



OLLSCOIL NA GAILLIMHÉ
UNIVERSITY OF GALWAY

Ward & Burke Construction – Lecturer in Automation Engineering, 1FTE, Permanent

Ref #: 011628



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College	Science and Engineering
School	School of Engineering
Post Title & Subject Area	Ward & Burke Construction Lecturer in Automation Engineering
Post Duration	Permanent
Level	Lecturer (Contract Type B)
Reports to	Head of School or nominee

JOB ADVERTISEMENT

Applications are invited for an appointment as Ward & Burke Lecturer in Automation Engineering in the [School of Engineering](#) at the [University of Galway](#). This role has been developed as part of an exciting strategic partnership between [Ward & Burke Construction Ltd](#), the University of Galway and the School of Engineering and the [Construct Innovate Centre](#), Ireland's National Research Centre for Construction Technology and Innovation. The Ward & Burke Centre for Smart Infrastructure and Data Driven Engineering, located in the School of Engineering alongside Construct Innovate, aims to make Ireland a global research and innovation leader for innovative automation and manufacturing solutions that can support next generation climate resilient infrastructure. The Centre will lead globally impactful research that enables climate resilient infrastructure and energy excellence in infrastructure development.

The successful candidate will capitalise upon and strengthen University of Galway's international position in automation, control and sustainability to deliver innovation in Smart Infrastructure and Data Driven Engineering. This role strongly aligns with two of the five Horizon Europe missions: **climate resilience** and **climate-neutral and smart cities**. This role will provide leadership to the University's ambitions to further world-class research within the newly formed Ward & Burke Centre for Smart Infrastructure and Data Driven Engineering and deliver upon our commitment to supporting the just transition to a low carbon future. It will support society in meeting key challenges, supporting sustainable economic growth and meeting the Science Based Targets initiative (SBTi) Net-Zero Standard, which establishes a robust emissions reduction target that aligns with the pace and scale mandated by climate science. The Centre will make Ireland a global research and innovation leader in automation engineering that will support the development of sustainable and data-driven solutions for advanced manufacturing and low-carbon infrastructure.

There are many exciting opportunities to foster the application of disruptive innovation and new research approaches to automation, optimisation, real-time monitoring, data processing, control, and sustainability and energy security for (i) advanced manufacturing for sectors including, but not limited to, medical devices, pharmaceuticals, semiconductors, batteries and energy conversion, and modular construction; and (ii) low-carbon infrastructure for sectors including, but not limited to, water, wastewater, and energy. Such research will enable sustainability, cost effectiveness, and resilience while ensuring Ireland's competitiveness in these critical sectors. The successful candidate will be an ambitious, and highly committed individual who combines strong academic credentials with a record of accomplishment in research and innovation in these and related areas.

The appointee will have prior experience of conducting high-impact research, prior experience of innovation and partnering with industry, and demonstrated experience of delivering research excellence. The role requires an individual who can work with others to foster a culture of innovation and collaboration with staff, industry partners, policy makers, regulatory and professional bodies, and other stakeholders to develop and grow this area of strategic importance to the University of Galway.

It is expected that the appointee will lead a world-class research programme from within Mechanical Engineering, working with colleagues across the relevant academic disciplines such as Civil Engineering and research institutes. Mechanical Engineering has active clusters in robotics and automation, sustainable energy systems, construction technologies, advanced manufacturing, offshore engineering, and composite materials. Researchers from the [School of Engineering](#) play leading roles in centres and networks including the [Ryan Institute](#) for advancing sustainability and innovation, the [I-Form](#) Research Ireland Centre for Advanced Manufacturing, the [MaREI](#) Research Ireland Centre for Energy, Climate and Marine, the [SH2AMROCK](#) Hydrogen Valley, and the [IEA Wind](#) Technology Collaboration Programme. Of particular relevance is [Construct Innovate](#), Ireland's national research

centre for construction technology and innovation, which collaborates with over 90 construction companies and is led by academic staff from the School of Engineering. The successful candidate will be expected to apply for major funding awards, for example from the European Research Council (ERC), Research Ireland and Horizon Europe, and will develop national and international collaborations with academia and industry.

The successful candidate will contribute to teaching, research, student project supervision, and programme administration across undergraduate and postgraduate programmes in Mechanical Engineering and the School of Engineering and will benefit from a significant package for Centre-related research, including PhD and researcher funding.

The successful candidate shall possess:

A PhD in Mechanical Engineering or a closely-related discipline, significant research experience and expertise in one or more of the following areas: automation, robotics, process design, control, modelling and optimisation, real-time monitoring and data processing, vision systems, energy systems engineering, application of data-driven approaches to engineering processes, including digital twins, artificial intelligence, and data analytics.

For informal enquiries, please contact Professor Laoise McNamara, Head of School, School of Engineering (laoise.mcnamara@universityofgalway.ie) or Prof. Rory Monaghan, Head of Mechanical Engineering, School of Engineering (rory.monaghan@universityofgalway.ie).

Additional information on the School/Discipline/College is available at [School of Engineering](#) and the Discipline is available at: [Mechanical engineering](#).

Salary: € 64,903 to €103,538 p.a (applicable to new entrants effective from January, 2011)

This appointment will be made on the Lecturer scale in line with current Government pay policy and in accordance with the terms and conditions of the University's Remuneration policy. [Remuneration Policy](#)

Closing date for receipt of applications is 17:00 (Irish Time) on 9th April 2026. It will not be possible to consider applications received after the closing date.

Garda vetting may apply.

Appointments will be conditional on work authorisation validation.

Further details are available at www.dbei.ie

For more information and Application Form please see website:

[Jobs - University of Galway](#) Applications should be submitted online.

Please see further information on how to apply here: [E-Recruit - University of Galway](#) and [Guidelines for On-line Applications \(universityofgalway.ie\)](#)

Please note that appointment to posts advertised will be dependent upon University approval, together with the terms of the Employment Control Framework for the higher education sector.

At the University of Galway, we celebrate diversity and believe that every candidate can bring unique perspectives, talents and approaches to our University community. We actively encourage applications from all backgrounds regardless of race, religion, ethnicity, gender, family status, civil status, membership of the Traveller community, sexual orientation, disability or age.

We value flexibility and recognise that a work-life balance is essential. We offer flexible working arrangements, including hybrid options, to accommodate the diverse needs of our staff. Our commitment to inclusivity extends beyond recruitment as we foster a friendly and supportive work environment, where all work styles are valued and respected. Join us in shaping a workplace that thrives on diversity, creativity and collaboration.

University of Galway is an equal opportunities employer.

JOB DESCRIPTION

BACKGROUND

Ollscoil na Gaillimhe – University of Galway has been inspiring minds since 1845 as a research-led university. It is one of the oldest and largest universities in Ireland. The campus community includes over 21,000 students and staff and 110,000 alumni located in over 100 countries across the world. University of Galway has earned international recognition as a research-led university with a commitment to top quality teaching. University of Galway is counted among the Top 300 universities in the world, positioned in the top 2% in QS global rankings. The university has committed to aligning all major activities, including teaching, research, operations and engagement to the Sustainable Development Goals (SDGs), targets and indicators. University of Galway is ranked 34th in the world and first in Ireland in the Times Higher Education's Impact Rankings.

The School of Engineering, as part of the College of Science and Engineering at University of Galway, is one of the premier engineering schools in Ireland, with a long tradition of excellence dating back to 1849. The school has four primary engineering disciplines: Biomedical, Civil, Electrical & Electronic and Mechanical, who are housed within the award-winning Alice Perry Engineering Building, the largest engineering education facility in Ireland.

Since its foundation at University of Galway in 1979, Mechanical Engineering has established a reputation for excellence in teaching, research, and industry collaboration. The Discipline offers a five-year Masters of Engineering (M.E.) programme, which is accredited by Engineers Ireland as meeting the educational standards for Chartered Engineer, with international recognition through the Washington Accord. Industrial experience is embedded in our engineering education programmes, with a structured work placement opportunity for every student. Additionally, the Discipline delivers a Masters of Science (M.Sc.) in Mechanical Engineering and a Masters of Applied Science (M.App.Sc.) in Enterprise Systems programmes and a B.E. in Mechanical Engineering. Our staff also have leading roles in the B.E., M.E. and M.Sc. in Energy Systems Engineering, and the B.Sc., M.Sc., and H.Dip. programmes in Environmental and Occupational Health and Safety. There will be opportunities for collaborative teaching and research initiatives across the School of Engineering and the College of Science and Engineering.

The Mechanical Engineering research profile spans all branches of the discipline, including materials, energy, fluid dynamics, manufacturing, computational modelling, ergonomics, enterprise systems, and health and safety. Mechanical Engineering researchers actively collaborate with colleagues across the School of Engineering, which, in turn, has strong links with local and international industry and the research community. Staff and graduates of the School of Engineering have been instrumental in the growth of innovative indigenous companies in sectors including offshore energy, composites, advanced manufacturing, aerospace technology, medical devices and battery technology. As a partner in the Irish Centre for High-End Computing (ICHEC), University of Galway has access to world-class high-performance computing. There is significant scope for the new Lecturer to influence the development of the research and teaching agenda of the School of Engineering, while leveraging many exciting research synergies across the College and beyond. University of Galway hosts Construct Innovate (<https://constructinnovate.ie/>), Ireland's national research centre for construction technology and innovation with over 90 construction companies as members.

Full details of the extensive laboratory facilities available in the School of Engineering may be found at:<https://universityofgalway.ie/science-engineering/engineering/facilities/>.

University of Galway is launching the Ward & Burke Centre for Smart Infrastructure and Data Driven Engineering in 2026. The mission of the centre is to enhance both fundamental and applied research on the use of data-driven engineering approaches can enhance the design, construction and operation of infrastructure and the built environment for a sustainable and climate future. Of central importance to this mission is the role of the Discipline of Mechanical Engineering in developing innovation and talent in automation, process design, real-time monitoring, control, modelling and optimisation. The centre will ensure that the outputs from research address the significant global challenges related to the built environment and can be harnessed by society.

Equality and Diversity

University of Galway and the College of Science and Engineering have a deep commitment to equal opportunities, and this year, University of Galway is delighted to announce that it is to be conferred with the institutional Athena Swan Silver Award. The School of Engineering is deeply committed to making real and lasting changes to career development in supporting and advancing women throughout the pipeline including attracting more women into engineering at both undergraduate and postgraduate level, and the career development of postdoctoral researchers and staff. Engineering has already demonstrated significant leadership in this area, being the first school/unit in University of Galway to apply for and be awarded with the departmental Athena SWAN Silver award. More information on the College's activities in this domain can be found on <https://www.universityofgalway.ie/science-engineering/edi/> and the overall University activities on <https://www.universityofgalway.ie/equalityanddiversity/>.

JOB DESCRIPTION

Principal Duties and Responsibilities

The post-holder's duties will include, but not be limited to, the following:

Strategy and Research Leadership

- Conduct a world-class programme of research projects, externally funded through national and international (especially EU) programmes.
- Disseminate research outputs in leading academic publications and international conferences
- Work effectively with the Centre Director, and colleagues across the School of Engineering to realise the university's ambitions for the centre.
- Support external relations with relevant industry partners, funders, policy makers, other academic institutions and other stakeholders to develop collaborative research; as well as to identify opportunities for philanthropic funding
- Contribute to the research profile of the Centre to attract, manage and retain staff to achieve academic excellence
- Support the transfer of knowledge to society through outreach (e.g. collaborative research; seminars; workshops; lectures; websites; publications) and, where applicable, through technology transfer (e.g. collaborative research; contract work; and commercialisation of intellectual property, licences etc).
- Promote the quality of the experience of research students associated with the Centre.

Teaching

To give instruction and supervision, as directed by the Head of School, to students of the University in courses and programmes organised by the School or to which the School contributes to another School or College. Such duties to include:

- Curriculum and course design, preparation and delivery of lectures, tutorials, project supervision and general examination and other assessment responsibilities.
- Provide academic counselling and advice to students.
- Contribute to the supervision of postgraduate masters and PhD students
- Contribute to creating, updating and delivering relevant undergraduate and postgraduate programmes in the College of Science and Engineering

Contribution and Scholarly Activity

- Contribute actively to the academic administration and the on-going initiatives within the College of Science and Engineering through participation at College meetings and other relevant committees
- Engage in scholarly activity including refereeing of journals, membership of advisory bodies and peer review panels and work associated with external examinership
- Engage with the wider community regionally, nationally and internationally from a civic, economic, social and cultural perspective as a contribution to the life of the University.
- In representing the University externally, the post-holder is expected to maintain the highest professional standards, thereby enhancing the reputation of the University
- Other contributions to the College of Science and Engineering and School of Engineering as necessary

The post-holder shall carry out these duties under the direction of the Head of the School or of an authorised senior member of the staff of the school.

The post-holder shall be a member of College/Colleges in accordance with University Statutes.

The hours of work are those prescribed under the Public Service Agreement in respect of Academic Staff.

ELIGIBILITY REQUIREMENTS

Essential Requirements:

- A Primary degree and a PhD qualification in Mechanical Engineering or a closely related engineering discipline.
- Demonstrate research capacity in one or more of the following areas: automation, robotics, process design, control, modelling and optimisation, real-time monitoring and data processing, vision systems, energy systems engineering, application of data-driven approaches to engineering processes, including digital twins, artificial intelligence, and data analytics.
- A record of publishing research in high-impact internationally renowned journals.
- Experience of collaboration and relationship building with industry or other stakeholders.
- Experience of securing research funding at national or international level together with evidence of developing new research initiatives.
- Excellent communication and teamwork skills, and an ability and commitment to develop collaborative relationships with other academic staff in the pursuit of teaching and research objectives of University of Galway.
- Demonstrated commitment to equality, diversity and inclusion, and cultivating respect in the workplace.
- A commitment to teaching excellence, which includes the use of innovative teaching approaches and technologies and the integration of the latest research and industry developments to enhance student learning.

Desirable Requirements:

- A number of years post-doctoral experience in one or more of the indicated research areas.
- Experience in international mobility.
- Experience in outreach and student recruitment.
- Experience in academic programme delivery and development.
- Experience of successful mentoring of postgraduate students and/or postdoctoral researchers.

The appointment will be made to the School of Engineering and will be associated with the discipline of Mechanical Engineering.

Competency Framework for Lecturer (Contract Type B) Roles at University of Galway

	Academic Excellence		Leadership Excellence		Organisational Excellence
CORE	<ul style="list-style-type: none"> Excellence in Research <p><i>The Lecturer (Contract Type B) furthers their discipline and contributes to the body of knowledge in their area through planning, carrying out and publishing/ disseminating their own high quality research, building and leading research groups and providing supervision and support for postgraduate students to enable them to produce quality research. They keep up to date with relevant developments in their field and network and collaborate with others, both internally and externally, to optimise the value and relevance of the research being produced and to maximise the School's/Discipline's ability to attract research funding.</i></p>	CORE	<ul style="list-style-type: none"> Personal Effectiveness <p><i>The Lecturer (Contract Type B) is enthusiastic about their discipline and is committed to making their best personal contribution through employing excellent planning and organising, communication and decision making skills to achieve their goals and through working hard and being flexible in order to meet the multiple and changing demands of the Lecturer (Contract Type B) role.</i></p>	CAPACITY TO DEVELOP	<ul style="list-style-type: none"> Strategy & Vision <p><i>The Lecturer (Contract Type B) should contribute to the strategic development of the discipline by developing a strong awareness of the wider environment, how the discipline is developing and how the School/Discipline can develop in the long term to optimise its contribution. He /She must have the ability to make a strong case for the development of new programmes or engaging in joint programmes or collaborations that they feel will add long term value to the School/Discipline.</i></p>
CORE	<ul style="list-style-type: none"> Excellence in Teaching <p><i>The Lecturer (Contract Type B) develops and delivers quality teaching programmes which engage and inspire students at all levels and maximises their learning. They are confident in using a range of teaching techniques, are open to innovations in teaching and are focused on continually developing their own teaching skills.</i></p>	CAPACITY TO DEVELOP	<ul style="list-style-type: none"> Leading Others <p><i>The Lecturer (Contract Type B) must work well with others, providing leadership and direction to students, colleagues and support staff in relation to projects or areas of work that they are leading on. They effectively encourage, support and manage the contributions of others to deliver results for the discipline and to ensure that high standards are met.</i></p>	DEVELOPING	<ul style="list-style-type: none"> Collegiate & Community Contribution <p><i>The Lecturer (Contract Type B) values and engages in a collegiate approach to working with others, within their own discipline, school and university and also within the wider external community. S/he actively seeks to build effective networks and is willing to contribute their time and expertise to a range of broader university wide or community projects.</i></p>

Competencies for Lecturer (Contract Type B) in University of Galway

ACADEMIC EXCELLENCE

Competency 1: Excellence in Research

The Lecturer (Contract Type B) furthers their discipline and contributes to the body of knowledge in their area through planning, carrying out and publishing/ disseminating their own high quality research, building and leading research groups and providing supervision and support for postgraduate students to enable them to produce quality research. They keep up to date with relevant developments in their field and network and collaborate with others, both internally and externally, to optimise the value and relevance of the research being produced and to maximise the School's/Discipline's ability to attract research funding.

- Conducts high quality research that furthers the School / Discipline
- Publishes research frequently in high quality, peer-reviewed journals and presents research at high profile conferences
- Builds up collaborative links and networks with other organisations and keeps up to date with research in own area and what is happening in the international research community
- Goes to relevant conferences, and works with industry and other relevant external bodies to keep research relevant
- Writes strong research and grant proposals which sells the value and potential benefits of a piece of research
- Effectively plans research and can estimate the time and resources required to complete it, and delivers on schedule
- Provides quality supervision and guidance in relation to the research of undergraduate and postgraduate students, motivating and encouraging them to help them overcome problems

Competency 2: Excellence in Teaching

The Lecturer (Contract Type B) develops and delivers quality teaching programmes which engage and inspire students at all levels and maximises their learning. They are confident in using a range of teaching techniques, are open to innovations in teaching and are focused on continually developing their own teaching skills.

- Provides a high standard of teaching to students across a range of programmes in their discipline
- Provides mentoring and supervision to PhD students / projects / programmes as required
- Leads on/contributes to the development and review of the curriculum and programmes delivered and encourages other staff to contribute
- Confident teaching student groups of various sizes and at different levels
- Competent and consistent in setting and organising/co-ordinating the marking of examinations
- Demonstrates, through their teaching, strong enthusiasm for their subject area and a high level of up to date knowledge and expertise in their area

- Competent in a range of teaching methods and strategies and is willing to continually evaluate and develop their teaching methods and skills, looking for better ways of teaching
- Open to using technological innovation as part of their teaching and keeps up-to-date with developments in this area
- Organises and structures their teaching logically to help maximise learning and ensure a good student experience
- Keep students engaged by incorporating research and current topics into teaching and informing their teaching by what is going on in the wider environment and including external input
- Demonstrates a commitment to students and gives the time and effort to engage with, and be accessible to students
- Has the ability to give constructive and timely feedback and advice to students
- Balances a concern for students with a focus on being consistent and equitable in their treatment
- Benchmarks teaching programmes against those in other universities and aims to ensure they are of a high standard
- Works with students to prevent plagiarism, and puts systems in place to detect and manage plagiarism

LEADERSHIP EXCELLENCE

Competency 3: Personal Effectiveness

The Lecturer (Contract Type B) is enthusiastic about their discipline and is committed to making their best personal contribution through employing excellent planning and organising, communication and decision making skills to achieve their goals and through working hard and being flexible in order to meet the multiple and changing demands of the Lecturer (Contract Type B) role.

- Demonstrates excellent planning, organisation and prioritisation skills, to effectively meet deadlines and to deliver to high standards across the areas of teaching, research and administration
- Has good time management skills to manage a heavy workload
- Demonstrates clear commitment and is willing to work hard for the success of their area
- Has a reflective approach to their own work and can consistently review it in order to ensure it is of the highest possible standard
- Active in reviewing systems and processes to maximise the time available for research and teaching
- Flexible and adaptable in managing competing demands while protecting core values
- Shows a strong commitment to keeping up to date and maintaining professional competence
- Is resilient and maintains a positive outlook in a challenging and pressurised environment
- Takes a balanced approach to the demands of the role and is flexible with what the role encompasses
- Understands the importance of budget management and raising programme funds, and can assimilate financial information and report back on financial matters

Competency 4: Leading Others

The Lecturer (Contract Type B) must demonstrate a capacity to develop skills and competence to work well with others, providing leadership and direction to students, colleagues and support staff in relation to projects or areas of work that they are leading on. They effectively encourage, support and manage the contributions of others to deliver results for the discipline and to ensure that high standards are met.

- Works constructively within a collective collegiate structure
- Consistently works with others to ensure high standards in all aspects of the role
- Is able to get the most out of people and to secure their support and cooperation in relation to work they are leading/managing
- Gives clear instructions in relation to the contribution expected from others
- Has the ability to manage and encourage others to deliver what is required
- Actively supports the career development of postgraduate students and newer colleagues
- Organises and delegates work in a way which is consistent and fair and makes best use of resources
- Understands the importance of, and can use a range of strategies to, motivate students and support staff and colleagues
- Takes the initiative to put good ideas into practice

ORGANISATIONAL EXCELLENCE

Competency 5: Collegiate and Community Contribution

The Lecturer (Contract Type B) values and engages in a collegiate approach to working with others, within their own discipline, school and university and also within the wider external community. S/he actively seeks to build effective networks and is willing to contribute their time and expertise to a range of broader university wide or community projects.

- Actively builds strong internal and external networks and collaborative links
- Participates in cross discipline working groups in addition to taking on roles in external institutions/agencies (with the necessary University approval in place)
- Takes time to build up positive working relationships with others and treats everyone fairly and with respect
- Assumes administrative/organisational roles and tasks to help ensure the smooth running of the School/Discipline
- Acts as chair on committees or acting or as representative at school/college/university level and works to develop the skills needed to perform these roles effectively
- Makes an effort to understand and take account of different people's views and perspectives
- Contributes outside the university to different committees, the local community, and voluntary organisations
- Encourages students to get involved in relevant external groups also, where appropriate

- Supports colleagues internally and with other universities in initiating collaborative enterprises/programmes
- Possess the negotiation skills required to achieve a balance between the university's academic requirements with potentially competing requirements of external bodies

Competency 6: Strategy and Vision

The Lecturer (Contract Type B) should demonstrate a capacity to develop skills and competence to contribute to the strategic development of the discipline by developing a strong awareness of the wider environment, how the discipline is developing and how the School/Discipline can develop in the long term to optimise its contribution. He /She must have the ability to make a strong case for the development of new programmes or engaging in joint programmes or collaborations that they feel will add long term value to the School/Discipline.

- Has a clear overall vision for what the School/Discipline is trying to achieve and how their work fits in with the overall direction
- Understands how the discipline is developing and brings this to bear on their work
- Uses initiative to benchmark against other organisations and takes other opportunities to increase understanding of best practice across the system
- Knows what research is being done within their area and what type of research will attract funding from which sources
- Identifies opportunities for new modules and programmes by assessing what will be viable and of interest in the long term
- Uses judgement to build and sell a persuasive case for resources/new programmes on behalf of their area/college
- Creates, and takes advantage of, opportunities to market programmes to attract high quality postgraduate students
- Able to negotiate for an area while recognising the realities and the resource restrictions and is willing to change and adapt to meet future needs