APPOINTMENT OF
SENIOR LECTURER IN CYBER
SECURITY EDUCATION

May 2018
The rules are based on principles that achieve the greatest legibility for our written and printed communication and avoid blocks to access.
INTRODUCTION

The Open University is a pioneer in innovative learning and teaching, and the Faculty of Science, Technology, Engineering and Maths leads the way with award winning platforms such as the OpenSTEM lab.

Within the STEM Faculty, the School of Computing and Communications is key in the development of several strategic initiatives, most recently securing HEFCE funding for the National Institute of Coding. We are leading a key thematic area of the Institute, working with a world class consortium of research and teaching focussed Higher Education Institutions, training providers and industry partners. This is a hugely exciting new venture with a vision to enhance the education and employability of students in a range of disciplines, including cyber security. The Institute will ensure that employers across the UK can access the skills they need to compete in the global digital economy.

The Senior Lectureship in Cyber Security Education, is a huge opportunity for the right candidate to develop and lead teaching practice in this important subject area. It is part of a wider university investment that is focussed directly on our educational mission, and which will further strengthen the synergies between research and teaching excellence at The Open University.

If you are a skilled and experienced cyber security professional and want to deliver a world-class cyber security education to students of one of the biggest universities, we would be very pleased to receive your application.
The world’s first successful distance teaching university, the OU was founded on the belief that communications technology could bring high quality, degree-level learning to people who had not had the opportunity to attend traditional campus universities.

The University opened to its first students – 25,000 of them – in January 1971 with a choice of four multidisciplinary foundation courses in the arts, social sciences, science or mathematics, and it has since become by far the largest university in the UK with more than 170,000 students worldwide. More than two million people worldwide have now achieved their learning goals by studying with the OU.

Almost half a century after the OU’s foundation, the need for its revolutionary “open to all” model is greater than ever. The University remains one of the largest engines of social mobility, supporting just over half of the UK’s total part-time student population who do not have the usual university entrance requirements, and over one third of UK part-time students with disabilities.

Governments across the UK are seeking to boost part time and in-work students, and the OU is responding to this agenda. We know that the world has not stood still, and neither can we; success matters, not just for us as a university, but also for the UK.

Our offer now includes:

• Apprenticeship programmes designed for employers’ needs.
• More than 600 learning modules.
• Accredited courses, from leadership and management, to role- and sector-specific skills.
• Customised training programmes and qualifications.
• Accreditation of in-house training.
• Learning and corporate consultancy.

The Open University (OU) transforms lives through education.
More about the OU:

• The University has around 12,000 staff including 7,000 tutors (Associate Lecturers), more than 1,200 full-time academic staff and around 3,500 support and administrative staff.
• The OU offers a choice from around 600 courses.
• More than 30,000 employers – including over 88 FTSE 100 companies – have chosen to sponsor their staff on OU programmes.
• The OU’s extensive material on iTunes U has had over 70 million downloads.
• OpenLearn, a free learning resources website from the OU, has had 44.2 million visits since its launch in 2006.

OUR MISSION

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 supported open 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.

Inclusive:
• We play a unique role in society, making higher education open to all.
• We promote social justice through the development of knowledge and skills.

Innovative:
• We lead the learning revolution, placing innovation at the heart of our teaching and research.
• We continuously seek new and better ways to inspire and enable learning.
• We create world-class research and teaching.

Responsive:
• We respond to the needs of individuals and employers and the communities in which they live and work.
• We are dedicated to supporting our students’ learning success.
OUR STRATEGY

www.open.ac.uk/about/main/sites

www.open.ac.uk/about/main/strategy-and-policies

More about OU:

Most of our undergraduate courses have no formal entry requirements. We believe that the qualifications our students have when they leave are the only ones that matter. We are committed to promoting equal opportunities for all, and close monitoring makes sure that we live up to our ideals.

The OU has more disabled students than any other university in Europe. The flexible nature of OU study and our experience in harnessing enabling technologies to support learning means over 20,000 people with a wide range of disabilities – including mental health issues – choose to study with us each year.

We work in partnership with national and local organisations to open higher education to underrepresented groups, reaching out to potential students in their communities – and ensuring that, once on board, these students receive the support they need to succeed in their studies. We also offer Access modules, designed to help people find out what it is like to study with the OU, build study skills and gain confidence.

The Open University has been committed to international development for over 20 years. We deliver flexible, adaptable and scalable programmes in partnership with governments, NGOs, funding institutions and local partners – addressing areas such as frontline health, teacher education and English language teaching. Our work ranges from vital skills training for frontline healthcare workers across sub-Saharan Africa, to projects designed to transform English language education in Bangladesh and Pakistan.
The OU teaches through its own unique method of distance learning, called 'supported open learning', which is:

- **Flexible** – students work where and when they choose to fit in with jobs, families and other commitments;
- **All-inclusive** – students get all the high-quality materials they need to study;
- **Supportive** – personal tutors provide academic expertise, guidance and feedback and run group tutorials; and specialist advisers are on hand to help with other aspects of OU study;
- **Social** – students get together at tutorials, day schools and informal study groups; and through online conferencing, study networks and course forums.

Modules are developed by multidisciplinary course teams comprising:
- Academics, educational technologists and media specialists contributing pedagogic and technical expertise.
- External assessors.

This model has helped to build the University’s reputation for innovation, rigour and quality and has been adopted by distance teaching institutions worldwide.

The OU has a delivery network that comprises thousands of tutors (associate lecturers) who are experts in their subject who combine their work as tutors with other academic or industry jobs. Tutors mark assignments, provide detailed written feedback, and offer support to students by telephone, email, or computer conferencing. They also run online tutorials and day schools. Some full-time members of staff are also associate lecturers.
OUR STUDENTS

Those studying with The Open University are not just in the UK; most courses are available 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.

Student statistics:

• 76 per cent of directly-registered OU students work full or part-time during their studies.
• 23 per cent of OU UK undergraduates live in the 25 per cent most deprived areas.
• 31 per cent 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.
The Open University’s qualifications are underpinned by scholarship. Our teaching resources and teaching methods are developed in the context of formal Learning Design in a strongly collegiate environment.

Pedagogical studies and evaluations provide important feedback to the design teams to ensure that our materials are effective and appropriate for large-scale open learning. Curriculum-focused scholarship is coordinated and supported in the faculties, ensuring a close coupling between teaching practice and pedagogy.

Our research is designed to have impact, influence policy and practice and change lives for the better. We maximise the impact of our scholarship, research and knowledge exchange through major collaborations with external organisations ranging from public bodies to third sector to business.

Our current strategic plan for research is aimed at strengthening our academic reputation, improving our academic environment, ensuring there is intellectual breadth and rigour across all our curriculum areas and also creating a focus on the following areas:

- Technology Enhanced Learning (OpenTEL)
- Citizenship & Governance
- International Development
- Space Science
- Health and Wellbeing.

Scholarship, research and knowledge exchange inform the high quality, free, open educational resources we provide to learners worldwide and feeds into the TV and radio programmes we make with our partner the BBC, which reach an audience of 40 million viewers annually.

In the years ahead, we will use the intellectual leadership derived from our scholarship to support even more effectively our primary purpose of creating educational opportunities and increasing social mobility.
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 more than 20,000 students (full time equivalents) which is 29 per cent of the OU total.

The Faculty generates more research income (circa £20 million) 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, and outreach to inspire the next generation and with programmes to encourage more women into STEM.

The Faculty of Science, Technology, Engineering and Mathematics (STEM) comprises:

• 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 (KMi).

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.
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 scholarship focused on continuously improving our STEM pedagogy, as well as by world-leading research, strong links with professional bodies and communities of practitioners.

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, scholarship and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skills shortages across the UK.

Among the various disciplines that now comprise the STEM Faculty there is a strong commitment to scholarship. Since 2009 this has been coordinated by the OU centre for STEM Pedagogy, officially known as eSTEeM. This centre provides infrastructure and support for STEM staff to conduct scholarship enquiries and to feed the findings directly back into curriculum resources.

We are a founding partner organisation of the Institute of Coding:

• The OU has been selected as a founding partner organisation of the Institute of Coding. The Institute of Coding (IoC) www.instituteofcoding.org is a new, exciting, national initiative, led by the University of Bath, supported by theme leaders Aston University, Coventry University, the Open University and Queen Mary University of London. The Institute brings together a range of universities, industry, training providers and professional bodies to address the UK’s digital skills gaps.

• The Institute’s vision is to enhance the education and employability of every IoC learner, and ensure that employers and individuals across the UK can access the skills they need to compete in the global digital economy. This unique and innovative collaboration has been made possible with £20 million from the Higher Education Funding Council for England and match funding from universities and industry partners.

• The Institute of Coding will develop and deliver innovative, industry-focused higher education across the UK. It will develop accredited degree schemes and short courses aimed at professionals in a wide range of sectors, as well as working to widen the participation of women, returners to work and hard to reach groups.
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, interdisciplinary, 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 4,772 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, 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.

The Open University, through the School of Computing and Communications and the Knowledge Media Institute, is part of a world class consortium of research and teaching focussed Higher Education Institutions coming together with industrial and other partners to establish an inclusive, sustainable national Institute of Coding. This is a hugely exciting new venture to try to address the digital skills gap: equipping learners of all disciplines to fulfil their potential in the digital economy and meet employment needs.

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 per cent of outputs rated world-leading or internationally-excellent (up from 70 per cent in 2008), and an excellent research environment (100 per cent 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 £7 million with total funding in the last seven years of over £15 million.

Complementing this, members of the Technology and Education Research (TERG) group carry out practically oriented research into: the use of technology for learning and the teaching and learning of technology. This research draws on C&C’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 eSTEeM, the OU centre for STEM pedagogy (http://www.open.ac.uk/about/teaching-and-learning/esteem/). eSTEeM brings together academics in STEM to promote innovation, scholarship and enterprise in open and distance learning. Much of eSTEeM’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. eSTEeM also works with universities and other agencies both within and outside the UK.
Building on award-winning initiatives such as the OpenSTEM Labs and the eSTEeM centre for STEM Pedagogy, the University is deepening its commitment to delivering the highest quality teaching through a significant, student-centred, investment programme. As part of this we are leading a key thematic work programme for establishing the national Institute of Coding. Together, these initiatives 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 appoint a Senior Lecturer focused on teaching and pedagogical scholarship in the field of cyber security education. This is part of building a team of six new academic staff in cyber security education in the School of Computing and Communications at The Open University.

We are seeking a candidate with demonstrable professional experience in cyber security, recognising it to be a multidisciplinary field that includes secure software engineering; data analytics; security and human behaviour; digital forensics; cryptography; security economics, law and policy; applied psychology; machine learning; and artificial intelligence.

We aim to appoint an inspiring and innovative scholar who will be at the heart of our academic community, who is passionate about developing novel approaches to learning, who will lead change as part of a dynamic team, and will develop an innovative environment for cyber security education involving colleagues, employers and students.
The Senior Lecturer will be expected to:

- engage actively across the School with the OU’s strategy to deliver a world-leading student experience;
- contribute to university level centres of excellence on curriculum development and pedagogy;
- deliver taught modules for undergraduate students in the field of cyber security;
- promote employability and career progression for our students;
- enhance the financial sustainability of teaching e.g. significant teaching-related income or cost reduction, or significant impact on student recruitment or retention;
- contribute to the academic excellence of the School by pursuing high quality pedagogical research and scholarship with national or international impact on teaching methods or student success;
- support the development of appropriate teaching and leadership skills in less experienced academic colleagues;
- enhance our links with industry to enable teaching collaborations and knowledge exchange;
- attract external income to the School;
- take a leading role in the continuing development of an excellent and vibrant scholarship environment in the School;
- contribute to the outreach activities of the School and Faculty.
## PERSON SPECIFICATION

**EDUCATION, QUALIFICATIONS AND TRAINING**

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<th>Senior Lecturer</th>
<th>Essential (E)</th>
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<td>A PhD, or substantial experience, in an area related to cyber security (e.g. secure software engineering; data analytics; security and human behaviour; digital forensics; cryptography; security economics, law and policy; applied psychology; machine learning; and artificial intelligence).</td>
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**KNOWLEDGE, WORK AND OTHER RELEVANT EXPERIENCE**

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<td>An understanding of, and sympathy for, the learning needs of students.</td>
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<td>The ability to build strong links with employers, in order to inform our teaching.</td>
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<td>The ability to write clear and accessible learning material in English.</td>
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<tr>
<td>The ability to design and deliver inspiring education in cyber security, based on an excellent, evidence-based, understanding of the teaching and learning process at all levels of the curriculum and for informal learning.</td>
<td>Desirable (D)</td>
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<td>An international profile of expertise in cyber security, with an in-depth understanding of how the discipline is developing, evidenced through appropriate outputs including publications, books, contributions to standards, or industrial/professional practice.</td>
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<td>The ability to produce high quality scholarly outputs, with national or international impacts on teaching methods or student success (commensurate with career stage).</td>
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<td>Membership of professional networks, including professional bodies and Senior Fellowship of the UK Higher Education Academy) or equivalent experience/standing in the UK or another country.</td>
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<td>Experience of securing funding from external agencies.</td>
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<td>Experience of applying digital technologies to enhance student learning and retain students.</td>
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<td>Experience of producing distance learning materials.</td>
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<td>Experience of supporting students in a distance-learning setting.</td>
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<td>Experience of improving student success.</td>
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<td>Experience of online approaches to curriculum development and delivery such as MOOCs and other Open Educational Resources.</td>
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<td>Evidence of reach and significance in public engagement.</td>
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# PERSON SPECIFICATION

## PERSONAL ABILITIES AND QUALITIES

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<th>Senior Lecturer</th>
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<tr>
<td>An inspiring, innovative and reflective teacher and scholar.</td>
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<td>An effective team worker who enjoys collaborative working and values other people’s views.</td>
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<td>Committed to the aims, ethos and values of the Open University.</td>
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<td>Flexible and to have enthusiasm to both initiate and take on additional activities and projects.</td>
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<td>The ability to work across boundaries, with colleagues who may have different values and/or priorities.</td>
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<td>The ability to demonstrate excellent written and spoken English skills, together with the ability to offer and receive constructive criticism.</td>
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<td>The ability to develop new collaborative partnerships both within the University and with external organisations.</td>
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<td>An experienced leader who enjoys a challenge and is able to carry others with them.</td>
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<td>The ability to drive through significant initiatives or changes.</td>
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<tr>
<td>The ability to demonstrate skills in managing, mentoring and developing academic staff.</td>
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Applications should consist of a full curriculum vitae detailing career and achievements, as well as a covering letter addressing the role description and person specification. The OU particularly welcomes applications from female candidates.

Applicants are asked to provide daytime and evening contact details. Shortlisted candidates will be invited to speak informally with key members of staff at the University in advance of formal interviews. The formal interviews will take place in late mid to late July.

Perrett Laver, the appointed advisors of The Open University, are conducting an executive search exercise alongside the public advertisement of the post. Perrett Laver will support the Interview Panel in the discharge of its duties, both to assist in the assessment of candidates against the requirements for the roles and to identify the widest possible field of qualified candidates.

For further information, please contact Dr Urvashi Ramphul on Urvashi.Ramphul@perrettlaver.com or +44 (0)207 340 6200. Applications should be uploaded via the website at https://candidates.perrettlaver.com/vacancies quoting reference 3255.

The closing date for applications is 9am BST on Thursday 5th July 2018.

Protecting your personal data is of the upmost importance to Perrett Laver and we take this responsibility very seriously. Any information obtained by our trading divisions is held and processed in accordance with the relevant data protection legislation. The data you provide us with is securely stored on our computerised database and transferred to our clients for the purposes of presenting you as a candidate and/or considering your suitability for this role.

As defined under the General Data Protection Regulation (GDPR) Perrett Laver is a Data Controller and a Data Processor, and our legal basis for processing your personal data is ‘Legitimate Interest’. You have the right to object to us processing your data in this way. For more information about this, your rights, and our approach to Data Protection and Privacy, please visit our website www.perrettlaver.com/information/privacy-policy