Professor of Engineering
(appointment to include a supporting Senior Lectureship role*)

Department of Electronic Engineering

Closing date: 10 February 2019
Interview date: 21 March 2019
Vacancy reference: 7268

*Please see over page for details
The University of York invites applications for a Professor of Engineering to lead the development of a new Engineering research and teaching initiative to augment existing activities within the Department of Electronic Engineering. The successful candidate will have an outstanding research record that is internationally recognised and supported by collaborations with academic and non-academic partners both in the UK and overseas. The post-holder will be expected to pursue research of the highest standards, attracting external funding to support the Department’s research and innovation activities, contributing towards its aspirational REF objectives.

The Department is currently expanding and diversifying into wider fields of engineering and, at this exciting time, we seek exceptional academics to provide strategic leadership across the disciplines of mechanical engineering, and particularly welcome applications in the areas of Robotic & Autonomous Systems and Medical Engineering. The intention is to extend existing areas of expertise and to provide leadership in research for staff and students. Our professors are also expected to provide inspirational academic leadership in teaching and curriculum development.

The successful post-holder will have the opportunity to work with colleagues with well-equipped facilities, including the Robotics, Bio-inspired Architectures, Microengineering & Microfluidics and Medical Engineering Laboratories. The post-holder will lead and drive our ambitious plan to develop research, enterprise and teaching initiatives in the wider field of Engineering at York, with University support for new facilities and further staff appointments over the next 10 years.

In addition to this appointment we will offer the successful candidate the opportunity to appoint a Senior Lecturer to support their work in the Department.

Professor Andy Tyrrell
Head of Department
Chairs at York are expected to advance their subject nationally and internationally, and to contribute to maintaining the University as an international centre of excellence for their subject area through research, scholarship, teaching and innovation.

We are currently seeking applicants who will excel in all aspects of academic practice during this new, exciting phase of development of this internationally recognised Electronic Engineering department. Successful candidates will (i) undertake world leading research in a discipline of mechanical engineering (we particularly encourage applicants with expertise in Robotic & Autonomous Systems and/or Medical Engineering); (ii) engage in wide-ranging collaborations within and beyond the Department, including supporting and mentoring early career researchers and postgraduate students; (iii) contribute to the academic leadership of the Department and University; (iv) with colleagues, support the continued development of teaching programmes in Engineering; (v) work at a senior level with external organisations to generate the highest research impact and deliver continuing professional development; (vi) engage actively with Department and University members to help create a distinctive and positive working environment that emphasises excellence.

**Key responsibilities**

(Role holders will be required to undertake some or all of the duties below.)

**To support the research activities of the Department**

- To carry out internationally outstanding research, scholarship and innovation
- To disseminate research through monographs, articles in journals of international standing, and other appropriate forms, including national and international conference presentations
- To play a leading role in the Department in identifying and securing external funding through research grants and contracts, and in developing collaborative research income-generating activities
- To attract and supervise research students, and, as appropriate, post-doctoral researchers and other support staff
- To support, comply with, and contribute fully to research plans and policies of the Department and the University
- To support and mentor junior academic colleagues in order to promote quality of teaching and research and their career development

**To support the teaching objectives of the Department**

- To design and be responsible for delivery of modules and teaching programmes for undergraduate and graduate students
- To play a leading role in departmental and interdepartmental curriculum development and quality enhancement
- To coordinate team teaching, as required, including liaison with other staff and with postgraduates who teach
- To design and mark assessments, and give feedback
- To supervise undergraduate and graduate projects and dissertations
- To carry out teaching in Continuing Professional Development
- To undertake pastoral support of students, as a personal supervisor or in another designated role
- To support and promote fully the University and Department teaching quality assurance standards and procedures
- To contribute to the efficient management and administration of the Department
- To make an important contribution to the leadership and management of the Department, including supporting early career staff and developing new collaborative initiatives
- To attend departmental meetings, meetings of the Board of Studies, and other committees and working groups within the Department and University
- To carry out relevant professional duties, commensurate with the Professial grade
- To undertake specific departmental roles and management functions as may be reasonably required by the Head of Department

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**JOB DESCRIPTION**

At a glance

<table>
<thead>
<tr>
<th>Salary</th>
<th>Commensurate with experience, current minimum £63,837</th>
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<tbody>
<tr>
<td>Hours of work</td>
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<tr>
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<th>Qualifications</th>
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<tr>
<td>PhD in Engineering or a related discipline</td>
<td>Essential</td>
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<tr>
<td>Membership, or willingness to attain membership, of relevant professional societies (e.g. IET, IMechEng)</td>
<td>Essential</td>
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<tr>
<td>Undergraduate degree in Mechanical Engineering or a related discipline</td>
<td>Desirable</td>
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<th>Knowledge</th>
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<tr>
<td>Outstanding and internationally recognised knowledge of Robotic &amp; Autonomous Systems and/or Medical Engineering with a focus on combining mechanical and electronic systems</td>
<td>Essential</td>
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<th>Skills, abilities and competencies</th>
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<tr>
<td>Ability to define, lead, manage and attract funds for internationally excellent research, operating across disciplinary boundaries</td>
<td>Essential</td>
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<td>Proven leadership and managerial skills</td>
<td>Essential</td>
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<td>Ability to manage and interact with staff and students at all levels and to contribute to broadening the strategic development of the Department</td>
<td>Essential</td>
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<td>Ability to consistently publish academic work that is recognised as internationally leading</td>
<td>Essential</td>
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<td>Ability to work with external and non-academic organisations for research impact and innovation</td>
<td>Essential</td>
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<tr>
<td>Evidence of international collaboration</td>
<td>Essential</td>
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<td>Evidence of peer review activities</td>
<td>Essential</td>
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<th>Experience</th>
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<tr>
<td>International leader in a major research field, leadership of research group/theme</td>
<td>Essential</td>
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<td>Substantial publication record in leading peer-reviewed journals</td>
<td>Essential</td>
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<td>Attraction and effective supervision of postgraduate students</td>
<td>Essential</td>
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## PERSON SPECIFICATION

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<th>Experience (continued)</th>
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<tr>
<td>Significant and sustained success in accessing research grants and other external funding</td>
<td>Essential</td>
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<tr>
<td>Exceptional achievement in curriculum development, course design and teaching, learning and assessment methods at UG and PG levels and in encouraging student access and engagement</td>
<td>Essential</td>
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<td>Invited presentations at major international conferences</td>
<td>Essential</td>
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## Personal attributes

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<td>Demonstrable capacity for strategic thinking and planning</td>
<td>Essential</td>
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<td>Ability to take a lead in key administration functions within the department</td>
<td>Essential</td>
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<tr>
<td>Self-motivated, pro-active and innovative</td>
<td>Essential</td>
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THE DEPARTMENT

The Department of Electronic Engineering at York is moving into an exciting new phase. Significant University investment is enabling an expansion of the Department, both in terms of new laboratory and research facilities and staff. Over the next 10 years an additional 20 academic staff appointments are planned, with this Chair post being the foundation of this expansion.

The Department currently undertakes world-leading research with groups working in multidisciplinary areas including: electronic and computer engineering, specifically, bio-inspired adaptive architectures and systems; applied electromagnetics, signal processing and coding for communications; nano-scale device fabrication and analysis; autonomous and robotic systems and biomedical engineering: https://www.york.ac.uk/electronic-engineering/

Our key research areas fit into three overarching groups:

- Communication Technologies
- Intelligent Systems and Nano-science
- Engineering Education and Management

This post will develop research in the areas of Robotic & Autonomous Systems and/or Medical Engineering with a strong emphasis on integrating mechanical and electronic systems with real-world applications.

In the 2014 REF 87% of our research outputs were judged world-leading or internationally excellent. Our research groups work with industry and universities across the world while providing a friendly and supportive environment for staff and students.

Our department has a long-standing reputation for high-quality teaching and learning and highly employable graduates. Our MEng and BEng undergraduate programmes in a number of subject areas are fully accredited by the IET (Institution of Engineering and Technology) at CEng (Chartered Engineer) level: http://www.york.ac.uk/electronics/undergraduate/. The Department is consistently highly ranked for Electronic Engineering in the annual National Student Survey and we are ranked 1st in the UK for graduate employment within one year of leaving the university (Longitudinal Education Outcomes (LEO) 2017).

Within Electronic Engineering our student body consists of approx. 400 undergraduate students and 130 postgraduate students. Our taught postgraduate students undertake one of our suite of MSc programmes, covering the latest technologies and skills in important industry sectors. We have a vibrant community of postgraduate research students enrolled on our PhD programme bringing our total student cohort to around 600 students.
THE DEPARTMENT

The Department has 40 academic staff (including part-time and job share), research staff and a team of support staff, providing administrative and technical assistance in the department. The Department continues to hold the Bronze Award from Athena SWAN for promoting women in science, which was won in 2013. The Athena SWAN Charter recognises and celebrates good employment practice for women working in science, engineering and technology (SET) in higher education and research.

The Department of Electronic Engineering operates a family friendly policy and is committed to gender equality and diversity. The Department recognises that a flexible approach to working is vitally important in the recruitment and retention of staff who have family commitments. The Department offers flexible working hours to all staff and will actively support job sharing and career break requests where it is reasonable and practical to do so and where operational needs will not be adversely affected.

The Department provides support for all categories of staff in their applications for promotion, role reviews, awards and prizes and rewarding excellence nominations. The Department strives to address gender inequalities and ensure that there is a culture that supports equality and encourages better representation throughout the department. Support for women at all stages of their career is recognised as being extremely important.

https://www.york.ac.uk/electronic-engineering/profiles/diversity/

Further details of the Department can be found on its website: https://www.york.ac.uk/electronic-engineering/
Founded on principles of excellence, equality and opportunity for all, the University of York opened in 1963 with just 230 students. In 2018 it is the home of more than 17,000 students across more than 30 academic departments and research centres. Since opening over fifty years ago, we have become one of the world’s leading universities and a member of the prestigious Russell Group.

We are consistently recognised as one of the leading Higher Education Institutes and are ranked 16th in the Times & Sunday Times league table (2017). The University of York has won six Times Higher Education (THE) Awards and five Queen’s Anniversary Prizes.

The University is proud of its association with Athena SWAN, holding 12 awards in support of gender equality, representation and success for all, with gold awards for Chemistry and Biology and a University-wide bronze award.

Of 154 universities that took part in the Research Excellence Framework (REF) in 2014, The University of York ranked 14th overall and 10th for the impact of our research. The University is consistently in the top ten UK research universities and attracts over £60m a year of funding from research alone.

Our vision is to make the University of York a world leader in the creation of knowledge through fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds and the application of knowledge for the health, prosperity and well-being of people and society.
Attractive workplace

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. York enjoys a safe, friendly atmosphere with facilities including bars, shops, theatres and concert halls all within easy walking distance.

The University has undergone an unprecedented period of expansion and renewal since 2000. We have invested in twenty new buildings on the original campus and have completed the first and second phases of a £750m campus expansion. Our investment in new colleges, teaching and learning spaces, laboratories, research facilities and a new sports village mean there has never been a better time to join us.

During this period of change we've worked hard to retain our friendly, informal and collegiate atmosphere, which is important to our core values of inclusivity and interdisciplinarity.

We have a thriving international community and are committed to providing staff moving to York with as much support as possible through our Relocation Package and Welcome Officers.

The University is committed to promoting a diverse and inclusive community - a place where we can all be ourselves and succeed on merit. We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff engagement forums, campus facilities and services to support staff from different backgrounds.

For further information please visit our employee benefit pages.
THE CITY AND THE REGION

The City of York

Internationally acclaimed for its rich heritage and historic architecture, York’s bustling streets are filled with visitors from all over the world. Within its medieval walls you will find the iconic gothic Minster, Clifford’s Tower and the Shambles - just a few of the many attractions.

But York isn’t just a great place to visit - it’s also a great place to live and work. While nourishing a vibrant cosmopolitan atmosphere, York still maintains the friendly sense of community unique to a small city.

Visit www.visityork.org for more information on the city of York

Shopping, culture and entertainment

York boasts specialist and unique boutiques but also all the high street stores on its busy shopping streets. Alongside them you will find cinemas, theatres, an opera house, art galleries, a vast range of restaurants, live music venues and clubs. York is particularly renowned for its multitude of pubs and bars, from the modern to the medieval.

Housing and schools

Whether you choose to live close to the city, in one of the surrounding villages or further afiel, you will find a wide range of housing within comfortable distance of York and the University. For families, the area has a range of excellent schools both in the state and independent sector.

Great location

York is one of Britain’s best-connected cities. Halfway between London and Edinburgh on the East Coast mainline, on intercity trains you can reach London King’s Cross in less than two hours and Edinburgh in two and a half hours. York is also well served by road links, and it is easily accessible from the A1, M1 and the M62.

For those travelling from overseas, Manchester Airport is two hours away and Heathrow Airport just three and a half. Flights from nearby Leeds Bradford Airport provide easy access to mainland Europe. By Eurostar from London St Pancras, Paris is just over six hours away.

Yorkshire

The Lonely Planet guide recently declared Yorkshire the third best region in the world to visit. There is something to cater to every taste, whether it be the rugged landscapes of the Moors or the Dales, the picturesque seaside towns of Scarborough and Robin Hoods Bay, the gothic architecture of Whitby or the vibrancy of cosmopolitan Leeds.
Apply online

- Go to [https://jobs.york.ac.uk](https://jobs.york.ac.uk)
- Find this job using reference 7268
- Complete the online application form

You will need to submit your completed application by midnight (local UK time) on 10 February 2019.

What will I need?

We will ask you for details of:

- Your CV
- A letter describing how you meet the requirements of the job
- A statement of your research and teaching intentions

You will also need details of three academic referees (one International) and one Employment referee.

Help and assistance

Direct any informal queries to Professor Andy Tyrrell (andy.tyrrell@york.ac.uk)

If you have any questions about your application, contact the HR Services team:

recruitment@york.ac.uk
+44 (0)1904 324835