School of Engineering and Informatics
Department of Informatics
Teaching Fellow in Computer Science (fixed term for 4 months, part time 0.5 FTE)
Salary range: starting at £39,324 and rising to £46,924 per annum, pro rata.
Expected start date: 30 January 2017

The School of Engineering and Informatics at the University of Sussex wishes to appoint a four-month fixed-term Teaching Fellow from 30 January 2017, to teach in the Department of Informatics.

The successful candidate will teach an undergraduate module in professional skills for computing students, covering technical communication skills and ethics and societal issues for computing professionals. He/she will have commercial experience in the IT industry, and experience of teaching, setting assessments and examining students in higher education.

Informal enquiries may be addressed to Professor Ian Wakeman, Head of the Department of Informatics, at ianw@sussex.ac.uk.

Closing date for applications: 16 December 2016

For full details and how to apply see www.sussex.ac.uk/jobs

The University of Sussex is committed to equality of opportunity

The School is committed to equality and valuing diversity, and currently holds an Athena SWAN Bronze Award. Applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in science and engineering at Sussex.
2. **Senior leadership and management**

The Vice-Chancellor (Professor Adam Tickell) is the senior academic officer and, as Chief Executive, is responsible to the University Council for management of the University. He is supported by an executive group which includes the four Pro-Vice-Chancellors, the Registrar and Secretary, the Director of Finance and the Director of Human Resources. The Heads of the Schools of Studies at Sussex report to the Pro-Vice-Chancellors.

The Registrar and Secretary heads the Professional Services of the University. In addition, under the University Statutes, the Registrar and Secretary is Secretary to the University Council. The Director of Finance reports to the Vice-Chancellor. The Director of ITS reports to the Registrar and Secretary, and the Librarian reports to one of the Pro-Vice-Chancellors.

3. **The School of Engineering and Informatics**

The School of Engineering and Informatics covers the disciplines of computer, electrical and electronic engineering, mechanical, and automotive engineering, product design, digital media, computer science and informatics. Sussex was ranked 19th in the UK in the just released Complete University Guide 2017.

Distinctive characteristics of the School are: creativity, interdisciplinarity, strong links with industry, and an international outlook in both research and teaching. £10m (£4.9m from HEFCE) is being invested in a new [Computing, Robotics, Electronics and Mechatronics Centre (CREaM)](https://www.sussex.ac.uk/cream) as a result of a 60% surge in applications for the School's degrees.

The School offers a range of undergraduate and postgraduate degrees in its areas of expertise, often in collaboration with other schools at Sussex, to create a distinctive focus that addresses the needs of industry, commerce and society. Examples include joint degrees with the MSc in Evolutionary and Adaptive Systems (EASY) that includes modules from the Schools of Engineering and Informatics and Psychology; and the MScs in Engineering Business Management, and Management of Information Technology, which were developed in collaboration with the School of Business, Management and Economics.

This interdisciplinary approach also applies to our research, with current and recent externally funded projects with researchers in a wide range of other subject areas including: geomorphology, media practice, medical imaging, neuroscience, anthropology, English literature, epidemiology, geography, international development, mathematics, psychiatry, psychology and sociology.

The School has strong links with industry, and has an established Strategic Advisory Board. Innovative research across the School has led to a number of patents which are being commercialised including: novel electric potential sensors (EPS) licensed to Plessey Semiconductors and marketed as the EPIC sensor chip; and University spin-out companies, including TribeHive, which is deploying delay-tolerant networking to provide smartphone connectivity in large crowds, and TexRAD, which has developed software for the analysis of medical images and has recently demonstrated the ability to detect brain texture anomalies in Asperger’s Syndrome patients. These developments have been supported by the University's Enterprise fund. The EPS sensor technology was awarded the IET Innovation award for ‘Measurement in Action’, and was shortlisted for two other IET categories and for a THES award.

The School is, for administrative purposes, comprised of two departments: the Department of Informatics and the Department of Engineering and Design. Staff teach across the School, and undertake research on cross-School, as well as cross-University projects.
Following a recent Professorial appointment, the School has just launched a major new School-wide research group in Creative Technology.

The Group brings together a number of academics working in the areas of human-centred technology, product design, experience design, tangible and physical computing, games, digital media, digital cultural heritage, child-computer interaction, broadcast technologies and social innovation.

### 3.1 Department of Informatics

The Department of Informatics is highly rated for its teaching and research. Its researchers work in an environment that was deemed to be wholly 4*/3* (world-leading/ internationally excellent) in the REF 2014.

Sussex was ranked in the top 25 in the UK in The Guardian University Guide 2014. Our students are highly employable: in early 2014, 95% of our previous year’s graduates were employed, and of those, 100% were in professional or managerial jobs.

The Department maintains a strong emphasis on interdisciplinary teaching and research, and has substantive links with almost all other Schools of study at Sussex. Its research spans the theoretical and applied.

The Department’s research is organised into three groups:

- Data Science ([www.sussex.ac.uk/calps/](http://www.sussex.ac.uk/calps/))
- Evolutionary and Adaptive Systems ([www.sussex.ac.uk/easy/](http://www.sussex.ac.uk/easy/))
- Foundations of Software Systems ([www.sussex.ac.uk/foss/](http://www.sussex.ac.uk/foss/)),

and also plays leading roles in cross-disciplinary research centres:

- Sackler Centre for Consciousness Science ([www.sussex.ac.uk/sackler/](http://www.sussex.ac.uk/sackler/))
- Centre for Computational Neuroscience and Robotics (CCNR) ([www.sussex.ac.uk/ccnr/](http://www.sussex.ac.uk/ccnr/))
- Centre for Cognitive Science (COGS) ([www.sussex.ac.uk/cogs/](http://www.sussex.ac.uk/cogs/))
- Sussex Neuroscience ([www.sussex.ac.uk/sussexneuroscience/](http://www.sussex.ac.uk/sussexneuroscience/)).

The Department has long-standing collaborations with a range of external organisations including Animazoo, the Clinical Practice Research Datalink, and American Express, which has sponsored over 120 MSc students in Informatics over the past 10 years.

The Department currently has 420 undergraduates, 80 taught postgraduates, and 60 doctoral students. Undergraduate courses, accredited by the relevant professional institutions where appropriate, and have an industrial placement year option, include:

- MComp (Hons) / BSc (Hons) Computer Science
- BSc (Hons) Computer Science and Artificial Intelligence
- BSc (Hons) Computing for Business and Management
- BSc (Hons) Computing for Digital Media
- BSc (Hons) Games and Multimedia Environments
- MEng (Hons) / BEng (Hons) Computer Engineering (a cross-School course between the Department of Informatics and the Departments of Engineering and Design).

The Department’s masters level courses are in the process of being reviewed as part of a cross-School process, the courses currently include:

- MSc Advanced Computer Science
MSc Computing with Digital Media
MSc Data Science
MSc Evolutionary and Adaptive Systems
MSc Human-Computer Interaction
MSc Information Technology with Business and Management
MSc Intelligent Systems
MSc Management of Information Technology.

Detailed information about the Department can be found at [www.sussex.ac.uk/informatics](http://www.sussex.ac.uk/informatics)

### 3.2 Department of Engineering and Design

The Department of Engineering and Design has a strong reputation for excellence in research and teaching. Its research outputs were rated as 88%, and impact as 90% 4*/3* (world-leading/internationally excellent) in the REF 2014. In the 2014 NSS engineering students registered an 86% satisfaction level with respect to learning resources. Mechanical Engineering ranked 15th for graduate prospects, in the Complete University Guide 2015 and an overall ranking of 18th in the just released 2016 Guardian University Guide; with Electrical Engineering ranked 14th for student satisfaction in the Complete University Guide 2014.

The Department's students won the automotive category of the Telegraph UK STEM Awards 2014 sponsored by McLaren Group (link to [video](#)).

Research activity is focused on mechanical engineering (turbomachinery, dynamics and control, and tribology); and electronic engineering (sensor technology, image and signal processing, and mobile digital communications). There are strong collaborations with industry, including Jaguar Land Rover, General Electric, Plessey Semiconductors and Meggitt Sensing Systems.

The Department's research is organised into four groups:

- Dynamics, Control and Vehicle Research Group ([www.sussex.ac.uk/dcv](http://www.sussex.ac.uk/dcv))
- Industrial Informatics and Signal Processing Research Group ([http://www.sussex.ac.uk/iisp/](http://www.sussex.ac.uk/iisp/))
- Sensor Technology Research Centre ([www.sussex.ac.uk/strc/](http://www.sussex.ac.uk/strc/))
- Thermo-Fluid Mechanics Research Centre ([http://www.sussex.ac.uk/tfmrc/](http://www.sussex.ac.uk/tfmrc/))

The Department currently has 495 undergraduate students, 62 taught postgraduate students, and 43 postgraduate research students.

The Department’s undergraduate courses, all of which are accredited and have an industrial placement year option, include:

- MEng (Hons) / BEng (Hons) Automotive Engineering
- MEng (Hons) / BEng (Hons) Computer Engineering (a cross-School course between the Departments of Engineering and Design and the Department of Informatics)
- MEng (Hons) / BEng (Hons) Electrical and Electronic Engineering
- MEng (Hons) / BEng (Hons) Mechanical Engineering
- BSc (Hons) Product Design.

The Department’s masters level courses, the majority of which are also accredited, are in the process of being reviewed as part of a cross-School process, the courses currently include:

- MSc Advanced Mechanical Engineering
MSc Digital Communication Systems  
MSc Embedded Digital Systems  
MSc Engineering Business Management  
MSc Robotics and Autonomous Systems  

Detailed information about the Department can be found at www.sussex.ac.uk/engineering
CORE JOB DESCRIPTION

Job Title: Teaching Fellow in Computer Science
Grade: Grade 8
School: Engineering and Informatics
Location: University of Sussex Campus
Responsible to: Head of School
Direct reports: n/a
Key contacts: Students, other members of Faculty within the School and University, School Officers, academics in the field in other institutions.

Role description: This is a career-grade teaching position. Post-holders will be expected to take full responsibility for the design, management and delivery of their own modules and contribute to course management. They will also be expected to provide support and guidance to less experienced members of staff.

PRINCIPAL ACCOUNTABILITIES

1. To design and deliver high-quality teaching courses that are attractive to students.

2. To contribute fully to the School and University by playing a significant role in working groups, committees, and other School and University activities.
KEY RESPONSIBILITIES

1. Teaching & Student Support

1.1 Engage in the planning, delivery and assessment of innovative high-quality undergraduate and postgraduate teaching, in liaison with the relevant programme and course convenors.

1.2 Identify, design, develop and manage new curriculum proposals that are attractive to students.

1.3 Develop high-quality inclusive teaching materials, methods and approaches, take responsibility for their quality, and ensure that they meet defined learning objectives.

1.4 Ensure that teaching materials remain up-to-date and relevant, incorporating advances in the subject area into the course of study, and utilising appropriate technology.

1.5 Set, mark, and assess coursework and examinations; select appropriate assessment instruments and assessment criteria, and provide constructive and comprehensive feedback to students.

1.6 Undertake continuous professional development to maintain an understanding of appropriate pedagogy in the subject area.

1.7 Supervise the work of undergraduate and taught postgraduate students, providing advice on study skills.

1.8 Contribute to the accreditation of courses and quality-control processes.

1.9 Undertake and complete administrative duties required in the professional delivery of teaching.

1.10 Undertake academic advising duties, and provide first-line support for sensitive issues, referring on as appropriate to services providing further assistance.

1.11 Adopt an approachable and accessible attitude towards students, offering office hours, informal advice etc.

1.12 Supervise student projects, fieldtrips and, where appropriate, placements.

1.13 Supervise the work of others, and co-ordinate work to ensure modules are delivered to the required standards.

2. Scholarship & Enterprise

2.1 Actively build internal and external contacts and networks in order to, for example, secure student placements, and build relationships for future activities.

2.2 Contribute to a relevant national professional body or recognised pedagogic events.
2.3 Continually update knowledge and understanding in field or specialism, and engage in continuous professional development.

3. Contribution to School & University

3.1 Attend and contribute to School meetings.

3.2 Responsible for administrative duties such as admissions days, time-tableing, examinations, assessment of progress and student attendance, as directed by the Head of School.

3.3 Undertake an administrative or organisational role within the School e.g. Library Representative, Year Tutor or personal academic tutoring.

3.4 Assist with undergraduate and postgraduate recruitment.

3.5 Play a key role in School or University working groups or committees, as required.

3.6 Advise and provide support to less experienced colleagues.

3.7 Conduct risk assessments, and take responsibility for the health and safety of others, if required.

3.8 Undertake additional administrative duties, as required by the Head of School.

4. Role-specific duties

4.1 Lead, teach and assess an undergraduate module in professional skills for computing students, covering technical communication skills and ethics and societal issues for computing professionals.

This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or level of responsibility entailed.
INDICATIVE PERFORMANCE CRITERIA

- A record of development of new courses/groups of courses, or significant components of schemes of study or CPD courses.
- Proven and sustained track record of successful teaching at the levels appropriate for the post.
- A high standard of teaching performance as judged by standard evaluation methods.
- Evidence of using feedback information from a range of sources to improve the student experience.
- Evidence of using knowledge arising from scholarship to enhance teaching and curriculum development.
- Evidence of engagement in advising students and proactively responding to student problems.
- Evidence of contributions to a relevant national professional body or recognised event.
- Evidence of identifying and employing current pedagogic best practice to improve the student experience.
PERSON SPECIFICATION

ESSENTIAL CRITERIA

1. Normally educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below).

2. Excellent interpersonal skills, with the ability to engage with students using a variety of different methods.

3. Experience of teaching at undergraduate and taught postgraduate level, or experience of equivalent professional training.

4. Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.

5. Ability to work individually on own initiative and without close supervision, and as part of a team.


7. Excellent organisational and administrative skills.

8. Ability to prioritise and meet deadlines.

9. A willingness to participate in support activities beyond normal classroom duties.

10. Excellent IT skills, with the ability to produce high-quality learning support materials.

ESSENTIAL ROLE-SPECIFIC CRITERIA

1. Commercial experience in the IT industry.

2. Experience of teaching, setting assessments and examining students in higher education.

DESIRABLE CRITERIA

1. A recognised higher education teaching qualification.

2. Experience of teaching computing students professional and employability skills.

3. Experience of successful curriculum design or re-design.

4. A recognised higher education teaching qualification.

5. Membership of professional body, if appropriate.