

# Ambitious growth plans to become a world-leading School of Engineering

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Professor in Electrical Engineering

Lecturer in Advanced Manufacturing

Returnship into Engineering:  
Early academic career Fellowship/Lectureship  
in Mechanical Engineering



# Engineering

## **Ambitious growth plans to become a world-leading School of Engineering**

Vibrant world leading research and a great collaborative environment are the driving forces for a new vision for the Engineering Department at Lancaster University.

We are consistently ranked amongst the top 10 in the UK league tables. We are 1st for graduate prospects in Chemical Engineering in the Times Good University Guide 2019; we are 8th in the UK and 112th in the world for paper citations; we are ranked 7th in the world for Electronic and Electrical Engineering for weighted citations in the 2018 Shanghai Global Ranking of Academic Subjects.

We have recruited more than 20 academics from top, world-wide institutions in the past three years helping to raise our international profile and offer a broad range of expertise to our students.

## **Our vision**

It is our excellent position that drives the long-term vision to become an influential School of Engineering that values people and fosters ground-breaking research through interdisciplinary collaborations. This will underpin the exciting and innovative teaching that our students experience and will produce future leaders in Industry 4.0 concepts.

Phase 1 of the Engineering expansion concluded at the beginning of 2015 with the opening of a £13million award winning building that has reinvigorated the Department, together with new facilities and modern laboratories.

Phase 2 includes a £37million investment to expand the building to further foster collaboration and to include approximately 2,000m<sup>2</sup> of cutting-edge laboratories to develop world-leading research in chemical, electrical and electronics, and mechanical engineering. This investment also supports our ten-year strategy to recruit the best academics, and to provide a full suite of equipment for research and teaching that will position Lancaster's School of Engineering as an influential and internationally recognised centre of excellence.

You could be a key contributor in achieving our vision to transform our Department into the new, globally recognised School of Engineering.

**Professor Claudio Paoloni**  
Head of Engineering Department





# Executive Summary

**Lancaster University is one of the UK's top universities, we are consistently ranked well inside the top 10 across all major league tables, and are currently University of the Year in the Times and Sunday Times Good University Guide.**

Competition for undergraduate places is the highest it has ever been, and Lancaster graduates are performing very well in an increasingly competitive job market.

At Lancaster University, we place great emphasis on an excellent student experience and students work with academics who are experts in their field. We provide an environment that is conducive to learning for a culturally and ethnically diverse student and staff population, on a friendly campus that is part of one of the safest cities in the UK. Since 2003 the University has invested over £450M to transform our campus for students and boost research and teaching facilities.

Lancaster University has an international outlook, but also a strong commitment to engage with the regional agenda and works closely with its partners across the North West.

Students and staff from over one hundred countries make up a thriving community based around nine colleges. Lancaster's community extends far beyond the campus with research, teaching and student exchange partnerships with leading universities and institutions in 24 countries around the world from China to Brazil, including our current overseas teaching partnerships and campuses in China, Ghana and Malaysia.

Following the University's golden anniversary in 2014, we continue to celebrate the inspiring work of our academic community and extend the opportunities that Higher Education brings to students from all backgrounds.



**Paul Boustead, MSc, Chartered FCIPD**  
**Director of Human Resources and Organisational Development**





# Our University

**Lancaster University is an international leader in the provision of inspiring teaching and research; this reputation is reflected in our ranking in the UK top 10 in all three major UK rankings (Times/Sunday Times, Guardian, and the Complete University Guide).**

The University has been awarded the 'University of the Year' award 2018 by the Times and The Sunday Times. The University is also ranked 1st in the North West, Best Campus University, and 150th in the Times Higher Education World University Ranking 2018. Lancaster University has been awarded the highest possible ranking in the UK government's Teaching Excellence Framework (TEF) rating, which aims to recognise and reward excellence in teaching and learning in UK institutions. The TEF Gold rating is based on high-quality teaching, excellent teaching facilities, and the career opportunities provided to graduates. The University's research has also been rated as world-leading in the 2014 Research Excellence Framework (REF), which assesses the quality and impact of research submitted by UK universities across all subjects. In the last research assessment exercise, 83% of our research was rated 'internationally excellent' or 'world-leading'. Our research is truly international in focus with research partnerships in over 60 countries around the world. Lancaster University is also proud to be a member of the N8 Group, a research partnership of the eight most research-intensive universities in the North of England.

A major strength of Lancaster University is its thriving ecosystem of interdisciplinary research. This collaborative approach is fostered by its mixture of formal and informal structures - including Institutes and University Research Centres - bringing together experts from different disciplines to address regional, national, and global challenges. The University comprises 13,500 students and around 3,400 staff. Lancaster is one of only a handful of universities with a collegiate system which has helped to forge a strong sense of identity and loyalty, and continues to be a distinctive feature of Lancaster University life. More than £450 million has been invested into the Campus since 2003, creating new academic facilities, student social facilities, and improved teaching space.

Our campus has transformed over recent years due to a number of significant redevelopment projects, including the refurbishment of the library and multi-million pound investments in other facilities across the University.





# Our Strategy for 2020

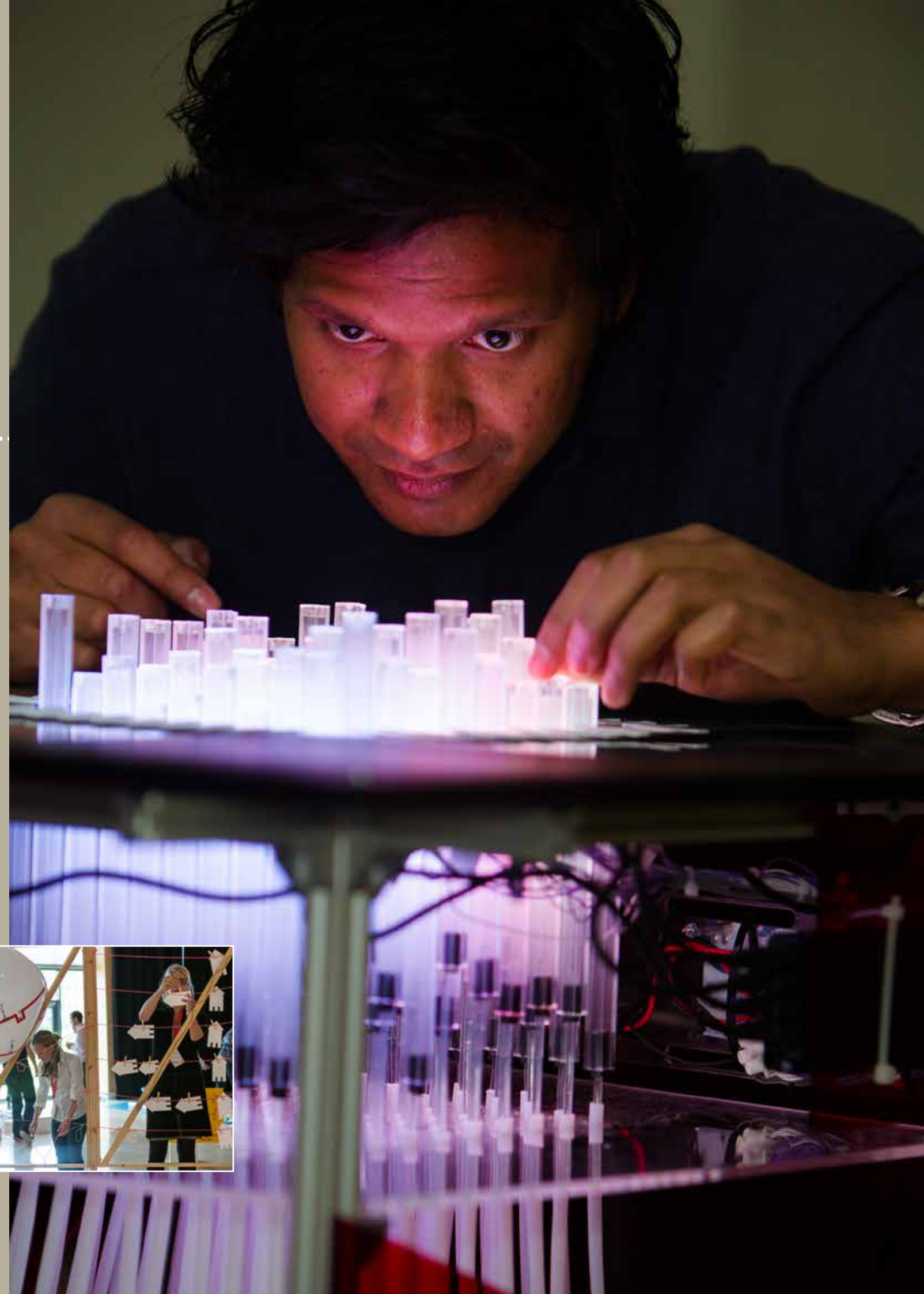
**Our strategy is to become a university that is globally significant – a leader in higher education that provides the highest quality research and teaching, and engages locally and internationally on the issues and debates of the day and of the future.**

Driven by research and stimulating learning, the globally significant university informs and changes practice and thinking worldwide. Our strategy is founded on three priorities of equal importance. Success across all three of these domains will be critical if we are to fully realise our strategic goals. In the rapidly changing context of UK higher education, the University community has identified that we now need to increase our engagement with third parties, enhance our reputation and continue to grow in scale. We have reviewed and updated our objectives to reflect these factors, and new or revised objectives are highlighted against each of our three overarching priorities.

**The priorities are:**

- Research that changes practice and thinking
- Teaching that transforms society and the lives of people in it
- To actively engage with students, businesses and our communities

Further details on our Strategic Plan can be found at:  
[www.lancaster.ac.uk/about-us/strategic-plan/](http://www.lancaster.ac.uk/about-us/strategic-plan/)







For further information  
about working and living  
in Lancaster please visit:  
[www.lancaster.ac.uk/  
working-at-lancaster](http://www.lancaster.ac.uk/working-at-lancaster)

# Our People

**Lancaster's success depends on talented, creative and committed people who work hard to make this University so special and distinctive.**

Our vision for the future is to be a sustainable and an academically excellent institution recognised as one of the leading universities in the world.

You will be joining a university which is amongst the best on any objective measure, but also modern, forward thinking, and quick and nimble in adopting the latest developments in teaching and research.

Lancaster University is committed to attracting, developing and retaining the best staff, celebrating equality and diversity, and recognising how all staff contribute to and enhance the overall success of the University. Our People Strategy 2020 clearly articulates that the core strength of the university is our people.





# About Lancaster and the UK

For further information about working and living in Lancaster please visit: [www.lancaster.ac.uk/working-at-lancaster](http://www.lancaster.ac.uk/working-at-lancaster)

**The City of Lancaster has a long and diverse history, having gained its first charter in 1193. In the heart of the city centre lies a 12th Century castle – one of the best preserved in Great Britain – which dominates the hill above the River Lune.**

Lancaster is small enough to explore on foot, but big enough to keep you entertained all day, and was recently ranked as one of the top ten most vibrant cities in the UK (the Experian Vibrancy Report), thanks to its established arts scene and student population. It offers excellent shopping, cinemas, theatres, and restaurants, with many well preserved older buildings. The area is also well served with state, private and church schools.

Lancaster's live music venues are home to regular guitar, electronic, folk, classical and jazz gigs. Fans of independent film and theatre have the choice of the city centre Dukes Theatre and Cinema, Grand Theatre, and Vue multiplex cinema, and the University's own Nuffield Theatre and LU Cinema. Venues also regularly play host to major comedy and theatrical tours too. With a number of galleries and museums located in the city, there is plenty for lovers of the arts to get their teeth into. The latest listings can be found through the Lancaster Arts City app.

Lancaster itself is situated in a delightful part of North West England. The rural landscape is superb, with the Lakeland fells in full view across the expanse of Morecambe Bay. The River Lune runs along the edge of the Forest of Bowland, an area of outstanding natural beauty, past many villages, into Lancaster and to the sea. There are two National Parks, the Lake District and the Yorkshire Dales, which are within a 30-minute drive. Lancaster is just over two hours by fast train to London and it is less than one hour to Manchester airport, which offers direct flights to most European capitals, the Middle East, and North America and the Far East. Lancaster, and the local surrounding area, offers a unique combination of city, coast, and countryside. There is an excellent choice of accommodation in the 'travel to' area which stretches from the Lake District to Preston and east along the Lune valley, as well as Morecambe and Lancaster, offering a range of housing from city centre to rural environments. Housing is varied (from old townhouses to barn conversions and new builds) and is competitively priced, especially against similar properties in South East England. The University offers allowances for staff (Grade 6 and above) who have to move to join us.





# Professor in Electrical Engineering

**Grade:** TBD

**Directly responsible to:** Prof Claudio Paoloni (Head of Engineering Department)

**Supervisory responsibility for:** Postgraduate students and research associates, potentially also for academic, technical, administrative and other staff

**Other Contacts:**

**Internal:** All academics, professional staff and students within Engineering and Faculty of Science of Technology University professional services (energy manager and electrical engineer).

**External Contacts:** Industry partners, including the Electrical Supply Industry, manufacturers and users; Government Departments, principally Energy Systems Catapult, BEIS and Ofgem; Professional bodies, such as the IET, and funding bodies. Research Councils, especially the EPSRC and academics in other universities. Potential students and their parents, nationally/internationally prestigious research collaborations/institutions

**Major Duties:**

To carry out high quality research in fields of Electrical Engineering at Lancaster, at national and international level, in particular Power System Engineering with the potential to shape/change the direction of the field.

To work within and across disciplinary boundaries to tackle major Electrical Engineering research challenges.

To generate research income and lead a group of researchers.

To work with national and international partners to develop research of truly global impact.

To contribute to the planning and delivery of innovative and stimulating teaching.

**Specific Duties:**

1. To lead the research in Electrical Engineering, with focus in Power Systems and their applications, at national and international level.

2. To be an international expert for research, teaching, scholarship, public engagement and debate on electrical engineering, and its role and applications in the industrial sector throughout the world.
3. Pursue a high-profile personal research agenda aligned with the Research Excellence Framework criteria, leading to outputs/publications in appropriate forms of research output and impact.
4. Contribute significantly to the life and continued success of the Department, including assisting with implementation of Engineering's expansion plan.
5. Attract external research income, from both public and private sources, to conduct research on key topics in Electrical Engineering, in particular with focus in Power Systems.
6. Mentoring and supervision of early career researchers and PhD students
7. To lead and inspire researchers and research students in Electrical Engineering.
8. Taking roles in the senior management of the Department
9. To complement and contribute to existing programmes at undergraduate and postgraduate level in relevant areas of Electrical Engineering, taking into account the influence of policy and current trends in, for example, industrial applications of power systems. To take an active part in the delivery and strategic direction of such courses.
10. Administration of teaching and research according to the department strategy
11. To maximise the impact of Engineering in Electrical Engineering research, development and application, and to complement and enhance related activities in the Department.
12. To promote Equality, Diversity and Inclusion, and be committed to your own continuing professional development.
13. To contribute to the wider objectives of the Engineering Department at the discretion of the Head of Department.

## Person Specification

Criteria	Essential/Desirable	How it will be assessed
A PhD or equivalent in a subject relevant to Electrical Engineering. Substantial industrial experience and demonstrated leadership may be accepted in lieu of a PhD.	Essential	Application Form
Evidence of a strategic approach to research impact and a well-established and successful track record in external engagement across academic and/or industry, nationally and internationally, and/or policy networks relevant to Electrical Engineering.	Essential	Application Form
High level expertise and an international reputation in research demonstrated by a substantial international reputation in research and scholarship and a significant track-record of research publications or other outputs suitable for submission to the next Research Excellence Framework (REF).	Essential	Application Form/ Interview
Demonstrable track record of success in securing research funding from a range of sources commensurate with a professorial appointment, evidenced by list of funding awarded over the last 5 years as Principal Investigator and co-I.	Essential	Application Form/ Interview
A clear track record in delivering a high quality student experience through teaching and supervising undergraduates, postgraduates and doctoral students. Please state your teaching experience and record of supervising PhD candidates to successful completion.	Essential	Application Form/ Interview
Chartered Electrical Engineer or Fellow of IET, IEEE, IMechE	Desirable	Interview
To convey an appropriate rationale and interest in applying for this particular post.	Essential	Application Form
Evidence of leadership of large, multi-partner research projects. Please list the composition of the groups that you have led in the last 5 years.	Desirable	Application Form

- Application Form – assessed against the application form, curriculum vitae and letter of support. Evidence will be “scored” as part of the shortlisting process.
- Interview – assessed during the interview process by either competency-based interview questions, tests, presentation etc.

Applications should be made online at [www.lancaster.ac.uk/jobs](http://www.lancaster.ac.uk/jobs)

Closing date for receipt of applications: **Sunday 28 April 2019**

Interviews are being scheduled to begin: **Monday 3 June 2019**



# Lecturer in Advanced Manufacturing

**Grade:**  
7/8

**Directly responsible to:**  
Prof Claudio Paoloni (Head of Engineering Department)

**Supervisory responsibility for:**  
Research team of typically 1 or 2 RAs and 2 or 3 PhD students

**Other contacts**

**Internal:**

All Engineering staff, Students  
Research Groups in areas relevant to Digital Manufacturing  
University professional services.  
Materials Science Institute  
J4.OIC (Joining 4.0 Innovation Centre TWI-Lancaster University)

**External Contacts:**

Academia, Industry partners, manufacturers and users;  
Government Departments;  
Professional bodies, such as the IMechE, IET and RCUK funding bodies.

**Major Duties:**

To carry out high quality research in fields of Digital Manufacturing in support of the Industry 4.0 concept and the Engineering expansion plan.

To work within and across disciplinary boundaries to tackle major Digital Manufacturing research challenges. To generate research income, produce high quality papers at level of 3 or 4 stars for REF submission and build a research group in the field.

To work with national and international partners to develop research of truly global impact.

To contribute to the planning and delivery of innovative and stimulating teaching.

**Specific Duties:**

1. To establish new research route in Digital manufacturing and contribute in the setup of state of the art facilities. The work will be performed in collaboration with senior academics in the corresponding field;
2. To develop laboratory facilities to support this research and associated teaching, collaborating closely with the Area Safety Officer in the development of safe systems of work for these laboratory facilities;
3. Writing grants and applications for research funding
4. Publication of top-quality, high-impact peer-reviewed journals.
5. To lead and inspire researchers and research students in Mechanical Engineering with broader scope in Digital manufacturing.
6. To complement and contribute to existing programmes at undergraduate and postgraduate level in relevant areas of Mechanical Engineering, taking into account the influence of policy and current trends in digital manufacturing, industry automation and processes. To take an active part in the delivery and strategic direction of such courses.
7. Administration of teaching and research according to the department strategy
8. To maximise the impact of Engineering in Digital manufacturing engineering research, development and application, and to complement and enhance related activities in the Department.
9. To promote Equality, Diversity and Inclusion, and be committed to your own continuing professional development.
10. To contribute to the wider objectives of the Engineering Department at the discretion of the Head of Department.

## Person Specification

Criteria	Essential/ Desirable	How it will be assessed
A PhD in Mechanical Engineering or closely related subject and substantial post-doc experience. Substantial industrial R&D experience may be accepted in lieu of a PhD;	Essential	Application Form
An honours degree in Mechanical Engineering or related discipline.	Essential	Application Form
Research experience in digital manufacturing. The experience is to be evidenced by a track record of relevant, high-quality journal publications. For candidates from industry, evidence of successful product and/or system innovation in lieu of publications;	Essential	Application Form/ Interview
Experience in production and processes	Desirable	Interview
The potential to secure research funding from a range of sources commensurate with a lectureship appointment, evidenced by examples of funding applications and involvement with applications.	Essential	Application form /Interview
Evidence of ability to lecture at postgraduate and undergraduate level on mechanical engineering subjects and to inspire students and researchers at all levels.	Essential	Application Form/ Interview
The ability to convey an appropriate rationale and interest in applying for this particular post and show vision of probable developments from the appointment	Essential	Application Form
Excellent communication and inter-personal skills including the ability to communicate enthusiasm for the subject	Desirable	Application Form

- Application Form – assessed against the application form, curriculum vitae and letter of support. Applicants will not be asked to make a specific supporting statement. Normally used to evaluate factual evidence e.g. award of a PhD. Will be “scored” as part of the shortlisting process.
- Interview – assessed during the interview process by either competency based interview questions, tests, presentation, etc.

Applications should be made online at [www.lancaster.ac.uk/jobs](http://www.lancaster.ac.uk/jobs)

Closing date for receipt of applications: **Sunday 28 April 2019**

Interviews are being scheduled to begin: **Thursday 23 May 2019**



# Returnship into Engineering:

## Early academic career Fellowship/Lectureship in Mechanical Engineering

The engineering department at Lancaster University is looking to appoint successful candidates, who have taken an extended career break, to support their transition back into an academic career. We realise that returning after a significant break can be challenging, especially in STEM areas, so we have developed an engineering returnship programme to enable applicants to return to a permanent academic role on either a full or part-time basis. As a successful candidate, you will undertake a supported programme, based on your personal requirements, which will include a designated mentor, coaching sessions and a bespoke academic development programme. The scheme is open to people looking to return to work after an extended career break of one year or more, and who have experience in the mechanical engineering subject area and/or relevant transferable skills gained working in industry.

**Directly responsible to:**

Prof Claudio Paoloni (Head of Engineering Department)

**Supervisory responsibility for:**

Research team of typically 1 or 2 RAs and 2 or 3 PhD students

**Other contacts**

**Internal:**

All Engineering staff, Students  
Departmental Research Groups (including but not limited to Structures, Materials & Manufacturing)  
University professional services.  
Materials Science Institute  
J4.0IC (Joining 4.0 Innovation Centre TWI-  
Lancaster University)

**External Contacts:**

Academia, Industry partners, manufacturers and users;  
Government Departments;  
Professional bodies, such as the IMechE, IET and UKRI funding bodies.

**Major Duties:**

To carry out high quality research in the Mechanical Engineering subject area and related fields, in support of planned and future department developments, including the Industry 4.0 concept and the departmental expansion plan.

To work within and across disciplinary boundaries to tackle major Mechanical Engineering research challenges.

To generate research income; to produce high quality research outputs at level of 3 or 4 stars for REF submission; and to build a research group in the field.

To work with national and international partners to develop research of truly global impact.

To contribute to the planning and delivery of innovative and stimulating teaching.

**Specific Duties:**

1. To establish new/complementary departmental research themes in Mechanical Engineering and to contribute to the scoping and establishment of state of the art facilities. The work will be performed in collaboration with senior academics in the corresponding field;
2. To develop laboratory facilities to support this research and associated teaching, collaborating closely with the Area Safety Officer in the development of safe systems of work for these laboratory facilities;
3. To be proactive in identifying funding sources, writing cases for support, and making applications for research funding;
4. To publish research outputs in high quality/high impact peer-reviewed learned journals;
5. To inspire, enthuse and lead researchers and research students in Mechanical Engineering;
6. To complement and contribute to existing taught programmes at undergraduate and postgraduate level in relevant areas of Mechanical Engineering, taking into account current trends for example in manufacturing, automation and resource use; and take an active part in the delivery and strategic direction of such courses;
7. Administration of teaching and research according to the department strategy;
8. To maximise the impact of your research and teaching, through engagement with relevant stakeholders;
9. To promote Equality, Diversity Inclusion, and be committed to your own continuing professional development;
10. To contribute to the wider objectives of the Engineering Department, at the discretion of the Head of Department.

## Person Specification

Criteria	Essential/ Desirable	How it will be assessed
Evidence of a significant, recent academic career break.	Essential	Application Form
A PhD relevant to the Mechanical Engineering subject area. An honours degree in Mechanical Engineering or a related discipline. Appropriate industrial R&D experience may be accepted in lieu of a PhD.	Essential	Application Form
Appropriate and significant post-doctoral experience.	Essential	Application Form
Research experience in mechanical engineering. The experience is to be evidenced by a track record of relevant, high-quality journal publications. For candidates from industry, evidence of successful product and/or system innovation in lieu of publications.	Essential	Application Form/Interview
Experience of collaborating successfully and initiating/developing effective relationships within a research, teaching or impact context	Essential	Application Form / Interview
The potential to secure research funding from a range of sources, evidenced by examples of funding applications and/or involvement with applications.	Essential	Application Form / Interview
The ability to inspire, relate to, motivate, supervise and teach students	Essential	Interview
The ability to convey an appropriate rationale and interest in applying for this particular post and show vision of probable developments from the appointment	Essential	Application Form / Interview
Excellent communication and inter-personal skills including the ability to communicate enthusiasm for the subject	Essential	Application Form / Interview

- Application Form – assessed against the application form, curriculum vitae and letter of support. Applicants will not be asked to make a specific supporting statement. Normally used to evaluate factual evidence e.g. award of a PhD. Will be “scored” as part of the shortlisting process.
- Interview – assessed during the interview process by either competency based interview questions, tests, presentation, etc.

Applications should be made online at [www.lancaster.ac.uk/jobs](http://www.lancaster.ac.uk/jobs)

Closing date for receipt of applications: **Tuesday 9 April 2019**

Interviews are being scheduled to begin: **Tuesday 7 May 2019**



# Employee Benefits and Reward Package



## Remuneration

The roles each attract a highly competitive starting salary, details of which will be available on application.

## Pension

For this role the University offers the opportunity to join the Universities Superannuation Scheme (USS).

## Relocation

For those relocating nationally or internationally a generous relocation package is available.

## Flexible Benefits

All staff are eligible to participate in the University's sector-leading flexible benefits scheme. The scheme provides staff with the opportunity to purchase benefits at discounted rates and also to take advantage of tax and national insurance savings on some of the benefits chosen.

### The current benefits include:

- Childcare Vouchers
- Pre-School Centre
- Cycle to Work scheme
- Season Ticket Loan
- Low Emission Cars
- Charitable giving
- Shopping discounts
- Dental insurance
- Health cash plan
- Sports Centre membership
- Lancaster and external courses
- Professional Bodies' membership fees
- Car parking
- Subsidised annual bus pass
- Discounted staff dining card
- Local retail discount card
- Theatre membership
- Home technology
- Additional annual leave

Detailed information on benefits are available at [www.lancaster.ac.uk/employment-benefits](http://www.lancaster.ac.uk/employment-benefits).



# Process and Timeframe

Informal enquiries should be directed to the Head of Engineering Department Professor Claudio Paoloni [c.paoloni@lancaster.ac.uk](mailto:c.paoloni@lancaster.ac.uk) or to the Dean of the Faculty of Science and Technology Professor Peter Atkinson [pma@lancaster.ac.uk](mailto:pma@lancaster.ac.uk)

Applications should be made online at <https://hr-jobs.lancs.ac.uk/>

Applications should consist of the completed online application form addressing the criteria in the role information, with a CV, accompanied by a covering letter.

An appointment will be made subject to satisfactory references, in line with the usual terms and conditions of employment at the university.



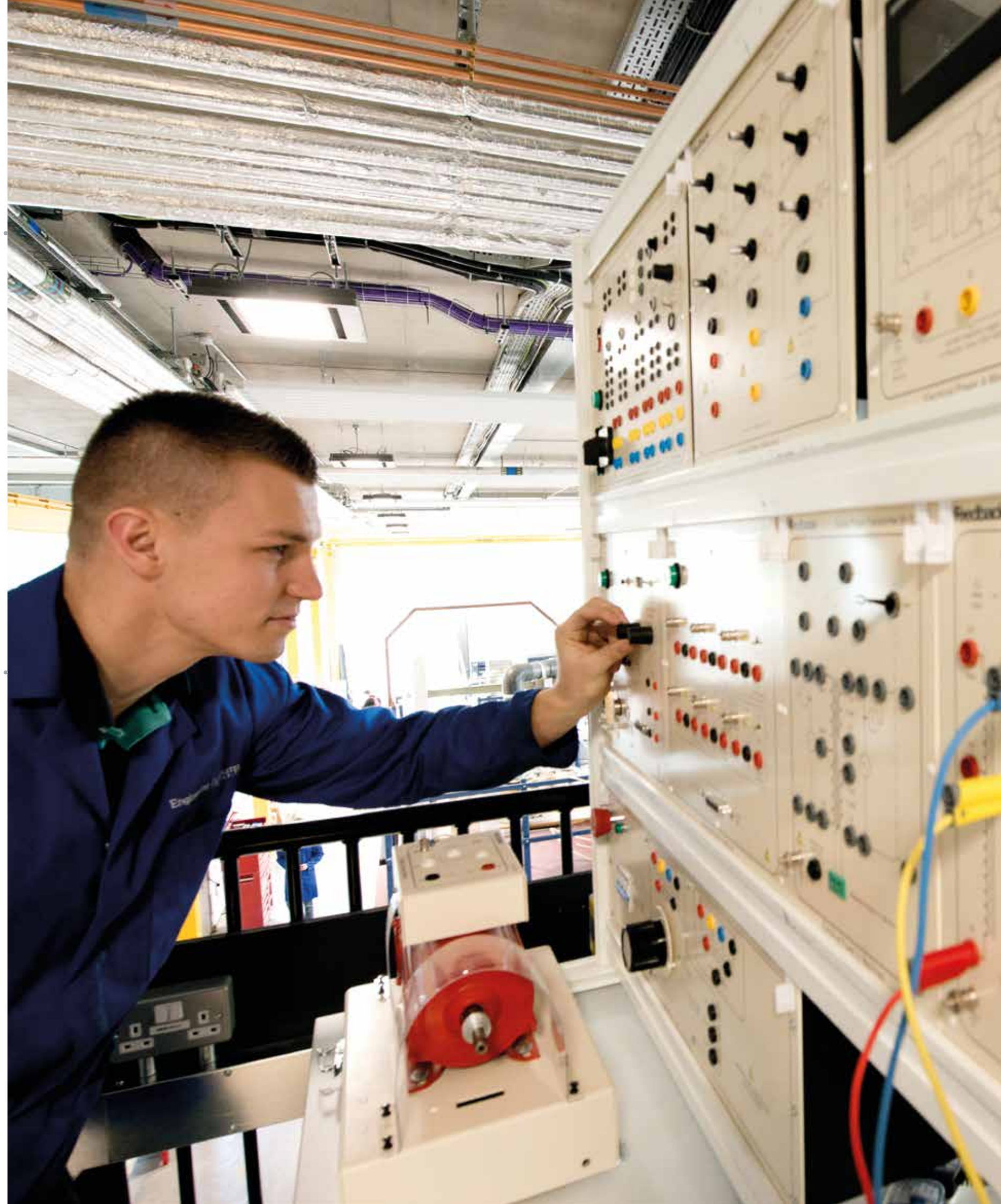
## Recruitment Statement

**We want to provide you with full information at an early stage to enable you to make an informed decision as to whether you are committed to pursuing this position and to outline the University's expectations of all candidates taking part in our recruitment process.**

Once you have reviewed the information below, and in fairness to everyone concerned, we would ask that you give serious consideration to proceeding further with this process if you think you may not accept the position should it be offered to you.

The role will be located in Lancaster and there is a requirement that successful candidates will live within commuting distance of the Lancaster University Bailrigg campus. If this might involve a re-location for you, it is of course important that candidates consider how the move might affect anyone who may accompany you (for example, early consideration may need to be given to local schooling, housing and other employment opportunities where other family members are involved, as early as possible). We will support you as much as possible with this and are happy to discuss any concerns you may have. We would ask you to agree to undertaking a positive, open, and transparent dialogue with us throughout the recruitment process, raising questions and any concerns as early as possible.

Lancaster engages in a variety of domestic and international benchmarking exercises to ensure we are extremely competitive in the levels of reward and recognition we provide, therefore we are confident that any offer made will be strong and competitive. If you are happy to continue in your application for the position in light of the above expectations, we would very much look forward to hearing from you.





# Join Us

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[www.lancaster.ac.uk](http://www.lancaster.ac.uk)

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“We make campus an inspiring place to be.”