

Lecturer/Senior Lecturer in Transport Engineering

Closing date: Interview date: Reference number:

17 October 2022 To be confirmed

ENG196A

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INTRODUCTION

The School of Engineering at the University of Aberdeen is a research-intensive multidisciplinary academic unit engaged in fundamental and applied research and offering UG and PGT degree programmes across five Engineering disciplines: Chemical, Civil, Electrical and Electronic, Mechanical, and Petroleum. The School's ambition is to be recognised as an international leader in engineering education, research and the application of knowledge to benefit society globally.

The School's research spans the main engineering disciplines across five Research Groups and five Research Centres (https://www.abdn.ac.uk/engineering/research/index.php) with over 100 PhD students. Within the 2021 REF period the Unit has increased substantially in size and in the scope of its research and 91% of the School's research output was ranked as world leading or internationally excellent in REF2021. The increase in size and expansion in research capability have enabled the School to make substantial research contributions that address major societal challenges: environmental sustainability, the circular economy, renewable energy infrastructure and technologies, decarbonisation, carbon capture and utilisation, and energy transition.

Transport has a major role to play in addressing many of the societal challenges listed above. In recognition of this fact the School of Engineering has identified Transport Studies as a key focus for investment as demonstrated by the establishment of the MSc Transport and Intelligent Mobility degree programme. The University has a longstanding commitment to transport studies which has made a significant and internationally recognised contribution in both teaching and research, specialising on the sustainability of transport systems with emphasis on environment, society and technology.

A Lecturer/Senior Lecturer in Transport Engineering position is available for individuals who will relish an opportunity to be part of a strong research team within the School of Engineering working in the area Transport Studies and also contribute to the development and delivery of new and existing undergraduate and postgraduate courses and programmes including the MSc in Transport and Intelligent Mobility. The successful candidate will be a dynamic individual with a clear ability for leading research in their field, as evidenced by a track record of publications and funding commensurate with career stage. The appointee will have developed plans for future research with strong prospects for external funding. They will have excellent communication skills and the desire and ability to teach within postgraduate and undergraduate programmes specifically in the Transport Engineering area.

We are particularly seeking expertise in the following areas of teaching and research:

- Intelligent Mobility with a particular interest in links between transport and data/computing science.
- Traffic engineering and transport modelling and simulation with experience in the use of associated software.
- Sustainable transportation infrastructure with experience in design, planning, analysis and maintenance of common transportation modes.

An inclusive working environment

The School and the University are committed to promoting and maintaining an inclusive and supportive working environment that assists all members of our University community to reach their full potential. Diversity brings strength and we welcome applications from all genders and protected characteristics across the international, national and regional communities that we work with and serve.

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The School is proud to have been awarded the Athena SWAN Bronze Award for equality and diversity.



JOB DESCRIPTION

MAIN PURPOSE OF THE ROLE:

The School of Engineering is seeking the appointment of a Lecturer/Senior Lecturer in Transport Engineering to play leading roles in expanding the School's research portfolio in this exciting area as well as delivering of the new MSc programme in Transport and Intelligent Mobility. The successful candidate will also be expected to generate external research income and contribute to teaching across existing undergraduate and postgraduate programmes in the School.

KEY RESPONSIBILITIES:

- Undertake high quality research in the field of Transport Engineering, generating high impact publications and significant research income through external grants.
- Contribute to the development and delivery of new and existing undergraduate and postgraduate programmes, including occasional teaching overseas.
- Develop collaborations with colleagues in the School of Engineering and, as appropriate, in other Schools (e.g. Natural and Computing Sciences, Geosciences and Business).
- Contribute to the School of Engineering REF submission.
- To represent the School externally through participation in agreed professional activities (e.g. professional and institution committees, advisory bodies).
- Develop the School's capacity for research in Transport Studies and lead research through supervision of PhD students and funded research staff.

CANDIDATE BACKGROUND

Successful applicants will have an excellent track record of research, relevant industrial experience, outstanding communication skills and the desire and ability to teach well at undergraduate and postgraduate levels.

We are particularly seeking individuals with a degree in Civil/Transportation Engineering and a PhD in Transport Studies or a cognate discipline and significant experience as a post-doc or independent researcher in one or more of the following areas:

- Intelligent Mobility with a particular interest in links between transport and data/computing science.
- Traffic engineering and transport modelling and simulation with experience in the use of associated software.
- Sustainable transportation infrastructure with experience in design, planning, analysis and maintenance of common transportation modes.

In order to further enhance its diversity, the School particularly welcomes applications from women, who are currently under represented in the School.

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TERMS OF APPOINTMENT

Salary for Lecturer will be at the appropriate point on Grade 7, £43,414 – £51,805 per annum and salary for Senior Lecturer will be at the appropriate point on Grade 8, £54,949 – £61,823 and negotiable with placement according to qualifications and experience.

Any appointment will be made subject to satisfactory references and for Lecturer post also subject to probation period.

For further information on various staff benefits and policies please visit www.abdn.ac.uk/staffnet/working-here

This role is based in the UK and as such the successful candidate will be required to live and work in the UK.

Due to the nature of the requirements of this post, homeworking may be considered.

Should you require a visa to undertake employment in the UK you will be required to fulfil the minimum points criteria to be granted a Certificate of Sponsorship under the requirements of the Skilled Worker visa. At the time an offer of appointment is made, you will be asked to demonstrate that you fulfil the criteria in respect of qualification and competency in English. For research and academic posts, we will consider eligibility under the Global Talent visa. Please do not hesitate to contact Morvern McIvor, HR Adviser (Graduate Trainee) (e-mail: morvern.mcivor@abdn.ac.uk) for further information.





PERSON SPECIFICATION

	ESSENTIAL	DESIRABLE
Education/Qualifications Academic, technical and professional education and training.	 PhD in Transport Engineering, Transport Studies or cognate disciplines such as Maths, Computing Science or relevant discipline. 	 Chartered Engineer (CEng). Membership of a relevant professional institution (e.g. CIHT, CILT). HEA Diploma.
Work and Other relevant experience (including training) e.g. Specialist knowledge, levels of experience, supervisory experience, research.	 Experience of University teaching and supervision of students at both undergraduate and postgraduate level. Demonstrable potential to perform leading research in their specialist area. Strong research profile with ability to develop and lead research projects (commensurate with career stage). Record of publications in peer-reviewed international journals (commensurate with career stage). Experience of applying for research funding and managing research (commensurate with career stage). Experience of managing major research projects (for Senior Lecturer only). 	 Experience in the administration of academic affairs or similar experience in industry (commensurate with career stage). Prior experience of developing postgraduate taught courses on campus and online. Experience of working with other Engineering disciplines.
Personal qualities and abilities e.g. initiative, leadership, ability to work on own or with others, communication skills.	 Excellent written, oral and presentation skills. International recognition through invited lectures, nominated UK expert, research visits, honours, etc. (for Senior Lecturer only). Excellent skills to develop strong relationships with industry partners and/or with academics and researchers from other institutions. Ability and willingness to work in a multidisciplinary environment. Ability and willingness to engage in growing the market for the new MSc. 	
Other e.g. special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.		 Ability and willingness to travel to national and international meetings and conferences and to deliver teaching at different locations including overseas.

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open to all and dedicated to the pursuit of truth in the service of others

The University of Aberdeen is a broad based, research intensive University, and we put students at the centre of everything we do. Outstanding in a wide range of discipline areas, Aberdeen is credited for its international reach and commercialisation of research ideas into spin out companies. The University has over 16,000 matriculated students and 3,600 staff representing 130 nationalities. We encourage bold thinking, creativity and innovation, and we nurture ambition with many opportunities for professional and personal development in an inclusive learning environment which challenges and inspires.



CURRENT CONTEXT

The University continues to build on its achievements. Underpinning our high performance and significant growth is a £100m investment in Aberdeen's estate which will include the completion of a new Science Teaching Hub, the regeneration of the historic King's Quarter and a new Business School building. The University has also invested in 50 new academic posts and in 2020 launched five interdisciplinary, cross-institution Research Centres that will catalyse world-leading research in our areas of strength. Our five Interdisciplinary Challenges are: Energy Transition; Social Inclusion and Cultural Diversity; Environment and Biodiversity; Data and Artificial Intelligence; and Health, Nutrition and Wellbeing.

ABERDEEN 2040

On our 525th anniversary as a University we launched <u>Aberdeen 2040</u>, our strategic vision for the next 20 years. Four strategic themes will shape our learning and discovery, underlined by 20 commitments we have made against each theme:

Inclusive

We welcome students, staff and partners from all backgrounds, organisations and communities. We value diversity.

- Interdisciplinary We innovate in education and research by generating, sharing and applying new kinds of knowledge. We learn together.
- International We connect with others and extend our networks and partnerships around the world. We think across borders.
- Sustainable

We understand and nurture our environment, and take care of our resources, including our people and finances. We work responsibly.

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OUR EDUCATION

Recognised as the Scottish University of the Year in the Times and Sunday Times Good University Guide 2019, we remain true to our roots as an ancient Scottish university, combining breadth and depth in our degree programmes and drawing strength from the quality of our research. Our flexible curriculum encourages students to grow as independent learners and therefore to thrive as graduates in the diverse workplaces of the future. Our education is open to all and we are setting ambitious targets to further widen access.

OUR RESEARCH

Researchers at the University of Aberdeen have been at the forefront of innovation and excellence throughout the centuries, generating insights in medicine, science, engineering, law, social sciences, arts and humanities. This research has contributed to five Nobel prizes as well as other awards such as the Queen's Anniversary prize. Our research is intellectually rigorous working within our established areas of excellence as well as new methods of enquiry. We will continue to generate new knowledge addressing economic and societal issues with ambition and imagination, ensuring that it is globally excellent and locally relevant.

INTERNATIONAL

Aberdeen is increasing its international presence, positioning the University as a global organisation and building on established global partnerships in e.g. Qatar, China, North America, Europe. We feature in the top 50 institutions worldwide for international students¹ and have been named 31st in the world for International Outlook². The University of Aberdeen is proud to be the first UK University to deliver programmes on a dedicated campus in Qatar in partnership with AFG College. Phase 1 has successfully recruited over 600 students and Phase 2 will see the creation of a substantially larger campus, with capacity for at least 5,000 students and research activity. For further information on our Qatar campus visit <u>www.abdn.ac.uk/qatar</u>.

IMPACT

Our dedication to building a sustainable future is reflected in the Times Higher Education Impact Rankings 2021 where we were ranked in the top 60 Universities worldwide for positive impact on society.

In 2020 the University signed the United Nations Sustainable Development Goals accord, solidifying our commitment to developing the world in a sustainable way. In 2021 we were listed in the global Top 50 for 6 of these goals and in the UK Top 20 for all 17³.

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¹ QS World University Rankings 2022

² Times Higher Education World University Rankings 2022

³ Times Higher Education Impact Rankings 2021



ABERDEEN AND ABERDEENSHIRE

Scotland's third largest city, Aberdeen sits on the coast between the mountains of Aberdeenshire and the stunning North Sea coastline. The Aberdeen City region is a can-do place that is actively investing, at scale, in its future.

Renowned as a Global Energy Hub, Aberdeen is a vibrant, entrepreneurial region, home to a unique mix of business opportunities and specialist skills across various sectors including energy, technology, life sciences and food & drink. More than 20% of Scotland's top businesses are located in this region which is taking great strides to ensure that it continues to compete on a world stage. Investments of more than £10 billion of public and private infrastructure is due to be delivered before 2030, marking an exciting time to be part of a genuine world-class location.

Built from sparkling local granite Aberdeen has earned the name of the Silver City. As the energy capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live, work and study. Due to its global business and international energy industry credentials, Aberdeen is well served by local and national transport infrastructure with excellent rail networks that run both North and South of Scotland and the rest of the UK. It also acts as an international travel hub. Flying time to London is just over one hour with regular daily flights and serves international travel to European centres such as Amsterdam (Schiphol) and Paris (Charles de-Gaulle) as well as flights to other European destinations.

The City and the surrounding countryside provide a variety of urban, seaside and country attractions. Aberdeen has first class amenities including <u>His Majesty's Theatre</u>, <u>Music Hall</u>, <u>Art Gallery</u>, <u>the P&J Arena</u>, <u>Museums</u>, and <u>Beach Leisure Centre</u>. The City is framed by its accessible beach front which is within a short walk of the city centre and there are an array of activities available across the region such as hill walking; mountaineering; sailing; surfing; salmon, trout and sea fishing; golf; sailing; surfing and windsurfing. The surrounding countryside, known as Aberdeenshire, is also one of Scotland's most appealing regions. Royal Deeside and the Cairngorms National Park are within easy access of the city, and there are a variety of towns and villages scattered along the coastline.

Aberdeen has ranked consistently highly in nationally recognised quality of life surveys, and was recently named the happiest city in the UK to live and work in⁴.

To find our more visit www.visitabdn.com





EQUALITY AND DIVERSITY

The University values a diverse working environment and recognises the benefits this can bring. The University is keen to receive applications from individuals from across all of the equality protected characteristics (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation).

The University supports opportunities for flexible working for a range of reasons and has policies in place to facilitate this. The policies can be found at https://www.abdn.ac.uk/staffnet/working-here/flexible-working--5607.php.

The University's commitment to gender equality has been recognised through the achievement of an Athena SWAN Bronze award at an institutional level and across all its subject areas. The University is also a Stonewall Diversity Champion to further LGBT+ equality.

The University is signed up to Advance HE's Race Equality Charter, affirming the University's commitment to the charter's aim of improving the representation, progression and success of minority ethnic staff and students within higher education.

Candidates who are British Sign Language (BSL) users can contact us directly by using contact SCOTLAND-BSL.

The University is delighted to be accredited as a <u>Disability Confident</u> employer and strives to ensure that disabled staff and students have the opportunity to work and study in an inclusive, accessible and supportive environment.

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www.abdn.ac.uk/staffnet/governance/equality-and-diversity-277

HOW TO APPLY

Online application forms are available at www.abdn.ac.uk/jobs

The closing date for receipt of applications is 17 October 2022

Should you wish to make an informal enquiry please contact:

Professor Ekaterina Pavlovskaia, Head of School of Engineering

01224 272786

e.pavlovskaia@abdn.ac.uk

Please do not send application forms or CVs to Professor Pavlovskaia.

Please quote reference number ENG196A on all correspondence