



## Job Description

<b>College/Management Unit</b>	UCD College of Engineering and Architecture
<b>School/Unit</b>	UCD School of Mechanical and Materials Engineering
<b>Post Title &amp; Subject Area (if relevant)</b>	Lecturer (Above the Bar) in Engineering Management
<b>Post Duration</b>	Permanent
<b>Grade</b>	Lecturer (Above The Bar)
<b>Job Grading Reference No.</b>	N/A
<b>Reports to</b>	Head of School or nominee
<b>HR Reference No.</b>	007433
<b>HR Administrator</b>	Jane Mahony

### Position Summary

The UCD School of Mechanical and Materials Engineering seeks applications from exceptionally qualified and experienced candidates for a post in Engineering Management to support the growth of its undergraduate and postgraduate teaching programmes and research priorities.

The successful candidate will be expected to develop and lead an ambitious and internationally competitive mixture of fundamental and applied research activities. Within the Materials and Manufacturing theme in the School, research is undertaken in production operations/supply chain management (design, modelling and optimisation using approaches such as mathematical programming, process modelling & simulation, empirical modelling) and in advanced machining and manufacturing processes including ultra-precision machining, moulding, casting and forming of metals, polymers, composites, ceramics and glasses, and surface engineering. The appointee to this position will have a strong track record and trajectory of internationally competitive research achievement. It is also expected that the successful candidate will maintain an active personal research programme, publishing in leading international journals and conferences, and seeking out opportunities for research funding while participating fully in the programmes and academic activities of the School, College and University.

**Salary Scale: €45,726 - €76,936 p.a.**

Appointment will be made on scale and in accordance with the Department of Finance guidelines

### Principal Duties and Responsibilities

- Deliver core Operations/Production Management themed modules on the Master of Engineering Management (MEM), Master of Engineering Science (MEngSc) in Engineering Management and Master of Engineering with Business (MEB) programmes;
- Serve as Programme Director for the ME with Business, build on existing relationships with the UCD School of Business, and coordinate the supervision of student research projects;
- Participate on steering committees of the other Engineering Management themed programmes in the school, i.e. ME/MEngSc in Engineering Management;
- Support the delivery of undergraduate manufacturing engineering or related modules and contribute to the School's other teaching provision at undergraduate and graduate levels;
- Develop modules based on research interests to support the offerings across the School's taught graduate programmes and contribute to the development of content and structure of those degree programmes for which the School provides modules;
- Develop and lead an ambitious and internationally competitive mixture of fundamental and applied research activities. It is expected that this will involve developing and leading a vigorous group of research masters students, PhD students and postdoctoral researchers, thereby strengthening the Materials and Manufacturing research theme within the school

and wider university;

- Collaborate with colleagues in the Materials and Manufacturing theme, in the School, across other schools in UCD Engineering, the wider university and internationally to obtain research funding from sources including Irish Research Council, Enterprise Ireland, Science Foundation Ireland, EU (e.g. Horizon 2020 Factories of the Future strand);
- Direct, supervise and lead high-quality research that is internationally competitive and publish the findings in leading peer-reviewed journals and in the annual conference proceedings of relevant institutions;
- Develop a research interest in the pedagogy of manufacturing/production/systems engineering management and collaborate with colleagues in the school to disseminate research in this area, utilising the existing graduate taught programmes as data sources and publish this research in appropriate scholarly journals;
- Develop appropriately strong relationships with industry, national and international partners, and alumni;
- Support and identify opportunities for industry placement projects on existing relevant Masters degree programmes;
- Develop relevant interdisciplinary, inter-school and industry collaboration to support both teaching and research, including via industry-based projects for taught masters modules;
- Develop and deliver appropriate CPD/online courses;
- Contribute to the academic life of the School, College and University;
- Carry out administrative and other duties as deemed necessary by the Head of School or their nominee.

### **Selection Criteria**

Selection criteria outline the qualifications, skills, knowledge and/or experience that the successful candidate would need to demonstrate for successful discharge of the responsibilities of the post. Applications will be assessed on the basis of how well candidates satisfy these criteria.

#### Mandatory

- PhD in one of the following disciplines: Mechanical Engineering, Industrial/Systems Engineering, Production Engineering, Manufacturing Engineering, or a cognate discipline;
- A number of years of industrial experience in either manufacturing or engineering service firms, with some of those being at supervisory/management level (i.e. had engineering staff reporting directly);
- Possess teaching and research interests aligned with the School's Materials and Manufacturing research theme. Clearly articulated intent to focus his/her research and teaching in either the manufacturing or engineering services sector, aligned with the School's Materials and Manufacturing research theme and in one of the following priority areas:
  - Advanced manufacturing/Engineering services process technologies/system design
  - Production operations/Supply chain design, including mathematical modelling, combinatorial optimisation, process modelling and simulation
- Demonstrated track record of publications in leading academic journals in the discipline and an ability to disseminate his/her research in conference proceedings and journals;
- Obtained national and international funding to support his/her research and supervised research master and doctoral students to completion;
- Membership and active engagement in the scholarly activities of one or more of the following professional institutions:
  - Institute for Operations Research and Management Science (INFORMS) and relevant divisions such as Manufacturing and Service Operations Management (MSOM);
  - Institution of Mechanical Engineers (IMechE);
  - Institute of Industrial Engineers (IIE);
  - International Academy for Production Engineering (CIRP);
  - European Operations Management Association (EurOMA);
  - Production and Operations Management Society (POMS);
  - American Society for Mechanical Engineers (ASME);

- Institute of Materials, Minerals & Mining (IOM3);
- American Society of Engineering Management (ASEM);
- Evidence of ambition and potential to lead a vigorous research group;
- Relevant experience of university-level teaching and research supervision;
- Excellent organisational skills and the ability to use initiative and work collaboratively as part of a team;
- Excellent interpersonal, communication and administrative skills;
- Excellent computing skills and/or experimental skills;
- An excellent level of fluency in English, both written and oral.

#### Desirable

- Experience of university-level teaching, or equivalent professional experience in industry;
- Ability to fulfil specific teaching requirements at undergraduate and at taught Masters/Doctoral levels;

## Further Information for Candidates

### Supplementary information

The University:	<a href="http://www.ucd.ie/aboutucd.htm">http://www.ucd.ie/aboutucd.htm</a>
The College:	<a href="http://www.ucd.ie/eacollege">http://www.ucd.ie/eacollege</a>
The School:	<a href="http://www.ucd.ie/eacollege/mme">http://www.ucd.ie/eacollege/mme</a>
Research Institutes & Centres:	<a href="http://www.ucd.ie/institutes.htm">http://www.ucd.ie/institutes.htm</a>

### Relocation Expenses

- Will not apply
- Will be applied in accordance with the UCD Relocation Policy  
<http://www.ucd.ie/hr/policies>

### Informal Enquiries ONLY to:

Name:	Professor Michael Gilchrist
Title:	Head of School
Email address:	<a href="mailto:head.mme@ucd.ie">head.mme@ucd.ie</a>
Telephone:	+353 1 716 1890

### Particular to this position

Conditions specific to this post (if any):

- It is proposed that interviews for this position will be held on **23 June 2015**.

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## **Eligibility to compete and certain restrictions on eligibility**

### **Incentivised Scheme for Early Retirement (ISER)**

It is a condition of the Incentivised Scheme for Early Retirement (ISER) as set out in Department of Finance Circular 12/09 that retirees, under that Scheme, are debarred from applying for another position in the same employment or the same sector. Therefore, such retirees may not apply for this position.

### **Department of Health and Children Circular (7/2010)**

The Department of Health Circular 7/2010 dated 1 November 2010 introduced a Targeted Voluntary Early Retirement (VER) Scheme and Voluntary Redundancy Schemes (VRS). It is a condition of the VER scheme that persons availing of the scheme will not be eligible for re-employment in the public health sector or in the wider public service or in a body wholly or mainly funded from public moneys. The same prohibition on re-employment applies under the VRS, except that the prohibition is for a period of 7 years, after which time any re-employment will require the approval of the Minister for Public Expenditure and Reform. People who availed of either of these schemes are not eligible to compete in this competition.

### **Collective Agreement: Redundancy Payments to Public Servants**

The Department of Public Expenditure and Reform letter dated 28th June 2012 to Personnel Officers introduced, with effect from 1st June 2012, a Collective Agreement which had been reached between the Department of Public Expenditure and Reform and the Public Services Committee of the ICTU in relation to ex-gratia Redundancy Payments to Public Servants. It is a condition of the Collective Agreement that persons availing of the agreement will not be eligible for re-employment in the public service by any public service body (as defined by the Financial Emergency Measures in the Public Interest Acts 2009 – 2011) for a period of 2 years from termination of the employment. Thereafter the consent of the Minister for Public Expenditure and Reform will be required prior to re-employment. People who availed of this scheme and who may be successful in this competition will have to prove their eligibility (expiry of period of non-eligibility) and the Minister's consent will have to be secured prior to employment by any public service body.

### **Declaration**

Applicants will be required to sign a Pre-Employment Declaration to confirm whether they have previously availed of a public service scheme of incentivised early retirement and/or the collective agreement outlined above. The above represents the main schemes and agreements restricting a candidate's right to be re-employed in the public service. However it is not intended to be an exhaustive list and candidates should declare details of any other exit mechanism they have availed of which restricts their right to be re-employed in the public service. Applicants will also be required to declare any entitlements to a Public Service pension benefit (in payment or preserved) from any other Public Service employment and/or where they have received a payment-in-lieu in respect of service in any Public Service employment.

### **Superannuation and Retirement**

The successful candidate will be offered the appropriate superannuation terms and conditions as prevailing in the University, at the time of being offered an appointment. In general, and except for candidates who have worked in a pensionable (non-single scheme terms) public service job in the 26 weeks prior to appointment (see paragraph d below), this means being offered appointment based on membership of the Single Public Service Pension Scheme ("Single Scheme"). Key provisions attaching to membership of the Single Scheme are as follows:

a. Pensionable Age

The minimum age at which pension is payable is 66 (rising to 67 and 68) in line with State Pension age changes.

b. Retirement Age:

Scheme members must retire at the age of 70.

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#### c. Pension Abatement

- If the appointee was previously employed in the Civil Service or in the Public Service please note that the Public Service Pensions (Single Scheme and Other Provisions) Act 2012 includes a provision which extends abatement of pension for all Civil and Public Servants who are re-employed where a Public Service pension is in payment. This provision to apply abatement across the wider public service came into effect on 1 November 2012. This may have pension implications for any person appointed to this position who is currently in receipt of a Civil or Public Service pension or has a preserved Civil or Public Service pension which will come into payment during his/her employment in this position.
- Department of Education and Skills Early Retirement Scheme for Teachers Circular 102/2007  
The Department of Education and Skills introduced an Early Retirement Scheme for Teachers. It is a condition of the Early Retirement Scheme that with the exception of the situations set out in paragraphs 10.2 and 10.3 of the relevant circular documentation, and with those exceptions only, if a teacher accepts early retirement under Strands 1, 2 or 3 of this scheme and is subsequently employed in any capacity in any area of the public sector, payment of pension to that person under the scheme will immediately cease. Pension payments will, however, be resumed on the ceasing of such employment or on the person's 60th birthday, whichever is the later, but on resumption, the pension will be based on the person's actual reckonable service as a teacher (i.e. the added years previously granted will not be taken into account in the calculation of the pension payment).
- Ill-Health-Retirement  
Please note that where an individual has retired from a Civil/Public Service body on the grounds of ill-health his/her pension from that employment may be subject to review in accordance with the rules of ill-health retirement within the pension scheme of that employment.

#### d. Prior Public Servants

While the default pension terms, as set out in the preceding paragraphs, consist of Single Scheme membership, this may not apply to certain appointees. Full details of the conditions governing whether or not a public servant is a Single Scheme member are given in the Public Service Pensions (Single Scheme and other Provisions) Act 2012. However the key exception case (in the context of this competition and generally) is that a successful candidate who has worked in a pensionable (non-single scheme terms) capacity in the public service within 26 weeks of taking up appointment, would in general not become a member of the Single Scheme. In this case such a candidate would instead be offered membership of the UCD Pension Scheme. This would mean that the abatement provisions at (c) above would apply, and in addition there are implications in respect of pension accrual as outlined below:

#### e. Pension Accrual

A 40-year limit on total service that can be counted towards pension where a person has been a member of more than one existing public service pension scheme would apply. This 40-year limit, which is provided for in the Public Service Pensions (Single Scheme and other Provisions) Act 2012 came into effect on 28 July 2012. This may have implications for any appointee who has acquired pension rights in a previous public service employment.

#### f. Pension-Related Deduction

This appointment is subject to the pension-related deduction in accordance with the Financial Emergency Measure in the Public Interest Act 2009.

For further information in relation to the Single Public Service Pension Scheme for Public Servants please see the following website: <http://www.per.gov.ie/pensions>.