Job Related Information

This document includes information about the role for which you are applying and the information you will need to provide with your application.

1. Role Details

<table>
<thead>
<tr>
<th>Vacancy reference</th>
<th>14149</th>
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</thead>
<tbody>
<tr>
<td>Job title:</td>
<td>Lecturer in Cyber Security</td>
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<tr>
<td>Reports to:</td>
<td>Head of School</td>
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<tr>
<td>Salary:</td>
<td>£35,550 - £47,722</td>
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<tr>
<td>Terms and conditions:</td>
<td>Academic</td>
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<tr>
<td>Grade</td>
<td>AC2/3 – appointment dependent on experience</td>
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<tr>
<td>Duration of post:</td>
<td>Permanent</td>
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<tr>
<td>Working hours:</td>
<td>Full Time</td>
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<tr>
<td>Location:</td>
<td>Milton Keynes</td>
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<td>Closing date:</td>
<td>Noon, Friday 26 January 2018</td>
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<td>Type of application form accepted:</td>
<td>Short</td>
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<td>Number of referees required:</td>
<td>Three</td>
</tr>
<tr>
<td>Unit recruitment contact:</td>
<td>Mary Dahunsi</td>
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</table>
2. Summary of duties

Context
Since its inception, The Open University (OU) has focussed on innovation in teaching and learning, with a track record of providing, inspiring, world-leading programmes of higher education for students who learn at a distance. Building on award-winning initiatives such as the OpenSTEM Labs, the University is deepening its commitment to delivering the highest quality teaching through a significant, student-centred, investment programme. This will provide rewarding academic career paths that are focused on world-class teaching and scholarship, and will be aimed at strengthening our leadership in the field of digital innovation. As part of this programme, and recognising the critical global importance of addressing the cyber security skills gap, we plan to build a team of six new academic staff in the School of Computing and Communications. This team will include and be led by a Professor of Cyber Security Education. This team will deliver transformative new approaches to teaching and learning in relation to cyber security, complementing the school’s internationally leading research in the field.

We are seeking candidates with a strong grounding in cyber security, recognising it to be a multidisciplinary field that includes machine learning and artificial intelligence, digital forensics, and data analytics. We aim to appoint an inspiring and innovative educator who enjoys developing novel approaches to teaching and working collaboratively with colleagues.

Main Duties
The appointed Lecturer in Cyber Security Education will be expected to undertake a combination of the following duties:

1. Teaching
a. Actively contribute to the design and delivery of a high quality cyber security curriculum at undergraduate and postgraduate levels, achieving external accreditation of programmes and fulfilling the OU’s ambition to be world-leaders in cyber security education.
b. Deliver academic excellence by:
   - developing the innovative and effective use of technology in our teaching, drawing upon evidence-based educational research and scholarship
   - developing novel models for assessing practical competencies in cyber security and other technical disciplines
c. Promote employability and career progression for our students
d. Engage actively across the School with the OU’s strategy to deliver a world-leading student experience

2. Research, scholarship and knowledge exchange
a. Pursue high quality pedagogical research with national or international impact on teaching methods or student success
b. Enhance our links with industry to enable teaching collaborations and knowledge exchange
c. Attract external income to the School
d. Contribute to the vibrant scholarship environment in the School

3. General
a. Act as an ambassador, both internally and externally, for the academic excellence of the School
b. Take responsibility for administrative and/or other academic duties as required by the Head of School
C. Contribute to the outreach activities of the School and Faculty
## Person specification

### Requirements  (E = Essential/ D = Desirable)

#### Education, qualifications and training

- A PhD, or substantial experience, in an area related to cyber security (e.g. includes machine learning and artificial intelligence, digital forensics, and data analytics)  (E)

#### Knowledge, work and other relevant experience

**Essential:**
- Ability to contribute to the teaching of inspiring cyber security at both undergraduate and postgraduate level based on an evidence-based understanding of the teaching and learning process
- Demonstrable expertise in an area of cyber security, commensurate with career stage, with a good understanding of how the discipline is developing, evidenced through appropriate outputs including research publications, contributions to standards, or industrial/professional practice
- An understanding of, and sympathy for, the educational and study needs of students
- Ability to produce high quality scholarly outputs with demonstrated impact on teaching methods or student success
- Ability to write clear and accessible learning material in English

**Desirable:**
- Membership of professional bodies including Fellowship (or higher) of the UK Higher Education Academy or equivalent experience/standing in the UK or another country
- Experience of securing funding from external agencies
- Experience of applying digital technologies to enhance student learning and retain students
- Experience of producing distance learning materials
- Experience of supporting students in a distance-learning setting
- Experience of improving student success
- Experience of online approaches to curriculum development and delivery such as MOOCs and other Open Educational Resources

#### Personal abilities and qualities

**Essential:**
- Innovative and reflective teacher and scholar
- Effective team worker who enjoys collaborative working and values other people’s views
- Commitment to the aims, ethos and values of the Open University
- Ability to work in a dynamic and rapidly changing working environment
- Flexibility and enthusiasm to initiate and take on additional activities and projects
- Ability to work across boundaries, with colleagues who may have different values and/or priorities
- Excellent written and spoken English skills, together with the ability to offer and receive constructive criticism
4. Role specific requirements e.g. Shift working

5. About the unit/department

The Open University
The Open University’s mission is to be open to people, places, methods and ideas. We promote educational opportunity and social justice by providing high quality university education to all who wish to realise their ambitions and fulfil their potential. Through academic research, pedagogic innovation and collaborative partnership we seek to be a world leader in the design, content and delivery of open supported learning.

Our Values
In achieving our vision, we remain committed to, and are guided by, the enduring Open University values of inclusivity, innovation and responsiveness.

Our Students
Most courses are available to students throughout Europe and some are available worldwide directly from the OU. Many more courses are available through partnerships and accredited institutions. There are currently around 3,500 students in the Republic of Ireland, 9,000 students elsewhere in Europe, 7,500 outside the European Union and another 46,000 students on OU-validated programmes.

- 76% of directly-registered OU students work full or part-time during their studies;
- 23% of OU UK undergraduates live in the 25% most deprived areas;
- 31% of new OU undergraduates are under 25;
- The OU is the largest provider of higher education for people with disabilities, educating 22,000 people with disabilities in 2015/16;
- Of the University’s student population starting undergraduate study, over one third had one A level or lower qualification and 3 per cent had no formal qualifications;
- Approximately 70 per cent of OU students are studying while in employment: thousands of people, who might not have been able to study because of work or family commitments, are able to study part-time with the OU.

Our Faculties
There are four academic faculties:
- Science, Technology, Engineering and Mathematics
- Well-being, Education and Language Studies
- Arts Social Science
- Business and Law

Faculty of Science, Technology, Engineering & Mathematics
The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute
- Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration
“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”

The Faculty of STEM consists of 700 staff and 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:

**We are inclusive:**
- We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience
- We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM

**We are highly innovative:**
- We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation
- Our high quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy

**We deliver significant social and economic impact:**
- We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential
- We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working
- The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers
- Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill shortages across the UK

**School of Computing & Communications**
The School of Computing and Communications has around 80 academic and research staff, and is home for a number of visiting researchers and full-time and part-time research students.

Our objectives are:
- Transforming students’ lives through innovative and dynamic teaching enriched by world-class research and scholarship.
- Developing graduates with technical, analytical and creative skills who meet the highest expectations of employers and who can make a difference in their workplaces.
- Leading and shaping the digital revolution through people-centred, inter-disciplinary, collaborative research and scholarship that transforms society.
- Looking outwards to engage with individuals and external bodies, sharing our knowledge and developing mutually beneficial partnerships, so together we can create a more technically and socially aware digital society.
- Being a vibrant, agile and inclusive academic community that promotes academic excellence in all areas of teaching, research and external engagement.
Our strong sense of collegiality and community continues to shape and direct the interdisciplinary approaches used throughout our work.

The School of Computing and Communications holds the Athena SWAN Bronze Award and is committed to transforming gender equality. One aspect of our success in this area is that the School has more female professors than male, which is unusual for the discipline.

We teach a comprehensive range of undergraduate and postgraduate qualifications. Our students are nearly all part-time and are studying at different rates. We have the equivalent of 4772 full-time students registered for our undergraduate BSc degree across the UK and Europe, mostly studying at home. We have also just launched a degree apprenticeship in Digital Technology Solutions, one of three apprenticeships forming a pilot across the University.

We pioneered an online Introduction to Cyber Security MOOC (http://bit.ly/1pMMKhk), hosted on Futurelearn, which has been studied by over 140,000 learners worldwide. We are currently developing a further six MOOCs in cyber security. We also have extensive Open Educational Resources hosted by OpenLearn, run a distance ‘boot camp’ in programming, and have a robotics lab funded by HEFCE which we are working to make accessible to students from their homes.

Our main research interests lie in the areas of security/privacy, software engineering, communication technology, human-computer interaction, ubiquitous computing, Computer Science education, technology enhanced learning, computational linguistics, the history of technology, and critical information studies. We aim for, and achieve, international excellence in research and teaching, leading on many projects including smart cities development. The OU’s Computing research performed strongly in the Research Excellence Framework (REF 2014) assessment, with 77% of outputs rated world-leading or internationally-excellent (up from 70% in 2008), and an excellent research environment (100% rated world-leading or internationally-excellent).

The Software Engineering and Design (SEAD) group (http://sead1.open.ac.uk) is the largest research group in the School and consists of a team of multidisciplinary researchers with a shared goal of making software more dependable, usable and useful with a particular interest in security and privacy. Group members have a track record of collaborative research in human-centred computing, which has translated into the development of techniques and tools that focus on a variety of stakeholders in the software development process, and the software artefacts these stakeholders design, build, and use. Current and recent large funded projects focus on secure software, healthcare and forensics. Current external funding is diverse and exceeds £7M with total funding in the last 7 years of over £15M.

Complementing this, members of the Technology and Education Research (TERG) group carry out practically-oriented research into: the use of technology for learning; the teaching and learning of technology. This research draws on the School’s strong record of teaching innovation, and the substantial expertise that we have established in online and distance learning. The increasing prevalence of eLearning, virtual learning environments and social approaches to learning mean that this work is central to current educational debates. Members have a strong record of publishing on educational technology and computing education. The TERG members have strong links with eSTeM, the OU centre for STEM pedagogy (http://www.open.ac.uk/about/teaching-and-learning/esteem/). eSTeM brings together academics in Science, Technology, Engineering and Mathematics (STEM) to promote innovation, scholarship and enterprise in open and distance learning. Much of eSTeM’s work centres on the effective use of learning technologies at scale. The portfolio of projects includes work on innovative assessment, technologies for STEM learning, supporting students and STEM engagement. eSTeM also works with universities and other agencies both within and outside the UK.

6. How to obtain more information about the role or application process

If you would like to discuss the particulars of this role before making an application please contact the Head of School at STEM-CC-HOS@open.ac.uk.
If you have any questions regarding the application process please contact Mary Dahunsi on +44 (0) 1908 659573 or email: STEM-Recruitment@open.ac.uk.

7. The application process and where to send completed applications

Your application should contain:
1. A completed short application form
2. Covering letter
3. CV which includes details of academic qualifications, teaching, management, and research including grants received and publications, and experience appropriate to this role.

Please ensure that your application reaches the University by: Noon, Friday 26 January 2018

E-mail your application to: STEM-Recruitment@open.ac.uk

Or post it to Name/Job title: Mary Dahunsi, Staffing Adviser

Department/Unit: Deanery, Faculty of Science, Technology, Engineering & Mathematics

Address: The Open University, Walton Hall, Milton Keynes, MK7 6AA

8. Selection process and date of interview

The interview panel will be chaired by: A Faculty Associate Dean on behalf of the Executive Dean

The other members of the interview panel will be: To be confirmed

The interviews will take place on: To be confirmed

The selection process for this post will include
1. A short, specified teaching activity to be completed before the interview date;
2. A presentation of an aspect of your research, scholarship or knowledge exchange work to members of the School;
3. A panel interview.

The teaching text and presentation will be discussed with you as part of the interview process.

We will let you know as soon as possible after the closing date whether you have been shortlisted for interview. Further details on the selection process will also be sent to shortlisted candidates. Applications received after the closing date will not be accepted.