research and evaluate elements of their project.

The placements are for 10 weeks over the summer period and there are 7 positions available.

The titles of the projects and supporting brief details that are looking for a student to join them are below:

Virtual Reality in Chemistry delivery within STEMLab (Professor Steve Christie)

LU's STEMLab hosts a variety of highly practical subject laboratories where hands-on instruction and learning is essential. Virtual Reality provides an opportunity to augment in-person lab instruction when access to the lab is restricted. We have a full VR environment of the actual STEMLab laboratories, so the students are seeing the "real" labs; this project will bolster this by adding in equipment and techniques to the VR environment. The outcomes will be a series of virtual experiments that complement real lab activities.
The project would be suited to a student with good IT skills, but coding skills are not essential. Students from all disciples can apply, this project is not restricted to chemists.

Transforming existing ELVIS-II based laboratory equipment in STEMLab for use in blended learning activities. (Dr Sheryl Williams, Dr Ben Clark and Dr Alford Chauraya)

We are looking for a student who will be passionate about the designing and building of a flexible platform for the next generation of teaching.
The 2020-21 academic year saw the introduction of a remotely accessible digital electronics experiment which was well received by first year students.
The designers are looking to extend this laboratory to suit other degree programmes.
This project will involve building a rig that surrounds the 'ELVIS' II platform so that it is transportable and adaptable for a wide range of STEM activities.
The project would be suited to someone who has a willingness to learn basic programming (particularly LabVIEW), ability to design in CAD, good communication and report writing.

Compressible Flow Teaching Apps Development (Professor Adrian Spencer)

This project will deliver a web-based app which helps students studying high speed aerodynamics understand how aerofoil design affects lift, drag and centre of pressure in a graphical and intuitive way; allowing real time redesign of aerofoils to meet certain force constraints.
This project is suited to an Aeronautical Engineering Student with a strong performance in first year level subjects. Competency in computing, coding and experience developing web-based GUIs. A keen interest in compressible aerodynamics would be an advantage.

Inclusive problem-based flipped learning for Induction Days (Dr Fiona Hatton, Professor Lisa Jackson, Aisha Benachour)

We know the transition to University from School or College is often a large step in any young adults' life and that Induction events can play a pivotal role in helping students acclimatise to the new environment. Our aim is to develop

an innovative student-informed framework that can be exported to other Schools and disciplines and cater for students from a range of backgrounds, thus having a lasting impression on the Loughborough student experience. We are looking for a student that is enthusiastic about developing and shaping the student experience and helping our 2021-22 student cohort get off to a flying start. The internship will involve the design and development of an inclusive problem-based induction, providing hands on experience using our various University systems before term starts, group work, time management and presentation skills, and developing their reflective practice with mixed interdisciplinary student teams. The successful applicant will work with students and staff across the School and University to develop materials and case studies that are driven by and raise awareness of our core University equality, diversity principles.
The project would be suited to an Undergraduate student from the School of Aero Aeronautical, Automotive, Chemical and Materials Engineering that has a general knowledge of our School and programmes.

STEMLab CSI (Dr Sarah Bugby, Dr Glyn Spencer, James Moran)
STEMLab CSI will teach students to use analysis techniques such as nuclear magnetic resonance, X-ray diffraction, and photospectrometry through a simulated forensics investigation. We are looking for a student intern [insert details of terms of employment] to help develop activities and materials to be used during this.

Your role as an intern will be to create a catalogue of technical reports for variety of samples, using the different analysis instrumentation that is available in STEMLab. You will also be involved in the development of teaching materials to go alongside these – potentially leading to an automated framework for students to manage their forensics investigation, track resources, and 'pay' for expert opinions (your technical reports!).

You might be interested in this internship if;

- You are interested in new ways of teaching and integrating technologies and would like to be actively involved in the development of new online materials.
- You are familiar with analysis equipment in STEMLabs and/or data analysis techniques and would like to apply this knowledge and extend it.
- You would like to enhance your employability skills and gain experience in writing technical reports of the kind expected in industry.

Sustainable Automated Assessment of Quantitative Modules Across the University (Dr Ian Jones, Dr Rupal Mandania)
The intern will help improve and develop our database of online mathematics assessment using the STACK platform, with a particular focus on statistics assessments. No knowledge of the STACK system is expected, but the project suits an intern with strong programming skills, and good confidence with university-level statistics.

Development of Interactive Online Material for Programming Language Skills (Dr Marco Discacciati)
This project focusses on developing new online interactive material on Learn to support students in their learning of programming skills, as these are recognised as a fundamental asset to secure jobs and placements.
The student who will contribute to shaping this innovative learning material is expected to have a good knowledge of the Python programming language, web technologies, and excellent written communication skills.

When completing your application please detail at the start of the application which project/s you would like to work on. You can indicate your preference for one or more than one of the projects.

Informal enquires can be made to the relevant Project Manager (named alongside the project titles above) or if you are unsure of who to speak to or have a more general question, please contact Samantha Chester s.chester@lboro.ac.uk +44 (0)01509 228117.

Job Description

Job Purpose

To work in partnership with academic staff to fulfill the aims and deliverables of an innovative award-winning Teaching Innovation project. The postholders will work collaboratively within a project team and will be tasked with creating, supporting and evaluating learning and teaching resources and events.

Support and training will be provided to enable the post holder to undertake duties as required and to develop their skills.

Job Duties

Outlined below are the job duties relating to the overall Teaching Award Student Placements, specific objectives for each placement will be communicated and agreed prior to its commencement:

- To effectively engage with and deliver on the objectives and responsibilities outlined for each project.
- To engage with appropriate stakeholders and meet set objectives and deadlines.
- To contribute ideas and innovative solutions throughout the placement.
- To work collaboratively with academic staff to give insight and feedback on the project from a student's perspective.
- To attend, arrange and contribute to relevant meetings for the project.
- To pro-actively source and manage information/data as and when required, ensuring that appropriate policies and procedures are adhered to.
- To work with tact and diplomacy and maintain appropriate levels of confidentiality for tasks and activities.
- To manage workload effectively, ensuring that tasks are carried out in a timely and accurate manner.
- To work independently and recognise the need to refer to senior colleague(s) for advice and/or guidance where necessary.
- To undertake any other duties as may be reasonably requested by the Project Manager.
- To ensure compliance with relevant University policies and procedures.

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 Project Manager.

PERSON SPECIFICATION

Job Title: Teaching Award Summer Placement

Job Grade: **Grade 3**

	Essential	Stage to be Assessed
Experience	Experience of working individually and as part of a team Experience in problem solving, using initiative and judgement in more complex situations Experience in planning and organising workload in order to meet necessary deadlines	All assessed at stages 1, 2
Skills and Abilities	Flexibility to respond effectively to challenge and change Confident in forming effective working relationships with a broad range of people Able to plan, work independently and proactively, and deal with unforeseen circumstances effectively Excellent written communication skills, including being able to tailor written communication to a range of audiences Able to work with accuracy and attention to detail Excellent practical IT skills including Microsoft Office and Outlook diary management Associated competencies as outlined in the individual project briefs.	All assessed at stages 1, 2
Training	Willingness to engage any training required for the project	All assessed at stages 1, 2
Education and Qualifications	Currently completing a Degree at Loughborough University. A level education or equivalent GCSE Grade C/4 or equivalent in English and Mathematics (*that can be evidenced*)	All assessed at stage 1
Equality & Diversity	Evidence a good working knowledge of equal opportunities and understanding of diversity in the workplace	Assessed at stages 1 and 2

Please note: candidates should be eligible to work in the UK for the duration of the programme (we are unable to provide sponsorship).

Stages in Assessment:

1= Application Form
2= Interview

Conditions of Service

The appointment will be on a full-time, fixed term basis. Salary will be on Administrative Services Grade 3, with a starting salary of £18,009. Salaries may also increase with any cost-of-living award implemented by Loughborough University.

Fixed Term 10 Weeks, the start date to be agreed with Project Manager.

The appointment will be subject to the University's normal Terms and Conditions of Employment for Operational and Administrative staff, details of which can be found at: www.lboro.ac.uk/services/hr/a-z/conditions-of-service.html

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To avoid the online application timing out, we recommend that you type your supporting statement out before copy and pasting into the online text boxes provided.