

Job Description

Job Title:	Lecturer in Mechatronics
Job Ref:	SCT360
Faculty/Service:	Science & Technology
Campus:	Hendon
Grade:	Grade 7
Starting Salary:	£41,990 per annum inclusive of Outer London Weighting rising to £48,228 incrementally each year.
Hours:	The duties and responsibilities of a Lecturer are wide-ranging. You will be expected to work hours as are reasonably necessary in order to fulfill your duties and responsibilities.
FTE:	1.0
Period:	Permanent
Reporting To:	Head of Department

Role Summary

The role will be held by a developing academic who combines research with learning and teaching, and knowledge transfer and a broader contribution to their programme area. The post holder will join an established and supportive academic group, teaching on a range of programmes in engineering, broadly covering design engineering, automation, mechatronics, robotics and related subjects at undergraduate and postgraduate levels.

Job Purpose

To conduct and contribute to research, learning and teaching, and knowledge transfer to the benefit of students, the Department, the University and the wider community.

Main responsibilities

Learning and teaching

- Deliver high quality teaching to students
- Design, develop and review teaching activities and materials
- Identify best and innovative practices in learning and teaching and build these into personal teaching practice
- Maintain an understanding of how emerging research in the subject discipline can shape and improve the curriculum, and inform personal teaching practice
- Contribute to course/programme review and design
- Give effective advice, guidance and feedback to students, to support their academic progress
- Enhance student experience and outcomes

Research and knowledge transfer

- Contribute to or lead (under guidance) applications for research and knowledge transfer funding

- Individually or with others, conduct and disseminate the outputs of high-quality research, normally of international standard
- Develop and maintain a network of research and knowledge transfer related contacts, in the University and the wider specialist community
- Be committed to ensuring that research has impact beyond academia
- Continually update own knowledge in the field of specialism.
- Supervise Undergraduate/Masters students and contribute to doctoral supervision

Academic Leadership and Management

- Lead learning and teaching activities in a particular area as agreed, e.g. module leadership
- Contribute to the administration of the academic programme, by supporting student recruitment, induction, outreach etc
- Advise and coach colleagues
- Undertake other activities, as required.

Leave: 35 days per annum plus eight Bank Holidays and seven University days taken at Christmas (pro rata for part-time staff) which may need to be taken as time off in lieu.

Flexibility: Please note that given the need for flexibility in order to meet the changing requirements of the University, the duties and location of this post and the role of the post-holder may be changed after consultation. The balance of duties may vary over time and will be reviewed as part of the appraisal process.

PERSON SPECIFICATION

Post Title: Lecturer in Mechatronics

Essential Requirements

Knowledge, Skills and Experience

- Appropriate academic qualifications at postgraduate level (normally a doctorate or equivalent)
- Commitment to attracting research and or knowledge transfer funding
- Experience of developing and teaching courses in an HE environment, in at least four of the following:
 - Vision systems in automation and mechatronics applications
 - Application of machine learning / AI in mechatronic or automated systems
 - Programming microcontrollers and embedded system applications
 - Industrial automation systems including PLCs and HMIs
 - Mechatronic system design and integration using industry standard software
 - Digital twin modelling of industrial automation systems
- Evidence of research performance and research outputs of international standard
- Ability to deliver high quality teaching in a **practice-based** HE environment
- Understanding and proven experience of research methods and processes
- Understanding of good professional practice in learning and teaching
- Commitment to completing formal training in academic practice
- Demonstrable commitment to fairness and the principles of equality and inclusion.

Desirable Requirements

- Experience of teaching in any of the following:
 - Discrete event simulation modelling
 - Fundamentals of mechanical engineering principles
 - Using industry standard software from Siemens and or Festo
- Organising outreach activities to promote the discipline.
- Active engagement with industry
- Membership of a relevant professional body.

Parking at Hendon campus

There are currently *Regular Parking Permits and Pre-Paid Parking options* available to new joiners. Further details are available on the Travel and transport page on the staff intranet. *Please note if the number of applications becomes oversubscribed these parking options could be withdrawn at any point.*

Information for Disabled Staff

Staff and visitors with their own current blue badge have access to free parking on campus. All blue badge holders should present a copy of their blue badge to the security office in the Quad. Holders will be given car park access up to the date of expiry of their blue badge

Public Transport

Our Hendon Campus is well served by public transport with buses, London underground and British Rail services all within a short walk of the campus. You can get detailed journey information from TfL (www.tfl.gov.uk) and have a look at our directions and location to help plan your travel: <http://www.mdx.ac.uk/aboutus/Location/hendon/directions/index.aspx>

We offer an interest-free season ticket loan, interest-free motorbike loan, a cycle to work scheme and bicycle and motorbike parking and changing facilities.

We value diversity and strive to create a fairer, more equitable work environment for our staff and students.

We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff diversity networks, campus facilities and services to support staff from different backgrounds.

The postholder should actively follow Middlesex University policies and procedures and maintain an awareness and observation of Fire and Health & Safety Regulations.

What Happens Next?

If you wish to discuss the job in further detail, please contact Prof Mehmet Karamanoglu, Head of Department (Design Engineering & Maths), via email at M.Karamanoglu@mdx.ac.uk

Academic Professional Apprenticeships (APA) (updated January 2020)

Newly appointed academic professionals, including Associate Lecturers, engaged in higher education teaching and/or research have for some years been required to undertake the PG Cert HE programme unless they hold an equivalent qualification or relevant experience. This is because Middlesex University is committed to the professionalisation of teaching in higher education through recognition and the celebration of good practice in learning and teaching. The PG Cert HE carries academic credit, not only for articulating and demonstrating the scholarship of teaching and learning but, of equal importance, for evidence from practice which convincingly underpins espoused theory.

From September 2018, subject to eligibility criteria, Academics without a teaching qualification are now required to undertake the Academic Professional Apprenticeship or the PG Cert HE as appropriate. Key points *(please refer to the Academic Professional apprenticeship Guidelines for more detailed information)* <https://www.intra.mdx.ac.uk/key-information/academic-professional-apprenticeship>

- The Academic Professional Apprenticeship is expected to be completed over 18 to 24 months.
- Employees working less than 0.8 FTE will have the duration of the Apprenticeship extended.
- 20% of the contractual time is set aside for off the job Training (7 hours a week approximately).
- Applicants will be auto-registered on the Apprenticeship in October or January following their employment.
- Exemptions for prior learning can be considered, if some modules have been completed.
- The Apprenticeship is managed by the Education Department.
- Applicants have 2 years to successfully complete the programme.
- Staff completing the apprenticeship will be awarded: the Academic Professional Apprenticeship, the PG Cert Higher Education and Fellowship of the Higher Education Academy (FHEA).

Guidance Table

Considerations	Answer
Prior Qualifications Does applicant already have a teaching Qualification? PG Cert HE, FE etc or has 3 years teaching experience in HE .	If yes, no further action is required. If No, they will be required to do the APA
Is applicant a UK or EEA national or a non-UK or EEA national who has been in the UK for at least 3 years?	If yes, the applicant will be required to do the APA. If No, they will be required to undertake the PG Cert HE as they will not be eligible to do the APA
Level 2 English & Mathematics (GSCE) Has the applicant completed level 2 English & Mathematics or equivalent? (Evidence will need to be provided).	If yes, the Applicant will be able to do the APA. If No, the Applicant will be required to undertake the PG Cert HE, as they are not eligible to do the APA.
Part Qualified Has the applicant already commenced a PG Cert HE, FE Programme in another institution and completed some of the modules?	The applicant will still be required to complete the APA and may be given credit for the modules already completed. The recognition of prior learning (RPL), may reduce the overall time to complete the Apprenticeship. However, all apprenticeships must be undertaken over a period of at least twelve months.
Start date When are applicants expected to start the programme?	If the applicant commences employment before September, they will commence the programme in September. Applicants who commence employment after September but before January, will commence in January.
Deferral Are applicants able to request a deferral?	Approval for deferral will be given by the Executive Dean or Head of School.

Postgraduate Certificate in Higher Education Programme

Staff who do not hold a teaching qualification in Higher Education may be required to undertake a PGCHE on appointment.

POST GRADUATE CERTIFICATE IN HIGHER EDUCATION

Set out below are the conditions which apply to newly appointed academic or related staff in relation to the PG Cert Higher Education programme:

- all staff with a contract of more than two years duration and not less than 0.5 FTE are expected to complete the programme unless exempted at the time of appointment;
- other fractional staff and part-time hourly-paid staff may enroll on the programme subject to the normal University conditions concerning payment of tuition fees;
- exemption shall be granted to suitably qualified and experienced staff: *i.e.* 3 years full-time or equivalent or PG Cert HE or equivalent;
- normally staff should be expected to complete the PG Cert HE programme successfully within 24 months of enrolling;
- normally there will be an upper limit of four years to complete the programme successfully. If problems are identified at 30 months every effort will be made to resolve them at a staff development level;
- failure to complete the programme within four years may result in delayed grade progression within the University from Lecturer to Senior Lecturer and is likely to be considered negatively when candidates in such a position apply for promotion;
- staff must be given adequate time to complete the programme within an agreed time framework (*i.e.* normally within 24 months);
- staff will normally be given a time allocation of 0.1 FTE in order to participate in the programme;
- staff who do not complete the programme successfully within 48 months of enrolment without good cause shall not receive a further increment until they do successfully complete the programme;
- where exceptional circumstances apply staff should have the right to appeal to the Deputy Vice-Chancellor against a decision to withhold increments pending successful completion of the programme within four years.

The following qualifications will be considered for exemption of new teaching staff from undertaking the PGCHE:

Either

- Qualified teacher status: e.g. Registered teaching qualification recognised by SEDA, Bed, PG Cert E or further education qualification;
- DFEE registered teaching number (school-based number);
- Recognised ENB (NURSING) teaching qualification.

Or

- Three years full time teaching experience (subject to review following guidelines from ITLHE).

Not Accepted

General Adult Education cert. not accepted at present as it does not consider theories of learning, knowledge, needs, skills, and principles of learning.

NB Regardless of exemption, all new lecturers to the University MUST go through academic induction.