

Job Description

Job title	Lecturer in Mathematics
School / department	School of Computing and Engineering
Grade	Grade 6
Line manager	Head of Subject
Responsible for (direct reports)	N/A
Date of creation or review	21/11/2024

Main purpose of the job

This role has two distinct aspects to it. One is the mathematical education for our engineers and computer scientists. The post holder will also develop and support specialist MSc courses within the School. They will develop and deliver undergraduate modules within the School of Computing and Engineering, aligning with technical knowledge and previous experience. The post holder will teach in the following subject areas: Mathematics for Engineering, Computing, and Signal Processing.

The role requires strong expertise in one or more of these areas and the post holder will convey mathematical concepts to students with varying technical backgrounds, particularly in computing, engineering, and signal processing. Additionally, they will support research activities within these domains and contribute to the ongoing development of related courses.

They will support one or more of our existing Master's courses and develop level 7 education in a new area that aligns to the research strengths of the school. Such areas could be in non-destructive testing or the underpinning mathematics of artificial intelligence and/or machine vision.

The role involves:

- Development of mathematics modules that intersect with engineering and computing.
- Contributing to research, enterprise development, and commercial training in appropriate sub-disciplines of mathematics.
- Engaging with the community to enhance the School's impact and visibility locally and internationally.

Key areas of responsibility

- Teach across mathematics modules within computing, engineering, and other relevant subject areas.
- Ensure high-quality learning opportunities for students by:
 - Developing and implementing effective teaching methods and resources.
 - Undertaking assessment, marking, and examination duties as required.
 - Continuously evaluating the learning and teaching process for improvements.
 - Participating in administrative duties related to module management and course delivery.
- Supervise student projects at undergraduate and postgraduate levels.
- Provide pastoral care and academic support for students.

- Contribute to new course development, especially in mathematics applications in engineering and computing.
- Engage in research and enterprise activities, producing outputs in areas of mathematical applications that impact civil engineering, signal processing, computing, or related fields.
- Maintain up-to-date knowledge in applied and analytical mathematics, particularly in the context of computing and engineering.
- Represent the School of Computing and Engineering in professional communities and engage with local, national, and international partners.
- Contribute to curriculum design and further development of commercial education and training related to mathematical applications in engineering.
- To work in accordance with UWL's equality and diversity policies.

In addition to the above areas of responsibility the post-holder maybe required to undertake any other reasonable duties relating to the broad scope of the position, commensurate with the post, and in support of the University.

Dimensions / background information

The School of Computing and Engineering at the University of West London is a dynamic and forward-looking school with a focus on high-quality teaching, an excellent student experience, and research-informed education. The School has robust connections with local, national, and international partners and emphasizes employability across its courses. The Mathematics group supports students in various programs, especially those in engineering and computing disciplines.

Person Specification

	Criteria	Essential or Desirable ¹	Demonstrated ²		
			Application	Interview	Test / Exercise
Qualifications and/or membership of prof. bodies	PhD in a relevant field	Desirable	x	x	
	Fellow of Higher Education Academy	Essential	x		
	PG Certificate in HE (or willingness to enrol on PGCHE programme at UWL and obtain within first 12 months)	Essential	x		
	Member of an appropriate professional body	Desirable	x		
Knowledge and experience	Evidence of ability to teach relevant subjects at both undergraduate and postgraduate level in higher education	Essential	x	x	
	Evidence of teaching experience in the UK	Essential	x	x	
	Established research track record, or equivalent industrial experience, with appropriate outputs in a relevant discipline	Essential	x	x	
	Demonstrated knowledge of application of mathematics in range of subject areas.	Essential	x	x	
	Experience of module / course management or development	Desirable	x	x	
	Experience of submitting and obtaining research grants	Desirable	x	x	
	Experience of collaborating with industry	Desirable	x	x	
Specific skills to the job	Ability to teach on undergraduate and postgraduate courses	Essential	x	x	
	Ability and willingness to contribute to team teaching	Essential	x	x	
	Ability to undertake research and consultancy work in a relevant field and to agreed targets	Essential	x	x	
	Evidence of scholarly activity in the form of recent publications	Essential	x	x	
	Evidence of consultancy and/or professional practice	Desirable	x	x	
General skills	Effective oral and written communication skills	Essential	x	x	
	Ability to work with minimal supervision	Essential	x	x	

Disclosure and Barring Scheme Is a DBS Check required: DBS (This post does not require a DBS check)

Before making a selection, please refer to the University's [Disclosure and Barring Checks Guidance for Staff](#) and [Criminal Convictions, Disclosures and Barring Staff Policy and Procedure](#). If a DBS check is required for the role, a **Check Approval Form** will need to be completed.

¹Essential Criteria are those, without which, a candidate would not be able to do the job. Applicants who have not clearly demonstrated in their application that they possess the essential requirements will normally be rejected at the shortlisting stage.

Desirable Criteria are those that would be useful for the post holder to possess and will be considered when more than one applicant meets the essential requirements, to determine which applicants to shortlist.

²Demonstration: Select the Recruitment Process stage at which the candidates will have to demonstrate that they meet the criteria. Criteria which have to be demonstrated at application stage should be mentioned in the Recruitment Information Pack as Pre-Selection/Killer Questions, Shortlisting Questions or Shortlisting Criteria. Other criteria should be evaluated and tested at interview stage (e.g. through interview questions) or through additional tests, exercises or presentations. Criteria can (and should) be demonstrated at multiple stages.