



Job Description: Teaching Fellow

Reference: 1734185

Job Title:	Teaching Fellow
Post:	This post is fixed term for a period of 36 months.
Department:	Electronic and Electrical Engineering (EEE) Information regarding the Department can be found at http://www.ee.ucl.ac.uk .
Reports to:	The post holder will report to the Head of Department and Head of Teaching for EEE
Grade:	Grade 7 £38,581- £41,864 per annum inclusive of £3031 London allowance per annum.
Start Date:	It is planned to hold interviews in August 2018 and for the successful candidate to take up the position by the start of First Term of the 2018-2019 Academic Year.

The post-holder is expected to take responsibility for their work, duties and results. Please note that, within reason, the duties and role of the post-holder may be changed after appropriate consultation in response to changing organisational requirements. The post-holder is required to follow actively all UCL policies including Equal Opportunities policies.

Context

UCL is one of the foremost universities in Britain and the world. The Department of Electronic and Electrical Engineering at UCL is recognised as one of the leading Departments for research in its subject area, worldwide. Current research areas in the Department include Communications and Information Systems; Electronic Materials and Devices (including Nanotechnology); Optical Communications & Networks; Photonics and Sensors, Systems and Circuits. The Department also has an extensive teaching programme, both at undergraduate (BEng and MEng) and Masters levels.

The Department launched new BEng and MEng degrees in Engineering (Electronic and Electrical) in 2014. They include a range of new departmental and cross-faculty modules, incorporating problem and scenario-based learning at all stages. This creates a highly engaging learning environment where students put their theoretical knowledge to practical application. In addition, all programmes have major projects in the final year or years where students work on a major design or research topic.

Further information about the Department can be found at www.ee.ucl.ac.uk.

Main purpose of the job

This post is temporary cover for a member of academic staff who has gained a three-year research fellowship. Duties involve multiple aspects of the delivery and organisation of the department's electronic and electrical engineering programmes, including classroom teaching, running laboratory sessions, supervision of project students, planning, tutoring, and assessment. The role will also involve working closely with academics in the Department, and with appointed postgraduate teaching assistants (PGTAs).

Duties and responsibilities

1. Plan, organise, and deliver aspects of the module ELEC202P "Analog Electronics". The module aims to provide students with a good introduction to the analysis of standard circuit configurations, such as small-signal circuit analysis, frequency analysis for single-stage amplifiers and feedback circuits. Duties include lectures, after-lecture support to students (revision sessions, answering students' questions in office hours and on the Q&A online forum for the module), leading two experimental labs associated with the module with the support of PGTAs as well as preparing and marking exam papers and assignments.
2. Plan, organise, and deliver aspects of the module ELEC3016/ELECM016 "Electronic Circuits III". The module aims to further advance the understanding of the principles of operation of electronic circuits and their design procedures, with particular reference to analogue CMOS circuits and high-speed techniques. This includes lectures, after-lecture support to students (revision sessions,

answering students' questions in office hours and on the Q&A online forum for the module) and preparing and marking exam papers.

3. Plan, organize and deliver aspects of the module ELEC201P "Design Professional Practice II". The module aims to provide students with an understanding of the engineering process and practice. The module is centrally managed by the Faculty of Engineering with each department running a different version tailored to their own students. In addition to some common engineering skills, the Department currently runs 4 scenarios within the module. Each scenario lasts for a week and students work in groups on a hardware development and/or software programming project. The duties include: i) lead two scenarios while supporting the assessment of other scenarios; ii) teach printed circuit board (PCB) design by lectures and practical lab sessions; iii) give lectures on engineering skills relevant to electronic engineers; iv) liaise with the Faculty of Engineering on guest lecturers, etc.
4. Support the delivery of the module ELECM010 "Analogue CMOS IC Design and Applications". It includes supervising computer lab sessions on designing CMOS circuits using the CADENCE IC software suite.
5. Supervise 3rd-year and 4th-year project students.
6. Serve as personal tutor to a small group of undergraduates. This includes arranging and running weekly/fortnightly tutorials.
7. Liaise regularly with students and staff to ensure smooth running of modules and the programme as a whole.
8. Participate in the Departmental Teaching Committee and attend other staff meetings as required.
9. Maintain their own continuing professional development.
10. Actively follow and promote UCL policies, including Equal Opportunities.
11. Maintain an awareness and observation of fire and health and safety regulations, including acting as a fire marshal.
12. Carry out any other duties as are within the scope, spirit and purpose of the job, the title of the post and its grading as requested by the Head of Department and Head of Teaching.

Person specification

The appointees will have the essential skills, abilities, personal attributes and experience listed below. In your application, you should demonstrate how you meet the person specification, using examples.

CRITERIA	E S S E N T I A L	D E S I R A B L E	HOW IDENTIFIED AND ASSESSED AP = application I = interview R = references
Education/qualification and training			
Degree in electronic engineering, or equivalent qualifications and/or experience.	Y		AP
Higher Education teaching qualification.		Y	AP
PhD in electronic engineering, or equivalent qualifications and/or experience.		Y	AP
Knowledge/skills			
Excellent interpersonal, oral and written communication skills.	Y		AP/I/R
High level of literacy and numeracy.	Y		AP/I/R
Familiarity with engineering software or computer programming.		Y	AP/I/R
Teaching within an electronic engineering context.	Y		AP/I/R
Teaching using problem-based learning and practical learning modalities.		Y	AP/I/R
Knowledge of printed circuit board design and usage of CAD tools.	Y		AP/I/R
Knowledge of microelectronics and analogue integrated circuits.	Y		AP/I/R
Familiarity with microcontrollers.		Y	AP/I/R
Experience			
Experience of teaching undergraduates and/or postgraduates in a University Electronic/Electrical Engineering Department.	Y		AP/I/R
Experience of using virtual learning environments such as Moodle or Blackboard.		Y	AP/I/R
Experience of supporting extra-curricular activities.		Y	AP/I/R
Demonstrable scholarship activity as evidenced by a track record of conference presentations and / or publications in teaching-related journals.		Y	AP/I/R

Experience of working in an electronic or electrical engineering role.	Y		AP/I/R
Experience of supervising project students.	Y		AP/I/R
Personal Qualities			
Ability to communicate clearly, both orally and in writing, with students, academics and professional services staff at all levels.	Y		AP/I/R
Ability to motivate and engage students.	Y		AP/I/R
An enthusiasm for teaching technologies and other teaching innovations.	Y		AP/I/R
Excellent organisation and time management skills, with the ability to analyse existing processes to improve efficiency.	Y		AP/I/R
Flexibility to respond to changing priorities in a busy environment, taking a proactive approach at all times.	Y		AP/I/R
Excellent people skills and the ability to build good relationships with colleagues and external partners.	Y		AP/I/R
Ability to work independently and also as part of a team, recognising when advice / input needs to be sought.	Y		AP/I/R
A high level of accuracy and keen attention to detail and passion for teaching.	Y		AP/I/R
Ability to work calmly under pressure in order to meet tight deadlines.	Y		AP/I/R
Willingness to develop new skills as required.	Y		AP/I/R
Ability to relate easily to international academic and research staff and students in an academic context.	Y		AP/I/R

About UCL and the Department of Electronic and Electrical Engineering

University College London (UCL) was founded in 1826 as the third university in England, after Oxford and Cambridge. UCL was however the first university in England to admit students of any race, class or religion, and the first to welcome women on equal terms with men. UCL is now the largest comprehensive university in London with more than 4,000 academic and research staff in 72 departments. The main campus of UCL is located in central London, just a few minutes walking distance from British Museum, West-End and Thames River.

The Department of Electronic and Electrical Engineering at UCL was established by Professor Sir Ambrose Fleming in 1885 and has a very strong research culture, state-of-the-art research equipment and facilities, and a very rich history of many fundamental research achievements in electronic and electrical engineering. The Department currently hosts international renowned research groups in Communications and Information Systems; Photonics; Optical Networks; Sensors, Systems and Circuits; Electronic Materials and Devices and Nanotechnology. For more information about the department and our research achievements, please visit the website <http://www.ee.ucl.ac.uk>

Further information regarding UCL may be found at: www.ucl.ac.uk/

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HOW TO APPLY

All applications should be submitted via UCL Online recruitment system at the following link:

<http://www.ucl.ac.uk/hr/jobs> and search for reference 1734185

Please complete the application and upload the following documents:

- CV (including the names and contact details of at least two referees who may be contacted prior to interview.)

Informal enquiries regarding the post can be made to Prof Sarah Spurgeon on s.spurgeon@ucl.ac.uk

For any questions regarding the application process please contact Vicky Coombes at v.coombes@ucl.ac.uk quoting reference 1734185

Please do not send CV's direct.

UCL Taking Action for Equality