



Department Application
Bronze and Silver Award



Guidance to Athena SWAN Assessment Panels for Open University submissions

This is a standard Guidance document that has been agreed by Athena SWAN to accompany all OU submissions. Please note that it is not included in the word count.

The Open University (OU) is unlike any other Higher Education Institution in the UK. Both the student body and staffing structure are very different from that of a conventional university, which means that some of the information presented in its Athena SWAN submissions may be unfamiliar to Assessment Panels. This guidance aims to give additional background information to assist panels in completing their assessment of Open University submissions.

1. Students

The OU is the largest UK University, with over 174,000 undergraduate (UG) and taught postgraduate (PG) students, all of whom study part-time and at a distance. There are also around 1000 full-time and part-time postgraduate research students. Most Open University students are in employment and are mature students (only 5% of students are under 20). They are based in all parts of the UK, and there are also 10,000 non-UK based students. Around 20,000 of our UG and PG students have declared disabilities. The University operates an open access policy, meaning it accepts all applicants who apply to study at undergraduate level, without any academic prerequisites.

Study mode

Students are taught via the OU's unique model of distance learning known as 'supported open learning'. Course materials are delivered via a number of different media, such as on-line and printed material. Students are allocated to a personal tutor (Associate Lecturer) who provides academic expertise, guidance and feedback individually and as part of a tutor group, via on-line conferencing and face to face at tutorials and residential schools. Full time funded PhD students are based at the Milton Keynes campus while part time students (who are usually self-funded) are required to attend occasionally but are usually supervised remotely.

Modules and Qualifications

There has always been considerable flexibility in the patterns and pathways of study, and as they are studying part-time, most students usually take at least 6 years to complete their degree. Historically, OU students have registered on individual modules which they have used to build credits towards a qualification, which for many students has been the interdisciplinary BA (Open).

Since 2012, the OU curriculum has begun to move to being qualification-based, rather than module-based, with students registering for a named qualification from the outset. However, as this is a relatively recent development, there are still a large number of students who began with and are still following the module-based route. Moreover, individual modules may be common to a number of different qualifications, thus individual departments often contribute towards degree attainment outside of the named qualifications reported in the data.

For these two reasons, panels should note that OU departmental submissions will consider and reflect on student data at a module level, as well as qualification outcomes.

2. Staff

The majority of academic teaching and research staff are based at the main campus in Milton Keynes and are referred to in OU submissions as Central Academics. These Central Academics develop teaching materials as part of multi-disciplinary module teams and manage the delivery and assessment of modules. They also form the OU's research base, together with Research Associates and Fellows.

Regional Academics

In addition to academic and research staff based in Milton Keynes, there are almost 200 'Regional Academics' (also known as Staff Tutors) who are based in 12 OU regional and national centres across the UK, whose roles include teaching, administration and research. Regional Academics are employed on the same salary scale as Central Academics; however they have different terms and conditions in their contracts. In particular they are allowed less research time than central academics, and have a higher administrative load, because part of their role is to appoint and manage Associate Lecturers. These different responsibilities are allowed for within promotions criteria.

Associate Lecturers

Approximately 6000 Associate Lecturers (ALs) are employed on short term contracts to carry out tutoring roles and support student learning and assessment for specified modules. Many of them have substantive posts with other employers. Their contracts with the OU do not include production of course materials or research. They are appointed and managed by the Regional Academics at Faculty level, and are members of curriculum based Student Support Teams (i.e. not departments) along with student advisors, administrators and other non-academic staff. Since their contracts and career development remain beyond the responsibility of departments, there is limited scope for including this staff group within departmental Athena SWAN submissions. However, as ALs are the main point of contact with the university

for students, departmental submissions will provide basic data including a gender analysis of ALs who are employed to work on relevant modules.

3. Flexible working

The nature of the OU's teaching and learning model provides the flexibility for students to study where and when they choose, to fit in with jobs, families and other commitments. This also means that academics and researchers have always had a high level of flexibility about their working arrangements and this approach continues to be a unique part of the working culture and of how the OU operates. Therefore panels should be aware that this is the reason there have been very few formal applications for flexible working among academic and research staff. For colleagues working in regional/national centres across the UK, remote participation at meetings is also facilitated and encouraged and there are excellent audio and video conference facilities, so it is often not necessary to be physically at the Milton Keynes campus. Meetings are rarely held before 10am or after 4pm, to enable colleagues from regions to travel if necessary. Regional academic colleagues make particularly extensive use of flexible working because much of their work with the ALs necessarily takes place outside conventional office hours.

ATHENA SWAN BRONZE DEPARTMENT AWARDS

Recognise that in addition to institution-wide policies, the department is working to promote gender equality and to identify and address challenges particular to the department and discipline.

ATHENA SWAN SILVER DEPARTMENT AWARDS

In addition to the future planning required for Bronze department recognition, Silver department awards recognise that the department has taken action in response to previously identified challenges and can demonstrate the impact of the actions implemented.

Note: Not all institutions use the term 'department'. There are many equivalent academic groupings with different names, sizes and compositions. The definition of a 'department' can be found in the Athena SWAN awards handbook.

COMPLETING THE FORM

DO NOT ATTEMPT TO COMPLETE THIS APPLICATION FORM WITHOUT READING THE ATHENA SWAN AWARDS HANDBOOK.

This form should be used for applications for Bronze and Silver department awards.

You should complete each section of the application applicable to the award level you are applying for.

Additional areas for Silver applications are highlighted throughout the form: 5.2, 5.4, 5.5(iv)

If you need to insert a landscape page in your application, please copy and paste the template page at the end of the document, as per the instructions on that page. Please do not insert any section breaks as to do so will disrupt the page numbers.

WORD COUNT

The overall word limit for applications are shown in the following table.

There are no specific word limits for the individual sections and you may distribute words over each of the sections as appropriate. At the end of every section, please 5.1

We have provided the following recommendations as a guide.

Department application	Bronze	Silver
Word limit	10,500	12,000
<i>Recommended word count</i>		
1. Letter of endorsement	500	500
2. Description of the department	500	500
3. Self-assessment process	1,000	1,000
4. Picture of the department	2,000	2,000
5. Supporting and advancing women's careers	6,000	6,500
6. Case studies	n/a	1,000
7. Further information	500	500

Name of institution	The Open University	
Department	Engineering and Innovation	
Focus of department	STEMM	
Date of application	April 2016	
Award Level	Bronze	
Institution Athena SWAN award	Date: April 2013	Level: Bronze
Contact for application <small>Must be based in the department</small>	Ms. Carol Morris	
Email	carol.morris@open.ac.uk	
Telephone	01908 858223	
Departmental website	http://www9.open.ac.uk/mct-ei/	

1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words

I am writing in my capacity as Head of the Department of Engineering and Innovation at the Open University to endorse the department's application for an Athena SWAN Bronze award and also to confirm my commitment, together with that of my Department Management Team, to improving the working environment of the department. I confirm that the information contained in the submission is an honest, accurate and true representation of the department.

I have been Head of Department for two years, and before that I was Deputy Head for three years. During this time, I have been responsible for overseeing departmental academic staff promotion submissions. This has made me acutely aware of how individual circumstances can impact on people and their careers and, consequently, the importance of trying to ensure departmental working practices are designed to best meet the needs of all staff. One small example is avoiding scheduling important meetings during school holiday times. As a parent myself, with a 10 year old son and grown-up twin step-daughters (who I have seen through school and on to university), I have always appreciated being able to take my leave so that it coincides with my children's holidays, without causing either me or my work colleagues too many problems. I also believe that such flexible and considerate working practices, as well as being important to individual members of staff, greatly benefit the institution, creating a happy working environment and enhancing our ability to attract the highest calibre employees.

I welcome the opportunity that developing this Athena SWAN submission has given to reflect on gender equality and also wider issues of equality of opportunity within the department. I have been very happy to support the

formation of the Self-Assessment Team (SAT) by ensuring that members of the SAT have dedicated time in their workload allocations to contribute fully. I have also prioritised being a member of the SAT myself so that I am fully aware of any issues the process has uncovered. Writing the submission has highlighted that we have much to be proud of in the department. However, it has also revealed that over the past three years there has been a gradual decrease in the number of grant applications submitted by female academics, something of which we were previously unaware. We also have work to do to understand the reasons for the decrease in the numbers of female students registering on our entry-level modules over the same period.

I hope that the activities of the SAT going forwards will continue to highlight any gender-related issues and ensure that Athena SWAN Charter Principles are embedded within the culture of the department. I am fully committed to ensuring that Athena SWAN work is recognised in workload planning to aid the delivery of our Action Plan and will endeavour to provide the necessary resourcing.

Regards



Professor David Sharp
Head of Department
Engineering and Innovation

(470 words)

2. DESCRIPTION OF THE DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words

The Department of Engineering and Innovation is an interdisciplinary community of academic staff, leading the OU's teaching and research in the areas of Engineering, Technology Management, Design, Systems Thinking, Environment and International Development. The breadth of subjects covered by the department leads to a vibrant and diverse academic community with students benefitting from the interdisciplinary nature of much of our teaching material. The department is the largest of the three departments in the Faculty of Mathematics, Computing and Technology.



Some members of the Department of Engineering and Innovation

The department has 63 Central Academic staff, 16 Regional Academic staff, 22 Research staff, 48 full-time and 32 part-time PhD students.

Our Central Academic staff are similar to Lecturing staff at other universities, with responsibility for authoring teaching and assessment material, for managing module presentations to students, and for carrying out research. Our Regional Academic staff make similar contributions to teaching (and sometimes to research) but are also responsible for managing Associate Lecturers, generally splitting their workloads 50:50 between regional and central duties; the department has approximately 680 Associate Lecturer contracts associated with its modules, 237 of which are women (35%) and 443 of which are men (65%).

As at other institutions, our Research Fellows are primarily focussed on research, but some also make small contributions to teaching. Similarly, our full-time PhD students are, just as at other universities, based on campus. Some of

our part-time PhD students are also based on campus, but most study from home.

Fuller explanations of the roles of Central Academics, Regional Academics and Associate Lecturers are given in the *Guidance to Athena SWAN assessment panels for Open University submissions*.

As a distance-learning institution, all of our undergraduate and taught postgraduate students study from home and are classified as part-time. At the end of March 2015 we had approximately 10,000 undergraduate and 1,700 taught postgraduate student registrations on individual modules managed by the department, with approximately 3,000 undergraduate and 400 postgraduate student registrations on the qualifications for which the department is responsible. (As well as forming the basis of the department's qualifications, our modules contribute to qualifications across the University, as discussed further in section 4.1.)

The constituency of the department (as of March 2015), together with gender breakdown, is illustrated in Figure 1.

(368 words)

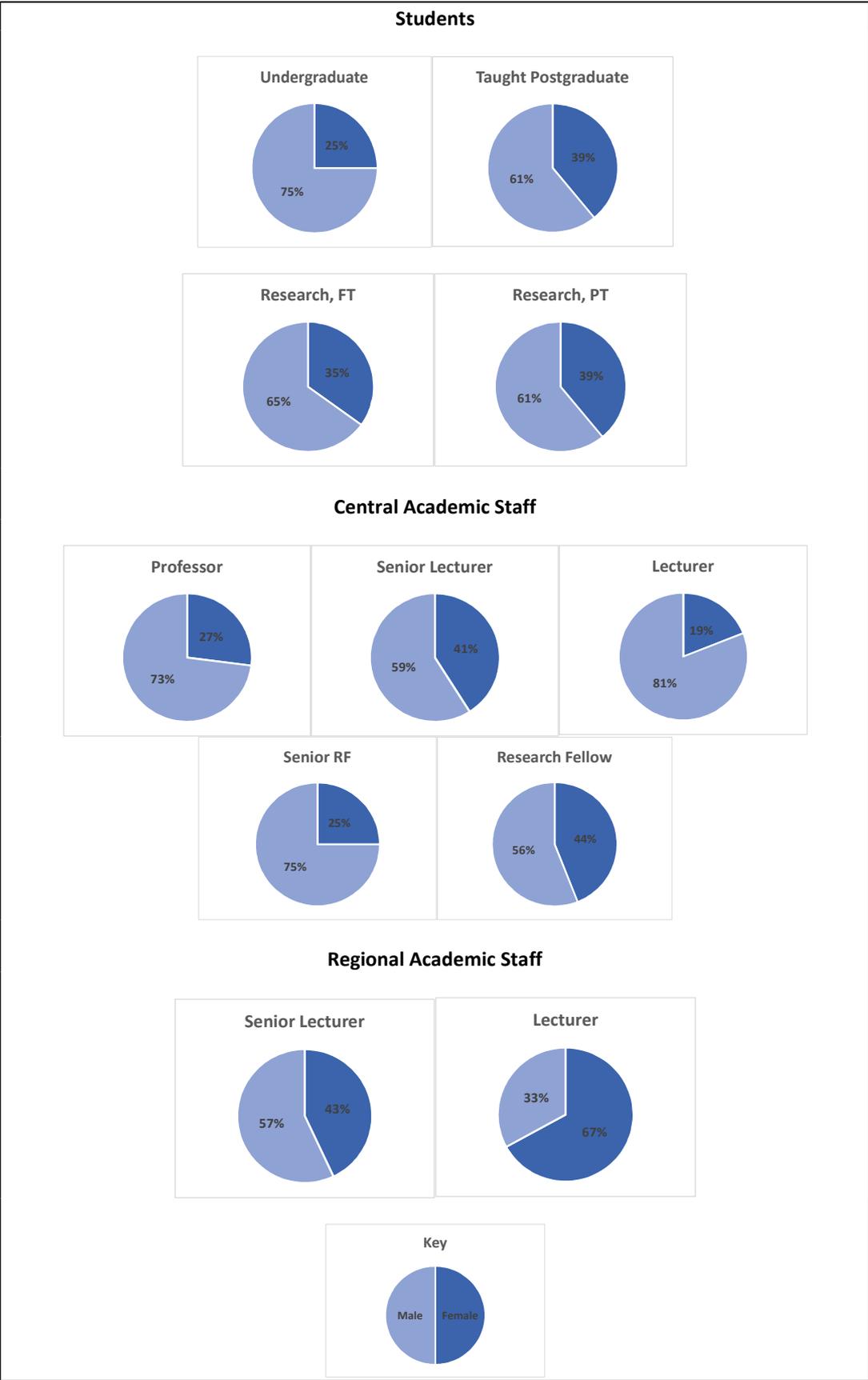


Figure 1: Students and staff in the Department of Engineering and Innovation; proportions by gender (March 2015)

3. THE SELF-ASSESSMENT PROCESS

Recommended word count: Bronze: 1000 words | Silver: 1000 words

(i) A description of the self-assessment team

The Self-Assessment Team (SAT) is made up of a number of women and men at different career stages and from different staff categories within the Department of Engineering and Innovation. The academic members of the team are:

Asma Chowdhry is a Lecturer in Design. She has been an Associate Lecturer since 2011, and also worked as a part-time Lecturer on the PGCE Design and Technology course at the University of Cambridge. Asma joined the department and the SAT in December 2015.

Dr Toni Gladding is a Senior Lecturer in Environmental Engineering. She has been at the Open University since 2001 having joined as a Research Fellow on a short-term contract, obtained a Lecturer position in 2002 and achieved promotion to Senior Lecturer in 2013. Her promotion case was largely based on external reputation, research and consultancy activities in addition to her teaching responsibilities.

Professor Hazel Johnson is Professor of Development Policy and Practice. She has been Head of Department and served on numerous OU bodies/committees, including currently the Chairs' Working Group of the Faculty, where she was its first female member. She has actively mentored junior and senior staff on their careers and staff promotions. Many years ago, she was Oxfam Lecturer in Gender and Development and has sought to integrate gender into undergraduate and postgraduate curriculum.

Professor Andy Lane is Programme Director for Postgraduate Technologies and Computing and previously Dean of the former Technology Faculty. He is a Principal Fellow of the Higher Education Academy and a member of the Chartered Institute of Ecology and Environmental Management's Training, Education and Career Development Committee and has published extensively on widening participation in Higher Education through open education.

Carol Morris is the Chair of the SAT. She started work at the OU in October 1987 as an Associate Lecturer, after a career break to raise a family and retrain as an engineer. She subsequently became a Regional Academic in 1992. She was promoted to Senior Lecturer in 2001. She held the post of Associate Dean (Learning and Teaching) for 10 years before moving to a Central Academic post in 2013. She is now the Director of Teaching for the department.

Dr Sally Organ is a Senior Lecturer and Qualification Lead for the Engineering Foundation Degrees and Top-up BEng. She joined the OU as a part-time Regional Academic on a fixed-term contract in 2000 and was appointed to a full-time permanent post the next year. She is currently on a two-year secondment from

her Regional Academic role in order to spend more time on curriculum development.

Professor David Sharp is Head of Department and Professor of Musical Acoustics. He joined the Open University as a Lecturer in 1998, was promoted to Senior Lecturer in 2005, and then to Chair in 2015. He has a strong focus on the career development of junior staff, and has served on the Faculty's Academic Staff Promotions and Rewards Advisory Group since 2011, guiding a number of colleagues through to successful promotion.

Dr James Warren is a Senior Lecturer and has recently taken time out from his Regional Academic role to work as an Associate Dean for the Faculty; part of that role was to promote equality, diversity and accessibility for all students and staff. He took full paternity leave for each of his children in 1999 and 2004 and has previously worked on four module teams which promoted family-centred work practices wherever possible.

Rahul Unnikrishnan joined the Open University in January 2015 and is a full-time research student in the Materials Engineering group. He actively mentored Bachelor and Masters students for 2 years during his Master's degree at the National Institute of Technology, Nagpur, India.

Ms Frances Gill is the SAT project manager. She is a Curriculum Manager within the Faculty and joined the Open University in March 2009. She has recently completed a BSc Hons (Open) and is an Associate Fellow of the HEA.

In addition the SAT previously included the following members of academic staff:

Dr Chris High (resigned from the University),
Dr Shirley Northover (retired),
Dr Nicole Lotz (maternity leave),
Dr Foroogh Hosseinzadeh (moved to major department project),
Dr Yvonne Sutton (moved to a different Faculty).

The SAT is also very grateful to the support provided by:
Pauline Adams (Faculty Manager for Departmental Support),
Simone Arthur (Senior Project Manager in the Equalities and Diversity Office),
Angie Jones (Departmental Office Manager),
James Forman (Institute of Educational Technology).

It should be noted that academic-related, technical and support staff are managed by the Deanery and not by the department, hence the SAT consists mostly of academic and research staff.

(ii) An account of the self-assessment process

The SAT was created following a series of Department Management Team meetings.

The SAT was constituted in November 2014, and has met on a monthly basis. SAT meetings and their outcomes and actions are formally recorded, with administrative support provided by the Faculty. There have also been various separate meetings of sub-groups (including meetings with the Chairs of other departmental SATs and the Programme Directors for undergraduate and postgraduate qualifications), electronic discussions of data and documents relating to the submission and consultations with other members of the department. The Chair is also a member of the University SAT and this has helped to keep the department's Action Plan aligned with the University's Action Plan by providing a link between the two teams.

A presentation on Athena SWAN was made to the entire department in March 2015, with updates at subsequent department meetings. We have also conducted an online survey of department staff to collect data on committee membership, professional body membership and external work.

Feedback on an early draft of the submission was obtained from an external colleague, who has experience of reviewing submissions, and a senior member of the University's STEM Gender Equality Working Group. The draft submission was circulated to all members of the Department Management Team, the Design and Engineering Programme Executive Team and the Executive Dean.

(iii) Plans for the future of the self-assessment team

The SAT will continue to meet quarterly to monitor the implementation of the Action Plan. Each item on the Action Plan will have a lead person who will be responsible for reporting on progress at SAT meetings and at Department Management Team meetings. The SAT Chair will also continue to report on progress to the University SAT and to liaise with other department SATs.

Action 3.1: Establish an annual cycle of reporting at department meetings on Athena SWAN/ gender equality issues.

Action 3.2: Highlight and maintain the visibility of the SAT and ensure succession planning for team members.

(1047 words)

4. A PICTURE OF THE DEPARTMENT

Recommended word count: Bronze: 2000 words | Silver: 2000 words

The Department of Engineering and Innovation sits within the Faculty of Mathematics, Computing and Technology. With 101 academic and research staff and 48 full-time and 32 part-time PhD students, it is currently the largest academic department in the Open University and also one of the more diverse, with research groupings in Design, Materials Engineering, International Development, Acoustics, Systems Thinking, Technology Management, and Environmental Engineering. Many academic staff also contribute to pedagogic research and scholarship across the University.

The department takes a broad, interdisciplinary and multi-disciplinary approach to its teaching, research and knowledge transfer activities. It aims to make a significant impact on individuals, organisations and communities that have to design, develop, build and manage complex processes and systems involving technologies of all kinds. We cover themes that reflect the diversity of the department's groupings and also collaborate with colleagues in other departments within the University on some projects and programmes.

4.1. Student data

The department is currently responsible for 24 undergraduate and 22 postgraduate modules, some of which are delivered twice in each academic year. These modules are currently and variously core to one CertHE (Environment), two DipHEs (Engineering, Environmental Management and Technology), two foundation degrees (Engineering, Materials Fabrication and Engineering, with the latter in teach out); four bachelor degrees (BEng, BSc Design and Innovation, BSc Environmental Management and Technology, BSc Technology, with the last one in teach out); one integrated master's degree (MEng); and four PGCerts, five PG Dips and five MScs (variously in Engineering, Technology Management, Environmental Management, Development Management, Systems Thinking in Practice).

Some of our undergraduate qualifications have versions only available to pre-2012 students (old framework) which will finish in 2017 and these students benefit from lower, 'transitional' fees. The number of students registered on old framework qualifications is rapidly declining as they graduate and most data considered here relate to new framework qualifications introduced in 2012. Students on new framework qualifications pay higher fees if they are resident in England but may be eligible for a student loan.

The modules and qualifications listed above cover the full breadth and depth of our research and scholarship interests and equate broadly with the national *Engineering and Technology* HESA category. Where possible our comparisons are made with the first release of part-time *Engineering and Technology* data for 2014/15.

Our students are classified as studying part-time and have some flexibility over the number of modules and credits they take each year, as well as the choice of route they take through the department's own qualifications and within other qualifications owned by other departments. Due to this flexibility most of our data is provided to us as a count of the student registrations on modules we teach within an academic year rather than a student headcount. However, since 2012/13 and the introduction of loans for part-time students, we are increasingly able to review the number and performance of students registered on our undergraduate qualifications. As noted in section 2, the number of students on the department's modules is a much higher figure than the number of students on the department's qualifications, as many students are taking our modules as part of other qualifications, most notably the Open Degree where they can construct their own study route from across the University's modules. Additionally, some students only register for individual modules for Continuing Professional Development. Postgraduate figures represent a student's qualification intention rather than a definite qualification registration.

For the 2014/15 academic year, we had just under 10,000 undergraduate and just under 2,000 taught postgraduate student registrations on our modules, a decline of just over 2,000 and 500 student module registrations respectively since 2012/13. This is in line with the sector-wide decline in registered part-time students during this period. Meanwhile, again for the 2014/15 academic year, we had just under 2,000 students registered on our undergraduate qualifications and over 300 on our postgraduate qualifications, a decline of 1200 and 900 students respectively since 2012/13. Over 10% of these students are from outside the UK. The vast majority are in paid employment and studying for career development reasons.

(i) Numbers of men and women on access or foundation courses

The department does not run any access or foundation courses as such but with the OU's open entry policy we do pay particular attention to our designated 'entry' modules at Level 1 for each of our main undergraduate qualifications (Engineering, Design and Innovation, Environmental Management and Technology). The data in Figure 2 show a wide variation in the percentage of female students registered on these modules with a small decline for the Environment entry level module in the past 3 years. Figure 3 shows there is less variation in the percentage of men and women passing these entry modules although both genders are recently performing better on the Engineering module and less well on the other modules. The data suggest that female students tend to have higher pass rates than their male counterparts although the differences are relatively small.

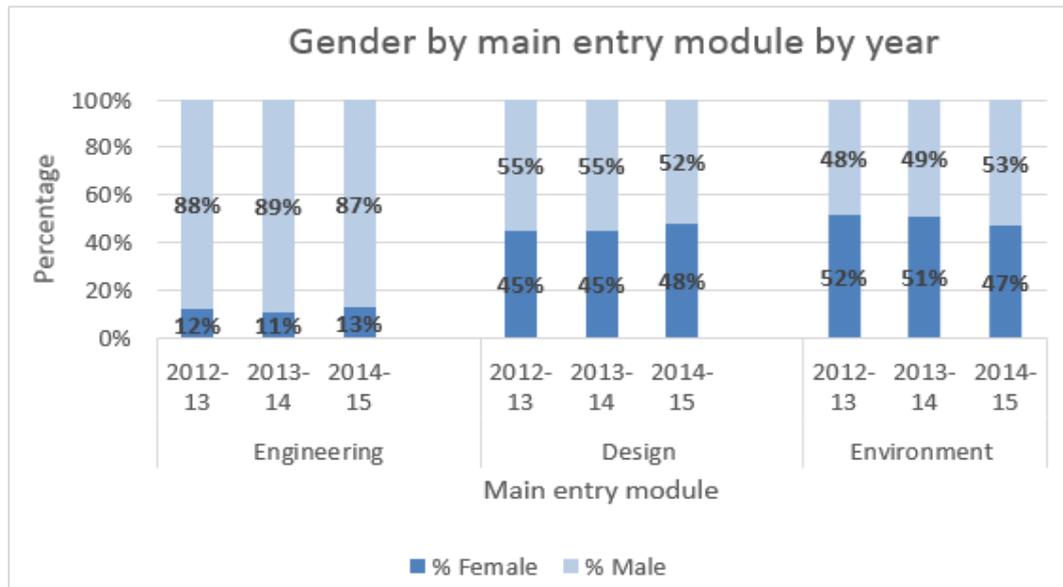


Figure 2: Students by gender registered on main entry modules

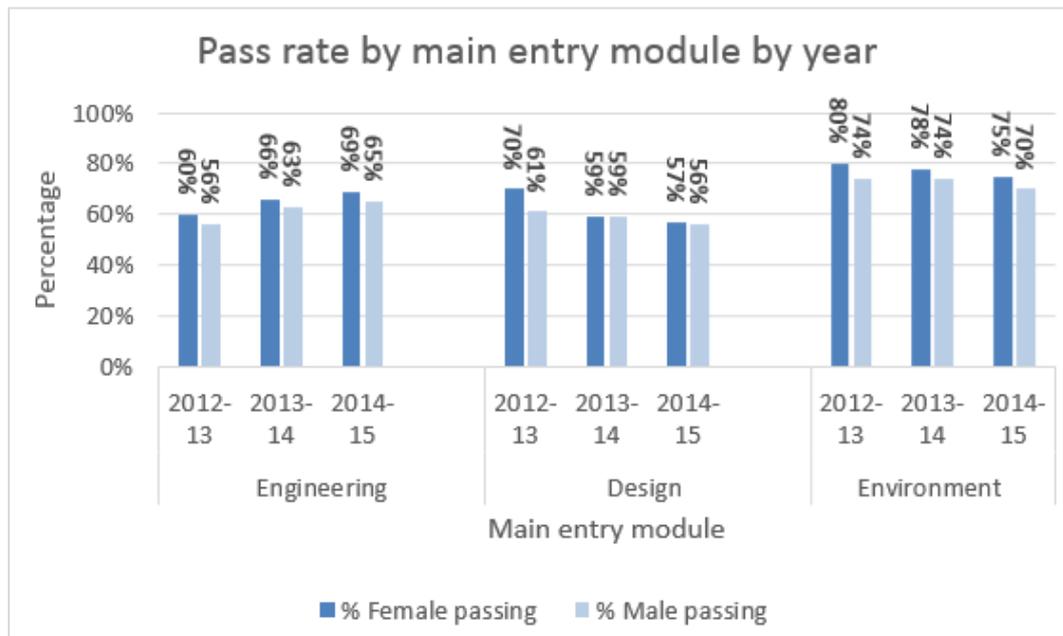


Figure 3: Percentage female and male students passing main entry modules

Action 4.1: Determine whether the differences in pass rates for entry level modules by gender are statistically significant, and if so, investigate reasons for the differences.

(ii) Numbers of undergraduate students by gender

In the 2014/15 academic year, 24% of students on our undergraduate modules, and 16% of students on our new framework undergraduate qualifications, were female. The figures are very similar for the 2012/13 and 2013/14 years (Figures 4 and 5) and compare favourably with the sector average of 9%.

However, the percentages quoted above mask substantive differences in the proportion of women registered on individual modules (for example, the range was 13% to 48% female students on entry modules at Level 1; Figure 2) and qualifications (ranging from 9% to 39%; Figure 6).

Further analysis of the data reveals that the proportion of females at Level 1 is consistently higher than the proportion of females at Level 3 (Figure 4). This trend indicates that while female students do as well as, if not better than, male students on individual modules they are not progressing as well through these particular qualifications. It is also worth noting that the proportion of females at Level 1 has decreased over the three year period, while the proportion of females at Level 3 has increased over the same period. The decrease in proportion of female students at Level 1 is a concern which needs to be investigated thoroughly, although a possibility is the disproportionate effect on female students of the higher fees associated with the new framework qualifications.

Action 4.2: Investigate potential gender imbalance of withdrawal from study.

Action 4.3: Investigate decrease in proportion of female students at Level 1.

Action 4.4: Carry out investigation into female student intentions at Level 1 through an online survey, together with focus group and interviews.

Engineering is the most popular degree and has approximately 1000 student registrations per year. Student registrations for the Design and Innovation degree and the Environmental Management and Technology degree are much lower (approximately 300 registrations and 200 registrations respectively). Our overall gender balance is therefore largely influenced by Engineering being the most popular of the three undergraduate qualifications. This is illustrated by comparing Figure 5 with Figure 6.

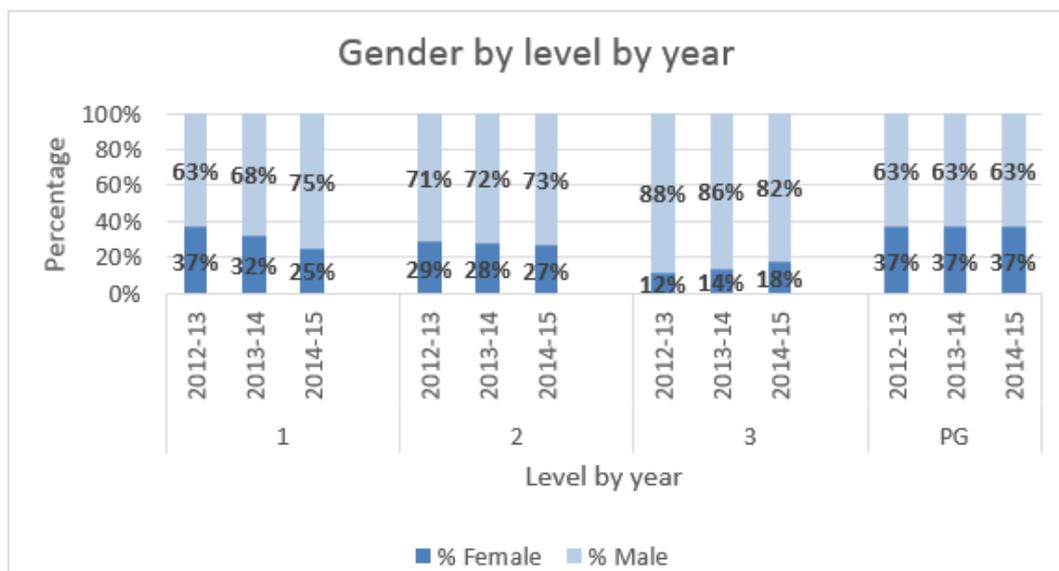


Figure 4: Students by gender and level

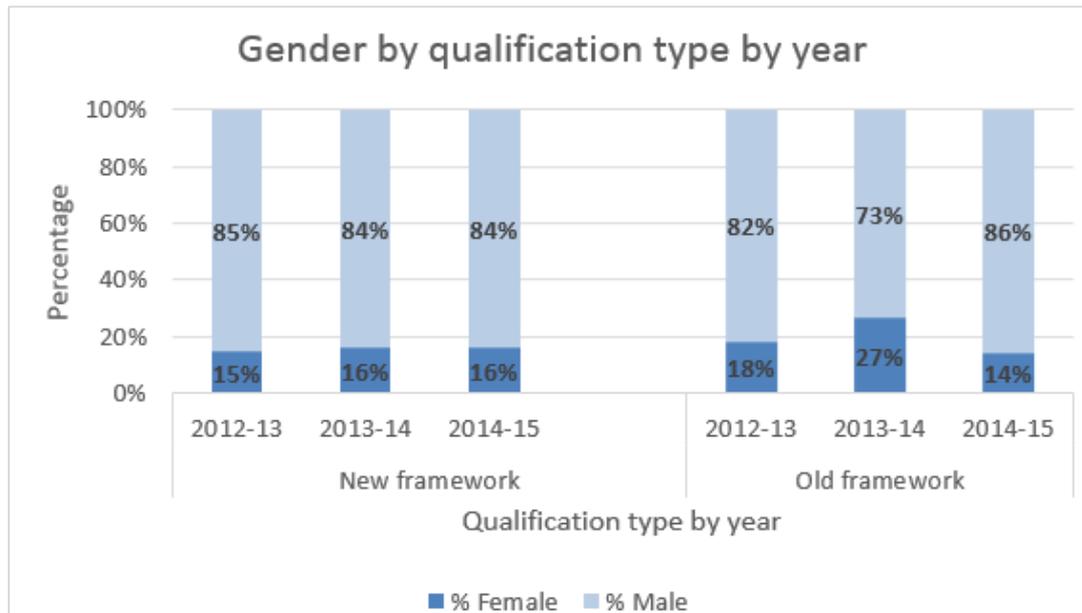


Figure 5: Students by gender and qualification type

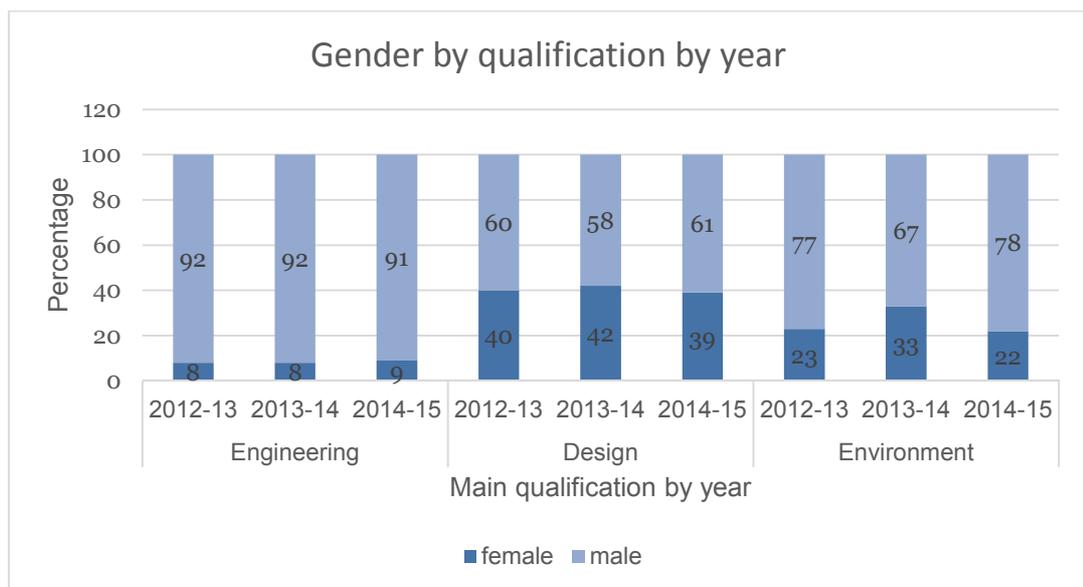


Figure 6: Students by gender on individual qualifications

The pass rates for students by gender on our modules are fairly similar with no big differences and no clear trend (Figure 7). The same is true for the degree classifications obtained by females (Figure 8) and males (Figure 9) on old framework qualifications (there are no graduates yet from new framework qualifications introduced in 2012). The degree classification distributions are also in line with those for part-time students nationally across all subjects for 2014/15 (there is no breakdown of the national data available for *Engineering and Technology* at the time of writing).



Figure 7: Percentage pass rates by gender and level

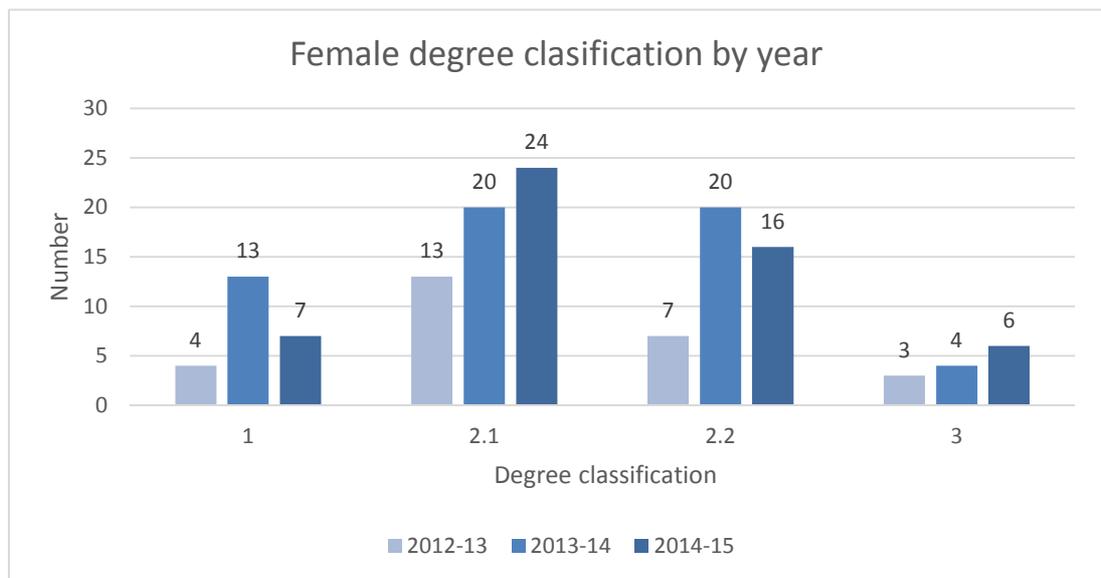


Figure 8: Female graduates by degree classification

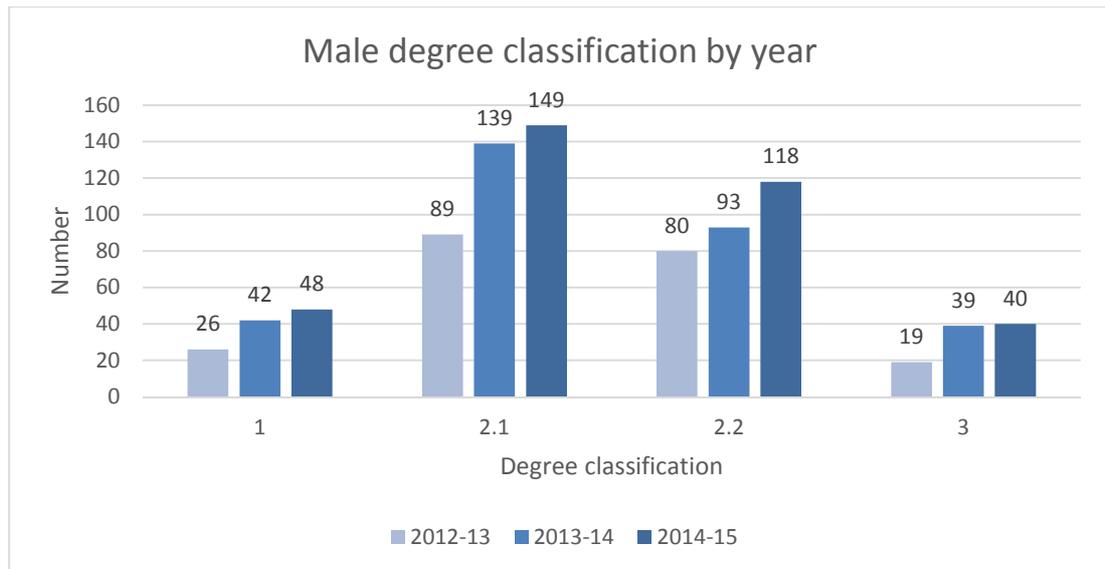


Figure 9: Male graduates by degree classification

Action 4.5: Organise conference for women students on engineering qualifications in June 2016 to coincide with National Women in Engineering Day.

Action 4.6: Develop information, advice, guidance and training (including case studies) on gender issues for use with Student Support Team, Marketing and Regional Academic staff who advise potential Engineering & Innovation students at enrolment and during their studies.

(iii) **Numbers of men and women on postgraduate taught degrees**

While we have graduate entry requirements for postgraduate modules and qualifications, registration is handled at University level and rarely involves departmental staff in the registration decision. In comparison with undergraduate, the proportion of female students at postgraduate level is higher, with a more consistent level of 37% women (compared with the national part-time sector average for *Engineering and Technology* of 19%).

Action 4.7: Investigate why the postgraduate curriculum appears to be more attractive to women than the undergraduate curriculum.

However, as with undergraduate, this masks some differences between the qualifications and does not reveal any differences there may be in terms of intention on the part of students to complete a PG Certificate, a PG Diploma or full MSc (the University does not have postgraduate qualification registration per se, but module registration with the option to declare a qualification intention). The proportion of females graduating with an MSc in the last three years is very similar to the proportion registered (Figure 10) albeit with a small decline during this period.

The variable use of postgraduate degree classification schemes until recently does not make it possible to look at trends in this indicator.

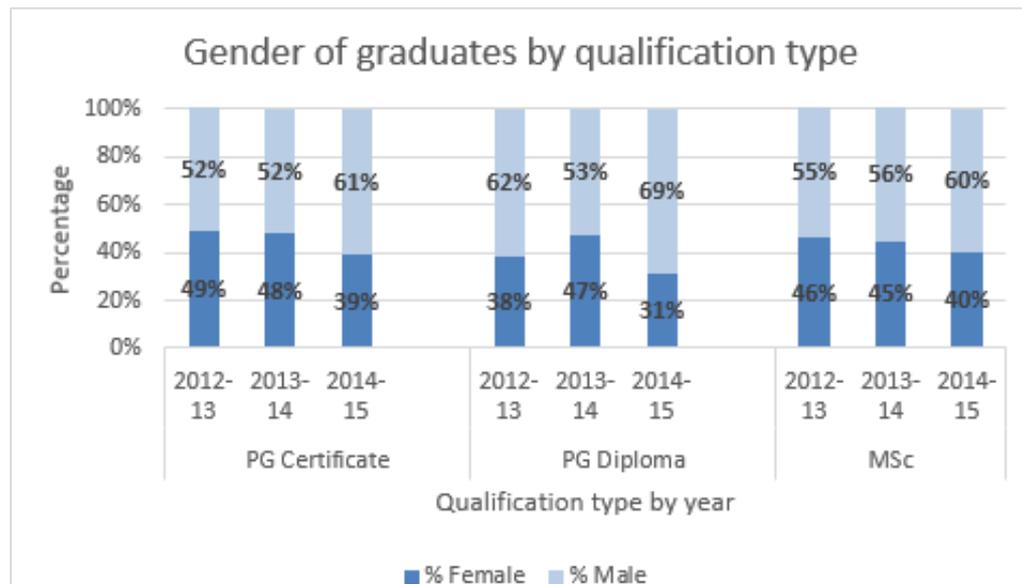


Figure 10: Masters graduates by gender and qualification type

(iv) Numbers of men and women on postgraduate research degrees

The department does not currently hold records of application and offer rates for postgraduate research degree students. For the period under review the number of research students entering the department is shown in Table 1 and the total numbers are shown in Table 2.

	Mar-12 to Mar-13		Mar-13 to Mar-14		Mar-14 to Mar-15	
	Female	Male	Female	Male	Female	Male
Full-time	1	4	1	3	7	10
Part-time	3	2	2	2	0	5

Table 1: Research degree entry by gender

	Mar-12 to Mar-13		Mar-13 to Mar-14		Mar-14 to Mar-15	
	Female	Male	Female	Male	Female	Male
Full-time	9	27	13	24	17	31
Part-time	9	18	11	17	11	21

Table 2: Total research degree student numbers by gender

The overall jump in recruitment for research degrees in 2014/15 was a direct result of the establishment of two doctoral training centres (in the areas of design and nuclear energy) and internal investment in a strategic research area (in international development).

The proportion of female students on full-time research degrees in 2014/15 was 35%, and 34% on part-time research degrees. This is comparable to the proportion of female students on taught postgraduate qualifications.

The number of students completing PhDs in each year is shown in Table 3. It should be noted that the data for 2012/13 is incomplete and the records do not show whether the students were full-time or part-time.

	Mar-12 to Mar-13		Mar-13 to Mar-14		Mar-14 to Mar-15	
	Female	Male	Female	Male	Female	Male
Completion	0	3	2	8	2	8

Table 3: Students completing PhDs by gender

Action 4.8: Monitor and report applications and acceptance rates for postgraduate research students by gender.

Action 4.9: Ensure records held in the department for completion of research degrees are accurate and up-to-date to enable monitoring of differences between part-time and full-time completion rates.

(v) **Progression pipeline between undergraduate and postgraduate student levels**

There is as yet no clearly defined or promoted route through from the department's undergraduate qualifications to its postgraduate qualifications, except in Engineering through our Integrated Masters (MEng). Most of our postgraduate qualifications do not have an undergraduate equivalent from which students can readily progress. The OU does not systematically collect and monitor data on the transition from undergraduate to postgraduate which might itself be after a gap of several years. Similarly, we do not hold data on whether graduates or taught postgraduates have wanted to pursue an academic research career, with the vast majority seeking professional development in their chosen field.

Action 4.10: To carry out an investigation to identify the scale and nature of student transition from undergraduate to postgraduate study and research within the department.

4.2. Academic and research staff data

- (i) Academic staff by grade, contract function and gender: research-only, teaching and research or teaching-only

The Department of Engineering and Innovation comprises 101 academic and research staff of whom 37% are female. This compares very favourably with the 2013/14 sector average of 19.4% for *Engineering and Technology* departments. In the following figures and table, the data for Lecturers and Senior Lecturers are separated out into Central Academic staff and Regional Academic staff (Figures 11 and 12, Table 4) to reflect the fact that these two staff groups are employed on different terms and conditions of service. All current Professorial staff in the department are Central Academics.

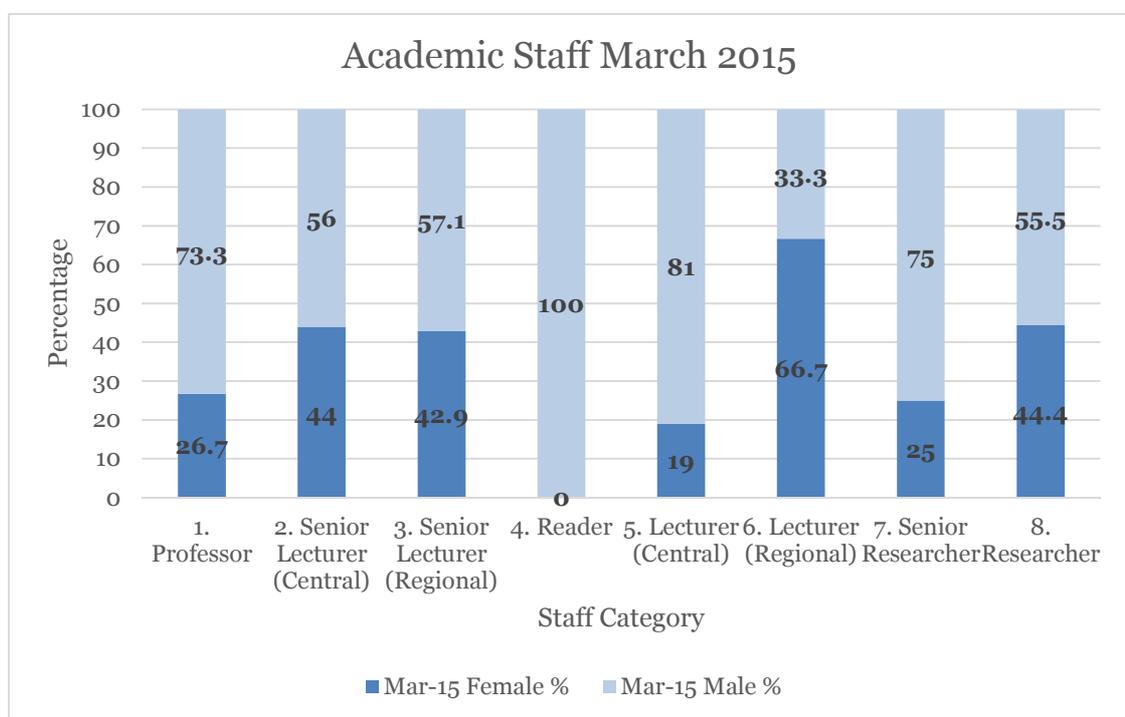


Figure 11: Academic staff by category and gender (percentage)

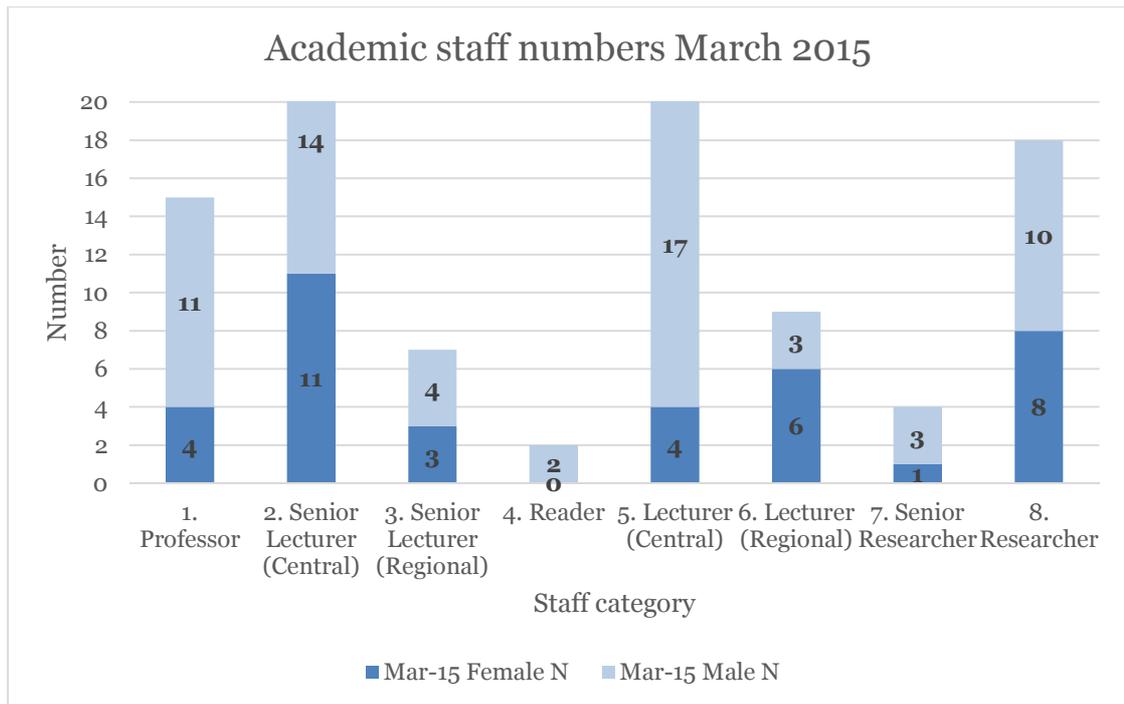


Figure 12: Academic staff numbers by category and gender

Category	Mar-13				Mar-14				Mar-15			
	Female		Male		Female		Male		Female		Male	
	N	%	N	%	N	%	N	%	N	%	N	%
Professor	3	15.0	17	85	4	23.5	13	76.5	4	26.7	11	73.3
Senior Lecturer (Central Academic)	10	31.4	16	61.6	10	41.7	14	58.3	11	44.0	14	56.0
Senior Lecturer (Regional Academic)	3	43.0	4	57.0	4	50.0	4	50.0	3	42.9	4	57.1
Reader					0	0.0	2	100.0	0	0.0	2	100.0
Lecturer (Central Academic)	5	20.0	20	80.0	4	16.0	21	84.0	4	19.0	17	81.0
Lecturer (Regional Academic)	7	87.5	1	12.5	7	77.8	2	22.2	6	66.7	3	33.3
Senior Researcher	1	25.0	3	75.0	1	33.3	2	66.7	1	25.0	3	75.0
Researcher	8	57.2	6	42.8	10	47.6	11	52.3	8	44.4	10	55.6

Table 4: Numbers of academic staff by category and gender

In March 2015, 4 out of 15 Professors were female. At 27% this compares favourably with the national HE figure of 23% (HESA first release data 2014/15). The *Engineering and Technology* sector breakdown for 2014/15 is not yet available, but the 2013/14 national data for *General Engineering* shows that women made up 9.5% of the Professoriate.

Women are well represented at Professorial and Senior Lecturer grades among Central Academic staff. However, the three year trend data (Table 4) indicates a much lower proportion of women at the Lecturer grade. The department may need to target women for any future early-career Central Academic posts to ensure that the gender balance is sustained and improved.

Action 4.11: Ensure job adverts promote the department as supportive for women, mention flexible working, and the high proportion of women at senior levels.

Action 4.12: Use 'women in science and engineering' networks to advertise jobs and actively encourage suitable women to apply.

Action 4.13: Use the department website to showcase the department's commitment and success in advancing the careers of women.

For Regional Academic staff, women are also well represented at Senior Lecturer level, and they are in the majority for Lecturer grade staff. We do not fully understand why women appear to be disproportionately appointed to the Regional Academic role but we will explore this as part of our action plan.

Action 4.14: Explore and understand why women appear to be disproportionately attracted to Regional Academic role.

Regional Academics have, in the past, found it extremely difficult to progress to Professor as there was no obligation to carry out research. The recent changes to promotion criteria described in section 5.1 (iii) whereby promotion to Professor can be obtained through a teaching or knowledge exchange route should help to alleviate this problem, and we will monitor this as part of our action plan.

Action 4.15: Encourage and monitor Regional Academic staff progression to Professorial grade.

Substantial changes to the working arrangements for the Regional Academic role will be taking place from Spring 2016 as part of major institutional restructuring and it is likely that Regional Academics will become 'homeworkers'. The department will need to monitor the changes and the

potential implications for the welfare and career progression of Regional Academics extremely carefully.

Action 4.16: Monitor the effect of major institutional restructuring, which will disproportionately impact on Regional Academic staff, on the recruitment and career progression of those staff.

SILVER APPLICATIONS ONLY

Where relevant, comment on the transition of technical staff to academic roles.

(ii) Academic and research staff by grade on fixed-term, open-ended/permanent and zero-hour contracts by gender

We do not have staff in the department employed on zero-hour contracts.

Most Central and Regional Academic staff are employed on permanent contracts, with the exception of short-term appointments to cover maternity/paternity/adoption leave and secondments. However, our research staff are mostly employed on fixed-term contracts (FTC) which coincide with grant funding or strategic funding. Fixed-term and permanent contracts by gender are shown in Table 5.

	Mar-13						Mar-14						Mar-15					
	Female			Male			Female			Male			Female			Male		
	FTC	Perm	% FTC	FTC	Perm	% FTC	FTC	Perm	% FTC	FTC	Perm	% FTC	FTC	Perm	% FTC	FTC	Perm	% FTC
Professor		3	0.0%	2	15	11.8%		4	0.0%	1	12	7.7%		4	0.0%	1	10	9.1%
Senior Lecturer (Central)		10	0.0%		16	0.0%		10	0.0%		14	0.0%		11	0.0%		14	0.0%
Senior Lecturer (Regional)		3	0.0%		4	0.0%		4	0.0%		4	0.0%		3	0.0%		4	0.0%
Reader											2	0.0%					2	0.0%
Lecturer (Central)		5	0.0%	3	17	15.0%		4	0.0%	2	19	9.5%		4	0.0%	2	15	11.8%
Lecturer (Regional)		6	0.0%		1	0.0%	1	6	14.3%		2	0.0%		6	0.0%	1	2	33.3%
Researcher	6	4	60.0%	6	3	66.6%	7	4	63.6%	10	3	76.9%	6	3	66.7%	10	3	76.9%

Table 5: Fixed-term and permanent contracts by gender and type

Given the small numbers on fixed-term contracts, it is difficult to draw conclusions, but there are no obvious gender issues.

Meetings are held with all staff on fixed-term contracts approximately 6 months, and again at approximately 6 weeks, before the end of the fixed-term. These meetings are focussed on career progression and future employment possibilities within the OU and externally. All staff who are within 6 months of the end of their contract are guaranteed an interview for any post within the OU for which they meet the essential criteria on the person specification.

(iii) Academic leavers by grade and gender and full/part-time status

Table 6 shows the number of leavers from the department by grade and gender between March 2012 and March 2015. All of this data is collected by the Staffing Team in the Faculty.

Of the Professoriate all the leavers were male, with four retirements, two leaving to take up senior posts elsewhere and one reaching the end of his fixed-term contract. The two Senior Lecturer leavers were both male retirements. There were four leavers on the Lecturer grade; of the three male leavers, one retired, one came to the end of his fixed-term contract (maternity cover) and one moved to another institution, while the female leaver was also on a fixed-term contract for maternity cover. In the time period under review there were no Regional Academic leavers. As turnover is small among lecturing staff it is difficult to draw any conclusions about gender except to say that the 12 male: 1 female ratio in the time period may reflect a gender imbalance from recruitment many years ago, given that seven of the male leavers were retirements.

Turnover of research staff is greater, with all leavers coming to the end of their fixed-term contracts. There is no gender imbalance.

	Mar-12 to Mar-13				Mar-13 to Mar-14				Mar-14 to Mar-15			
	Female		Male		Female		Male		Female		Male	
	leaver	% total	leaver	% total	leaver	% total	leaver	% total	leaver	% total	leaver	% total
Professor		0.0		0.0		0.0	4	31%		0.0	3	27%
Senior Lecturer (Central)		0.0		0.0		0.0		0.0		0.0	2	14%
Lecturer (Central)	1	20%		0.0		0.0	1	5%		0.0	2	12%
Researcher	1	13%	1	17%	3	30%	2	18%	2	25%	3	30%

Table 6: Turnover of staff by grade

(2359 words)

5. SUPPORTING AND ADVANCING WOMEN'S CAREERS

Recommended word count: Bronze: 6000 words | Silver: 6500 words

5.1. Key career transition points: academic staff

(i) Recruitment

		Mar-12 to Mar-13						Mar-13 to Mar-14						Mar-14 to Mar-15					
		Female			Male			Female			Male			Female			Male		
		applicants	shortlisted	appointed	applicants	shortlisted	appointed	applicants	shortlisted	appointed	applicants	shortlisted	appointed	applicants	shortlisted	appointed	applicants	shortlisted	appointed
Direct Appointment or Named Candidate	Professor			1	1	0													
	Senior Lecturer (Central)												1	0	1				
	Lecturer (Regional)												1	0	1				
	Researcher	1	0	1	1	0	1	1	0	1	4	0	4				3	0	3
Normal Vacancy	Professor	3	3	0	20	4	1						6	0	0	20	5	1	
	Lecturer (Central)	9	2	0	43	8	3				4	3	1						
	Lecturer (Regional)	6	3	2	11	2	0	6	2	0	34	6	1	2	2	0	8	4	2
	Researcher	8	6	4	33	10	3	13	6	2	28	10	3	17	3	0	14	4	1

Table 7: Application and appointment rates by gender and job role

The University's HR unit is responsible for advertising vacancies and they have recently commissioned research to identify ways of attracting women to senior STEM vacancies as part of the institutional Athena SWAN action plan. At departmental level we provide a role description and person specification, alongside a description of the Faculty and department, as part of the recruitment package. The OU provides guidance on the wording of role descriptions, person specifications and advertisements. All advertisements include the University's current equality and diversity statement.

Diversity is embedded in the University's recruitment and selection guidelines. An online recruitment and selection module is recommended for all staff undertaking recruitment, and is a requirement for interview panel chairs, to ensure fair selection is achieved.

The department does not keep records of who sits on interview panels, but single-gender panels are avoided, in line with University guidance that there must be at least one woman and one man on each panel. For academic positions, the 5-person panel must include a representative from another Faculty.

Table 7 shows the application and appointment rate by gender for the last three years.

Action 5.1: Ensure all staff on interview panels have undergone equality & diversity and unconscious bias training.

Action 5.2: Work towards ensuring that interview panels for academic staff have at least two women and two men.

(ii) Induction

The Open University has a comprehensive induction programme, which the department adheres to. A new staff member is given a mentor as well as being allocated to a probation supervisor. Mentoring continues throughout the probationary period.

The department's induction programme lasts for approximately three months and consists of the following stages:

- Before starting at the OU the new employee is contacted by the Departmental Administrator to ensure that any necessary resources and equipment are in place when they arrive.
- On arrival the new staff member is met and welcomed, and over the first few days they meet key people in the department and are shown around the University campus.
- In the first few weeks further meetings are held to discuss probation, training and appraisal and the new staff member works through an online induction programme.
- Over the course of a few months the new employee completes the induction programme and is invited to a University welcome session. Meetings are held regularly with the probation supervisor to agree probation targets.

All new employees are given details of University policies on equality and diversity and are required to undertake online diversity training. The range of policies relating to staff with caring responsibilities and information on nursery provision are also made available.

The induction process is monitored via completion of a pro-forma by the new member of staff and their probation supervisor. Records are maintained by the Faculty staffing team.

(iii) Promotion

There is a two-stage process for identification of potential candidates for promotions. The first stage takes place at department level. The CVs of all department staff are examined each December by the department's appraiser team, chaired by the Head of Department. Through discussions across the group, potential candidates for promotion to Senior Lecturer or Senior Research Fellow (i.e. promotion to the AC4 scale) or for promotion to Reader or Chair are identified. The potential candidates are notified and then each develops a written promotion case, under the guidance of their appraiser, the Head of Department or another senior colleague.

The second stage of the process takes place at Faculty level. For promotions to Senior Lecturer or Senior Research Fellow, the written promotion cases are evaluated by the Faculty's Academic Staff Promotions and Rewards Advisory

Group (ASPRAG) at three consecutive meetings (held from February through to May) to enable improvement and development. At the end of this process, ASPRAG recommends which should go forward to the University's Academic Staff Promotions Committee (ASPC). ASPC meets once a year in September to provide final decisions on these promotion cases.

Meanwhile, for promotions to Reader or Chair, the written promotion cases are considered by the Faculty's Chairs' Working Group (CWG), again with a focus on case development. Following an iterative process of improvement, CWG then recommends which cases should go forward to ASPC. For Reader/Chair promotions, ASPC meets three times a year to provide final decisions on cases.

Over the three year period under consideration (from March 2012 to March 2015), the criteria for promotion to Senior Lecturer or Senior Research Fellow focussed on the following four areas: a) teaching, b) research and/or scholarship, c) administration and management, and d) other work, such as public engagement. Central Academics were required to demonstrate excellence in two of the areas and strength in a third. Regional Academics were required to demonstrate excellence in two areas, with one required to be c). Researchers were required to demonstrate excellence in b) and evidence of contributions in one other area.

Meanwhile, the criteria for promotion to Reader or Chair in place during the three year period focussed on the following three areas: a) scholarly activities, b) teaching and/or student support, and c) academic service. Readership submissions required an outstanding record in two of the criteria, while Chair submissions required an outstanding record in two of the criteria, with one expected to be b), and competence in the third.

In October 2014 the University adopted a new set of academic promotions criteria which were implemented from 2015. The criteria were drafted in consultation with the University's STEM Gender Equality Working Group and will replace the criteria described above over the next two years. The new criteria make more explicit the range of eligible activities and allow for a teaching-only track for promotion to Senior Lecturer and Professor. Promotion on the teaching-only track to Professor includes a specific requirement for HEA Senior Fellowship or equivalent. The criteria also specify reductions in expectations for staff who have taken periods of parental leave, have other caring responsibilities or who work part-time, similar to the criteria applied in REF2014.

Action 5.3: Provide training for staff in understanding the new promotions criteria and preparing for promotion cases, including gaining HEA Fellowship.

	Mar-12 to Mar-13				Mar-13 to Mar-14				Mar-14 to Mar-15			
	Applications		%successful		Applications		%successful		Applications		%successful	
	F	M	F	M	F	M	F	M	F	M	F	M
Central Academic	1	3	100%	67%	1	1	100%	0%	0	3	-	100%
Regional Academic	1	0	0%	-	1	0	100%	-	1	0	10%	-
Researcher	0	0	-	-	0	0	-	-	0	1	-	100%

Table 8: Lecturer/Research Fellow to Senior Lecturer/Senior Research Fellow (AC3 to AC4) promotions in the Department, Mar 2012-Mar 2015.

Table 8 gives details of the promotions to Senior Lecturer/Senior Research Fellow in the department over the three year period from March 2012 to March 2015, broken down into three different categories of staff: Central Academics, Regional Academics, Researchers. It should be noted that the majority of the Researchers in the department are employed on external research grants held by academic (Central or Regional) members of staff. These Researchers are on fixed-term contracts and are not independent researchers, in the sense that they did not secure their own funding. While they have the same opportunity for promotion as Central Academics, Regional Academics and independent researchers, there is much less likelihood of them being able to meet the leadership aspects of the promotion criteria.

Across all three categories of staff, over the three year period there were four women promoted and six men, so the average number of promotions per year were 1.33 for women and 2.00 for men. To put this into context, the average number of women on the AC3 scale (across Central Academics, Regional Academics and Researchers) during this time was 19.67 and the average number of men on the AC3 scale during this time was 30.33. So, on average, 6.8% of eligible women were promoted per year over the period from March 2012-2015 while 6.6% of eligible men were promoted per year.

Meanwhile, over the same period, there was one unsuccessful promotion case from a woman and there were two unsuccessful promotions cases from men, so the average number of unsuccessful cases per year were 0.33 for women and 0.67 for men. So, on average, 1.7% of eligible women had unsuccessful promotion cases over the three year period while 2.2% of eligible men had unsuccessful promotion cases during the period.

From these figures, it appears that there was no gender imbalance in terms of AC3 to AC4 level promotion success rates across the department.

As the Reader/Chair promotions process is more iterative in nature, it is harder to define unsuccessful cases. However, there were four successful promotion cases during the three year period; two members of the department (both men) were promoted to Reader and two members of the department (1 woman, 1 man) were promoted to Professor. Therefore the average number of promotions to Reader/Chair per year were 0.33 for women and 1.00 for men. Again, putting this into context, the average number of women on the AC4 scale (across Central Academics, Regional Academics and Senior Researchers) during this time was 14.67 and the average number of men on the AC4 scale during this time was 21.33. So, on average, 2.3% of eligible women were promoted per year over the period from March 2012-2015 while 4.7% of eligible men were promoted per year. This does appear to suggest that there might be a gender imbalance in terms of the Reader/Chair promotions across the department. While the numbers involved are very small, and therefore the figures may not be completely representative, this is certainly something that needs to be monitored. Further evidence for a potential gender imbalance in terms of Reader/Chair promotions comes from comparing the percentage of female staff on the AC4 scale in the department (40.75%; averaged over the three year period) with the percentage of female Readers/Chairs in the department (19.6%; averaged over the three year period). For completeness, in the period since March 2015, there have been three promotions to Professor within the department (1 woman, 2 men).

Action 5.4: Monitor the appointment of staff to positions of responsibility, and ensure that women continue to be given appropriate leadership roles to assist with promotion, particularly to Professor.

It is also worth noting that all the Reader/Chair promotions during the reporting period were for Central Academic staff. Indeed, across the University, there are only one or two Regional Academic staff who have achieved promotion to Professor. This is a significant issue that it is hoped the new set of promotions criteria may help address, but it is too early to be able to comment on the success or otherwise of this.

Action 5.5: Ensure that each Regional Academic at Senior Lecturer grade has a balanced workload which permits them to spend time on academic activities appropriate for a Professorial promotion case.

(iv) [Department submissions to the Research Excellence Framework \(REF\)](#)

There were 93 staff (33 women, 60 men) in the Department of Engineering and Innovation who were eligible for consideration for REF2014 (this figure comprises all the Central Academics, Regional Academics and independent researchers in the department on the census date). Of these, 46 staff (14 women, 32 men) were actually submitted to REF2014.

Breaking this down by gender, 42.4% of the eligible women were submitted, while 53.3% of the eligible men were submitted. However, this picture changes if the Regional Academic staff are omitted. As noted elsewhere, Regional Academic staff spend half their time on line-management of Associate Lecturers. Although some Regional Academics spend the rest of their time on research, the majority choose to spend it on teaching and scholarship activities. When Regional Academic staff are removed from the calculations, 63.6% of the eligible female Central Academics/independent researchers were submitted to REF2014, while 59.3% of the eligible male Central Academics/independent researchers were submitted.

It appears therefore, at least among the department's Central Academics and independent researchers, that there was no gender imbalance in terms of the percentages of eligible female/male staff returned in REF2014.

For comparison, there were 96 department staff (27 women, 69 men) who were eligible for consideration for RAE2008 (again, this figure comprises all Central Academics, Regional Academics and independent researchers on the census date). Of these, 43 staff (8 women, 35 men) were actually submitted to RAE2008.

Looking at this data in terms of gender, 29.6% of the eligible women were submitted, while 50.7% of the eligible men were submitted. Omitting the Regional Academic staff from the calculations, 42.1% of the eligible female Central Academics/independent researchers were submitted to RAE2008, while 61.8% of the eligible male Central Academics/independent researchers were submitted.

This suggests that there may well have been a gender imbalance with respect to the percentages of eligible female/male staff returned in RAE2008.

It is difficult to pinpoint any particular action that has rectified the gender imbalance between 2008 and 2014. It is most likely a result of particular staffing appointments made during the period, with a number of women academics/researchers appointed with either very strong research track records or excellent research potential. It may also partially reflect a longer term cultural shift in attitude across both the institution itself and the HE sector in general.

SILVER APPLICATIONS ONLY

5.2. Key career transition points: professional and support staff

(i) Induction

Describe the induction and support provided to all new professional and support staff, at all levels. Comment on the uptake of this and how its effectiveness is reviewed.

(ii) Promotion

Provide data on staff applying for promotion, and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.

5.3. Career development: academic staff

(i) Training

The University provides an extensive and comprehensive programme of professional training.

The Research Career Development Team provides a programme for academic and research staff, developed as part of the Open University Concordat with Vitae. Online modules on 'Professional Skills for Research Leaders' are aimed at early-career researchers. Researchers are also encouraged to access the online Research Development Framework.

Alongside training and development for research the University has developed a recognition scheme, OpenPAD (Professional Academic Development), which is allied to the HEA's Fellowship scheme. The department actively encourages and supports academic staff who wish to apply for Fellowship of the HEA at all levels. A recent survey of academic and research staff in the department showed that of 48 respondents, one is a Principal Fellow (male), eight are Senior Fellows (2 female, 6 male) and six are Fellows (4 female, 2 male). Eleven staff are currently preparing submissions to the HEA (5 female, 6 male).

The various training and development programmes are connected via an online portal – the Academic Professional Development Framework. Records of development and training undertaken by individuals are kept and discussed as part of the Career Development and Staff Appraisal process.

The University also runs a 9-month Academic Leadership Programme for senior staff who have recently been appointed or aspire to leadership positions. The University also supports the AURORA programme aimed at female academic staff which is run by the Higher Education Leadership Foundation. To date one mid-career Regional Academic and one mid-career Central Academic have taken part in this programme from the department.

In addition to in-house training and development, several members of academic staff have undertaken leadership development through the Leadership Foundation and this has been fully supported by the department.

The department does not systematically monitor or review training undertaken by gender. There are a significant number of Senior Lecturers in the department who can be encouraged to develop leadership skills to further progress their careers to Professor.

Action 5.6: Monitor uptake of academic staff training and development in a systematic way.

Action 5.7: Encourage uptake of various leadership development programmes for Senior Lecturers.

(ii) Appraisal/development review

Career Development and Staff Appraisal (CDSA) for academic staff takes place each May. Appraisals are conducted by senior academics in the department and enable staff members to review their achievements and set objectives for the coming year. CDSA is an opportunity for longer-term career planning and to identify training and development needs. The University recently introduced two frameworks – Valued Ways of Working and the Leadership Competency Framework – which guide the CDSA process and discussions. Appraisal outcomes feed into workload planning for the following academic year and engagement with CDSA is a requirement for any rewards or promotion cases.

Each member of academic and research staff within the department is assigned an appraiser. Each appraiser usually has 4 or 5 appraisees and careful consideration is given to the appraiser/appraisee pairings with either party able to request a change at any time. Appraisal does not take place until at least a year's service has been completed. All appraisers must undergo online training before being allocated appraisees.

Engagement with CDSA is very high in the department; in 2015, 85 staff were eligible for CDSA and 82 were completed (95%) - there was no difference in the completion rates by gender. Staff informally report that they find the CDSA process rewarding, enabling them to reflect on their achievements for the preceding year and plan longer term.

(iii) Support given to academic staff for career progression

Career progression is supported firstly through the University's appraisal process outlined above and secondly through the University's promotions process outlined in section 5.1(iii). Workload planning, described in section 5.6(v), is also key to ensuring that all academic staff have a balance of teaching and research/scholarship activities.

The production of teaching material necessary to support the OU's model of distance-learning is always a team effort. Module teams, who author the teaching material, consist of 5-8 academic staff and mentoring support is always provided for inexperienced staff. The department's practice is to ensure that new academic staff join a module team as soon as they are in post to gain experience of how teaching material is produced and presented to students. Newly-authored teaching material is always peer-reviewed and supportive feedback is given to authors. New academic staff are strongly encouraged to become Associate Lecturers on modules in their discipline area.

Action point 5.8: Monitor and review the membership of module teams to ensure a gender balance.

The supervision of PhD students is carried out in teams, enabling staff who are new to supervision to be paired with an experienced colleague.

Grant applications are routinely peer-reviewed by OU colleagues, enabling post-doctoral researchers to benefit from the same support mechanisms as lecturing staff.

The OU model does not enable day-to-day contact with undergraduate students but post-doctoral researchers are encouraged to become Associate Lecturers and to apply for teaching posts at our residential schools.

Action 5.9: Promote opportunities for research staff to gain teaching experience.

(iv) Support given to students (at any level) for academic career progression

Each student on taught modules is assigned to a named Associate Lecturer (AL) who provides both face-to-face and online tutorial support as well as marking and feedback on continuous assessments. Student surveys show consistently high levels of satisfaction with the support that students receive from ALs. Telephone and email advice and support is also provided by subject-specialist Student Support Teams and advisors.

Postgraduate research students are supported in a more traditional manner. All PhD students have at least two supervisors and are allocated a third party monitor (an independent member of staff to whom they can go for advice and support). Female students are entitled to request a female supervisor or monitor if they wish. Currently 7 full-time and 11 part-time female PhD students in the department have a female supervisor or third party monitor and both postgraduate tutors are women.

The OU has a comprehensive programme of support for PhD students run via our Research School. For nearly 20 years our department has led the Doctoral Training Programme for all first year PhD students at the Open University, developed to fulfil the research training specifications of the research councils. In addition to fortnightly face-to-face workshops, the programme is delivered

through a co-published book, *Doing Postgraduate Research*, with a DVD of video and audio programmes and a supporting website. The workshops are open to full and part-time research students across the Faculties and are important in helping students build their own social and academic networks.

The Virtual Research Environment (VRE) is an online portal leading to a wide variety of resources and training opportunities both face-to-face and online. Through the VRE students can also access the Researcher Development Framework, a professional development planning tool developed with Vitae, where they can assess and record their skills and competencies.

Within the department the individual research groups have their own seminar programmes and there are monthly departmental seminars of broader interest. In addition, there are monthly research student lunchtime seminars where two students present to their peers and other members of the department. These sessions are open to remote part-time students via a webcast. Students also have the opportunity at these sessions to raise any matters of concern with the postgraduate tutors.

There is also a LinkedIn Group: *OU Engineering & Innovation Graduate Researchers and Alumni* (a closed group with access by request to the department's research secretary). Research students have the opportunity to gain teaching experience in schools via the national *Brilliant Club* charity and are encouraged to apply to teach at OU residential schools. There are currently no specific activities or support measures for female PhD students but they are encouraged to take part in the networking events for women in STEM which are organised as part of the University Action Plan.

(v) Support offered to those applying for research grant applications

All staff have the opportunity to bid for research funding via the same mechanisms. The procedure involves drawing up the bid as required by the funder, costing the bid in conjunction with research and enterprise administrative staff and submitting it via the Awards Management System (AMS) within the University. The bid is signed off via electronic signatures within the AMS, first by the Head of Department (or designated signatory e.g. Research Director), then via Finance, the Associate Dean (Research) and ultimately the Research School.

The department encourages a rigorous peer-review of all bids prior to submission to improve bid quality. Unsuccessful bids are recorded but further analysis is usually undertaken within the bid team.

	Mar-12 to Mar-13				Mar-13 to Mar-14				Mar-14 to Mar-15			
	Applications		%		Applications		%		Applications		%	
	F	M	F	M	F	M	F	M	F	M	F	M
Number of bids	19	43	31	69	16	61	21	79	6	40	13	87
Successful bids	6	17	32	39	7	22	44	36	*	*	*	*

Table 9: Departmental research bid applications and success rates by gender (*data unavailable)

Table 9 records that during 2012/13, 62 bids were made of which 23 were successful. Of these bids, 19 were made by 14 different female Principal Investigators (PIs), and 6 were successful. During 2013/14, 77 bids were made from the department of which 29 were successful; 16 were made by 10 different female PIs, with 7 being awarded. In 2014/15, records indicate that 46 bids were made; 6 originated from 5 different female PIs. At the time of writing data on success rates for the 2014/15 year were not available. (It should be noted that female Co-Investigators were also present on 3 further bids in 2012/13, and 4 in 2013/14.)

The success rates for female staff are slightly lower than for male staff in 2012/13, but higher in 2013/14. There appears to be no gender influence on success rates.

Table 9 indicates that the number of bids from male staff is greater than the number from female staff, reflecting the gender balance in the department. However, it is noticeable that the trend in number of bids from female staff is downwards over the three year period, while the number of bids from male staff has been maintained (with a peak in 2013/14). It is unlikely this difference is due to differential support or encouragement to submit research bids. However, this is a real concern and will be investigated as part of our action plan.

Action 5.10: Investigate the reasons for the fall in the number of female staff submitting grant applications.

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5.4. Career development: professional and support staff

(i) Training

Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?

(vi) Appraisal/development review

Describe current appraisal/development review schemes for professional and support staff at all levels and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.

(ii) Support given to professional and support staff for career progression

Comment and reflect on support given to professional and support staff to assist in their career progression.

5.5. Flexible working and managing career breaks

(i) Cover and support for maternity and adoption leave: before leave

Once a member of staff has informed the Head of Department that she is pregnant a conversation takes place to ensure that the support offered during pregnancy, maternity leave and on the return to work is fully understood. Staff have access to HR advisers who will explain how the University's maternity leave policy operates. Support is also available from the Faculty's staffing team.

A similar approach is taken when a member of staff informs the Head of Department that they will be adopting a child.

When it is known how long maternity or adoption leave is likely to be for a member of staff, a process is put in train to provide cover for teaching and research commitments during that period. Maternity/adoption cover is typically offered as a 6-month or 12-month fixed-term contract.

The University's Athena SWAN team recently commissioned an investigation of the key needs for those on maternity or adoption leave. The main recommendations which related to departments were to establish a 'buddy' scheme for women prior to their maternity or adoption leave (so that they can be in contact with a colleague who has recently taken such leave) and to have clear planning for Keeping-in-Touch (KIT) days.

Action 5.11: Establish a buddy scheme for individuals prior to maternity or adoption leave.

Action 5.12: Head of Department and member of staff on maternity or adoption leave to agree clear plan for KIT days.

(ii) Cover and support for maternity and adoption leave: during leave

Typically women on maternity or adoption leave are absent from the workplace for 6-9 months, when accumulated annual leave is included.

The Head of Department agrees a workload plan, ensuring that cover is in place for when the individual stops work, and that clarity is obtained on which areas of work she will resume. The focus of any detailed workload planning is to ensure an alignment with career development objectives and that a balance of teaching and research/scholarship activity is maintained on her return to work.

Keeping-in-Touch days are agreed with the staff member and have been used by the small number of women taking maternity and adoption leave in the department over the reporting period.

We have recent experience of adoption leave, which was more difficult to plan for as there was no clear date for the adoption, requiring cover to be put in place at short notice.

Two women who recently returned from maternity and adoption leave provided the following quotes:

“From May 2014 - November 2014 I took adoption leave which enabled me to bond with my newly adopted baby daughter. The adoption leave period was extended by two weeks for annual leave to have a holiday with my daughter and husband. Whilst on adoption leave I also took advantage of the KIT days which allowed me to get back up to date with my role and any new additions or policies within the role.”

“I took my maternity leave in a period when I was leading a couple of new research projects. The department was very supportive in helping me manage my maternity leave and maintain an appropriate balance between work and home life. I returned to work after 6 months due to my research commitments but I was able to work flexibly part-time using my accumulated annual leave.”

(iii) Cover and support for maternity and adoption leave: returning to work

The department is fully committed to ensuring that any member of staff returning from maternity or adoption leave is fully supported to continue to develop as an academic. This has been achieved to date on an individual basis as we have had very few members of the department on maternity/adoption leave.

Action 5.13: Work with staff on an individual basis to ensure a smooth return to work and enable them to pick up their research/scholarship and teaching as appropriate for career progression.

(iv) Maternity return rate

The number of women taking maternity leave during the period under review has been very low, as shown in Table 10. There has been a 100% return rate to full-time employment in each case.

	Mar-12 to Mar-13		Mar-13 to Mar-14		Mar-14 to Mar-15	
	Number	%return	Number	%return	Number	%return
Central Academic	0	n/a	0	n/a	1	100
Regional Academic	1	100	0	100	0	n/a
Researcher	1	100	0	n/a	0	n/a

Table 10: Female departmental staff taking maternity leave.

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Provide data and comment on the proportion of staff remaining in post six, 12 and 18 months after return from maternity leave.

(v) Paternity, shared parental, adoption, and parental leave uptake

For the period under review there has been one formal uptake of paternity leave and no formal uptake of shared parental leave.

There has been a single incidence of adoption leave in 2014 by a female Regional Academic.

We do not have information on staff who could have taken paternity or adoption leave but who chose not to do so.

The University has introduced a shared parental leave policy, enabling staff with caring responsibilities for babies or newly adopted children to share up to 50 weeks' leave and up to 37 weeks of shared parental pay. However, as this is a newly introduced policy there has not been any take-up in the department to date.

Action 5.14: Ensure all staff are aware of the statutory entitlement to paternity, shared parental, adoption, and parental leave.

(vi) Flexible working

The University and the department have a very strong culture of flexible working. Most academic and research staff are employed on a full-time basis but Table 11 shows the breakdown by gender and role of those staff working part-time. Their contracts vary from 0.25 to 0.90 FTE.

Role	Female	Male
Professor	1	1
Central Academic	0	1
Regional Academic	1	0
Researcher	4	0

Table 11: Number and gender of staff on part-time contracts

During the period under review, all requests to work part-time have been agreed and supported.

Informal flexible working is practised by all members of the department. As the Open University operates a distance-learning model and does not have a lecture timetable there is a great deal of flexibility around working hours. Staff can frequently work from home and at hours which fit around commitments such as child-care, other caring responsibilities and school hours. A flexible working culture has evolved as a consequence of the distributed nature of the University and its staff. Regional Academic staff are able to join meetings remotely using the University's 'Skype for Business' system. Staff are issued with laptop computers on request and can access University systems remotely using a 'virtual private network' (VPN) connection.

In 2014 the University introduced a formal 'agile working' policy for all categories of staff enabling them to request flexible working for a variety of circumstances. To date uptake among academic staff across the University has been low and there have been no requests for agile working in the department to date.

Action 5.15: Ensure that all staff are fully aware of the 'agile working' policy.

(vii) Transition from part-time back to full-time work after career breaks

No specific policy exists to support staff moving from part-time to full-time roles after a career break. However, the University has always been supportive of staff taking this action. The agile working policy specifically recognises that part-time arrangements may not be permanent and a return to full-time work will always be an option within the annual appraisal system. There are specific policies in place to avoid disadvantaging those whose research outputs are reduced, through career breaks or part-time working, in promotion cases and REF submissions.

5.6. Organisation and culture

(i) Culture

The department actively promotes a culture of mutual respect amongst colleagues regardless of gender. We adhere to all University policy and guidance relating to equality and diversity and do not tolerate inappropriate behaviours.

There is an annual 'Pulse' survey to monitor staff perceptions of institutional culture. The results can be broken down into departments by gender, enabling departments to identify any issues around equality and inclusivity. The survey utilises a 5-point scale with 5 being 'most satisfied'. Selected results are shown in Table 12.

The most recent survey indicated that staff in the department were very satisfied with their colleagues, with women giving a slightly higher score than men. Similarly, the figures for satisfaction with peer support reflect a supportive culture. However, while the department strives to schedule meetings considerately (section 5.6(vi)) and supports flexible working (section 5.5(vi)), the average score for work-life balance is lower for women than men. Although the difference between work-life balance scores is not statistically significant, we are aware that we must keep this under review.

Measure	Female average score	Male average score
Satisfaction with colleagues	4.67	4.14
Peer support	4.53	4.51
Work-life balance	3.23	3.81

Table 12: Selected results from the 'Pulse' survey.

Action 5.16: SAT to review annually the results of the 'Pulse' survey to identify and act on any gender specific issues.

As a department we are committed to addressing the negative consequences of short-term contracts and we continue to make the case for permanency for such staff.

We believe that the department culture benefits from having a good gender balance within the leadership team, as shown in section 5.6(iii). Women have taken up a number of senior positions providing role models for more junior staff.

(ii) HR policies

The department follows OU policy and procedures on issues such as bullying and harassment, and takes advice from HR as appropriate. Where staff have a grievance or are subject to disciplinary procedures this is progressed through

the Head of Department, supported by Faculty administration and a dedicated HR contact. In the last three years we have only had one staff grievance case and one disciplinary case and we are not aware of any discrepancies between policy and practice.

The application of these policies is part of the Head of Department induction.

(iii) Representation of men and women on committees

	Mar-12 to Mar-13			Mar-13 to Mar-14			Mar-14 to Mar-15		
	F	M	% F	F	M	% F	F	M	% F
Department Management Team	4	4	50	6	4	60	6	4	60
Design and Engineering Programme Committee	7	8	47	7	9	44	8	7	53
Postgraduate Technology and Computing Programme Committee	6	9	40	7	10	41	9	10	47
Chairs' Working Group (CWG)	4	5	44	4	5	44	4	5	44
Academic Staff Promotions & Rewards Advisory Group (ASPRAG)	5	6	45	5	4	55	5	4	55

Table 13: Male and female representation on key departmental and programme decision-making committees.

As evidenced in Table 13, membership on decision-making committees within the department and at Faculty level is fairly equal for men and women. The constitution of the committees is dictated to a large extent by University requirements, and the mechanisms for determining membership vary.

The Departmental Management Team and Programme Committees draw on staff with particular areas of responsibility, including Head of Department (HoD), Programme Director (PD), Director of Teaching, Research Director, and Student Support Team Lead. In some cases additional members may be co-opted to ensure that particular constituencies are included. For example, the Design and Engineering Programme Committee that governs our undergraduate teaching always includes at least one Regional Academic representative.

There are several mechanisms for appointment to senior roles in the department. The HoD and PDs are Faculty-appointed positions with an open application process, against a pre-determined person specification. Most of the other roles are within the department's remit and have less formal appointment processes. The Director of Teaching, Qualification Lead and Student Support Team Lead roles have only recently been established. A schematic of the Department Management Team is shown in Figure 13 demonstrating a good balance of men and women in lead roles.

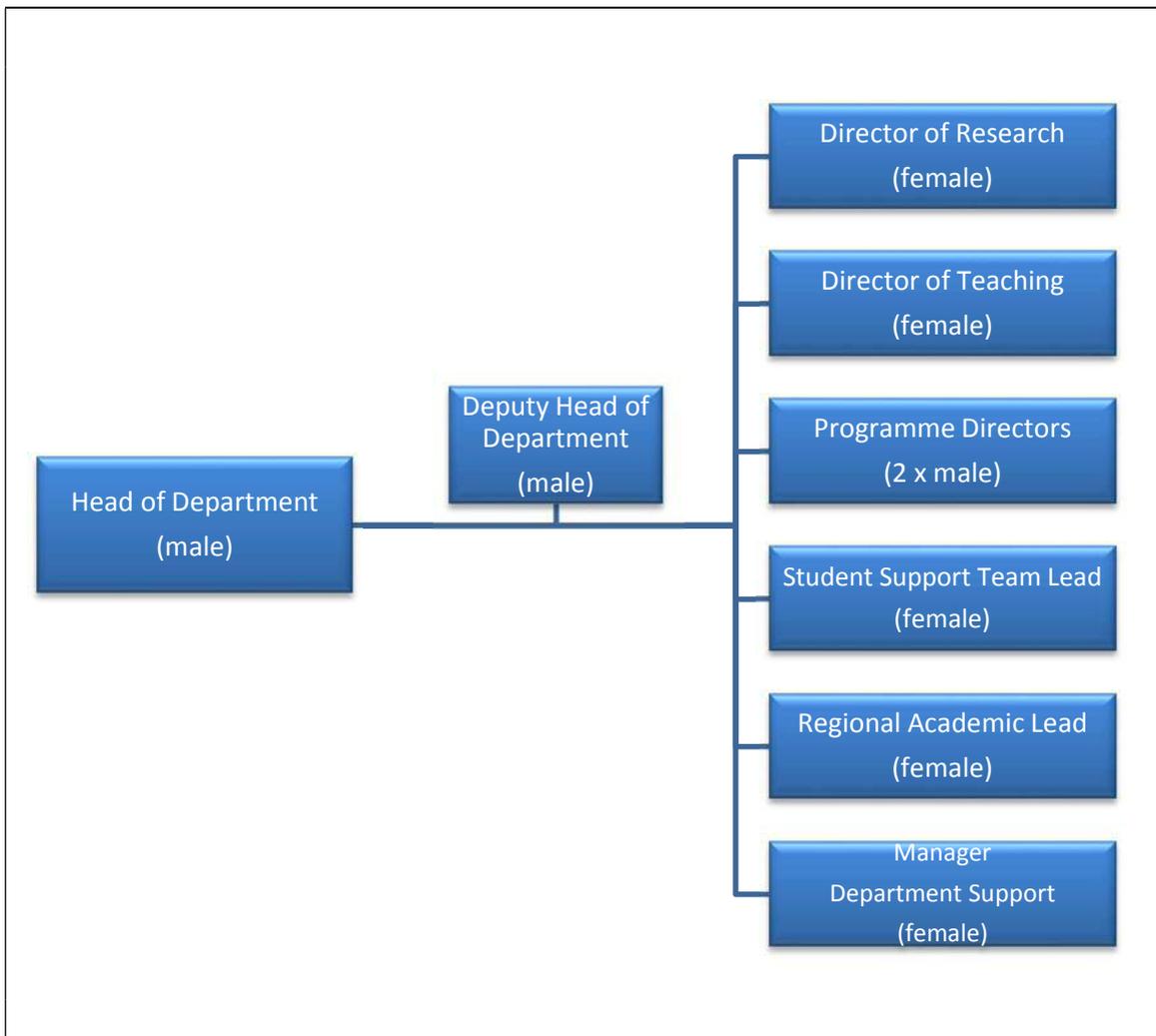


Figure 13: Department Management Team structure

The Chairs' Working Group (CWG) and Academic Staff Promotions and Rewards Advisory Group (ASPRAG) are Faculty groupings. CWG is chaired by the Dean and has a membership comprising two or three Professors from each department, dependent on the size of department. The departmental representatives are chosen through discussions with the HoD, who will try to ensure that there is at least one male and one female nominee (this is currently the case). Membership rarely changes unless a Professor leaves. ASPRAG includes the HoD (currently male) and one other departmental representative (currently female), nominated by the HoD.

Although the gender balance on key departmental and programme decision-making committees does not give cause for concern, it is apparent that the mechanisms for appointment to senior roles are not always transparent, and not always subject to regular review.

The department recently carried out a survey of staff to obtain a picture of committee membership overall. The response rate was 53%. 23 women responded and 31 men. The results are summarised in Table 14.

	Female	% of female respondents	Male	% of male respondents
OU committee membership	12	52	12	39
External committee membership	6	26	12	39

Table 14: Snapshot of committee membership (January 2016)

The picture which emerged is that female staff are more likely to be members of internal university committees and male staff are slightly more likely to be members of external committees. This is something that we must monitor carefully to ensure that women do not suffer internal 'committee overload'.

Action 5.17: Establish an up-to-date list of committee membership for department staff to enable monitoring of potential internal 'committee overload'.

(iv) Participation on influential external committees

We take this question to refer to committees which are external to the department.

University committee membership is something which is frequently part of an individual's role within the department. For example, the Programme Directors

(both male) and the Director of Teaching (female) are all members of the Faculty's Teaching Committee. The Director of Research (female) is a member of the University's Research Committee. The department also has four members of staff on the University's Senate (3 men and 1 woman) who are elected by the Faculty.

Staff are encouraged to become committee members as part of their CDSA process.

As stated in section 5.4(iii) more men than women are represented on committees which are external to the OU.

Action 5.18: Encourage female staff to seek opportunities to enhance external profile, via representation on national and international committees and bodies.

(v) Workload model

Workload planning is informed by Faculty, programme and department objectives as well as peer support through appraisals and a shared responsibility for teaching and research commitments. CDSA outcomes inform workload planning for the coming year. It is the Head of Department's responsibility (supported by the Director of Teaching, the Director of Research and appraisers) to ensure that individuals have time to carry out activities which are beneficial to their career progression.

Senior staff take responsibility for appraisals and meet twice a year to review workload, staff development and potential promotions and rewards cases. This group has oversight of variations in workload and staff development needs and feeds back to individual staff.

Preliminary workload plans for the following year (August-July) are completed in May and days allocated to different tasks are recorded on the Faculty's Academic Workload Management (AWM) system. Actual days from the previous year are also recorded on this system. Research and Scholarship plans are reviewed by the Director of Research and the Scholarship Lead to ascertain any funding or development requirements. A similar review is carried out by the Director of Teaching to ensure that all teaching commitments are covered.

The monitoring of gender distribution of workload is carried out annually at Faculty level by analysing 'actual' workloads from the previous year and this is reported to the STEM Gender Equality Working Group. The department has recently carried out its own analysis to ensure a fair distribution of research and teaching time. To date we have not found any evidence that women are taking a higher teaching load than male staff.

Action 5.19: Analyse workload distribution by gender at department level to ensure equitable balance.

(vi) Timing of departmental meetings and social gatherings

Department meetings and away-days are scheduled between 10:00 and 16:00 to enable those with caring responsibilities to attend. Most meetings involve Regional Academic staff who may have to travel considerable distances, so are planned well in advance to enable staff to make appropriate travel arrangements. We also use the University's 'Skype for Business' system to enable staff to join meetings remotely, allowing them to access presentations and contribute to discussions.

At least one of the department away-days involves a social event (e.g. Christmas lunch) which is timed to allow as many people as possible to attend.

Research seminars are held at lunchtimes and there are opportunities to socialise before or after these events.

The department pays particular attention to the timing of meetings and they are adjusted to accommodate the changing needs of staff members.

(vii) Visibility of role models

We aspire to ensuring appropriate gender representation at all departmental events.

We have a monthly departmental seminar series to which both internal and external speakers are invited. There is no process in place currently to ensure a gender balance amongst the speakers but analysis of the last year shows equal numbers of female and male presenters (5 female, 5 male).

Action 5.20: Actively ensure the gender balance of speakers at the departmental monthly seminar series is maintained.

We are currently in the process of updating the department's website and are endeavouring to use images which reflect our diversity and avoid stereotypes.

Prospective students access the University websites, rather than the department website, as registration is done at University level. We will continue to input to these websites via the University Communications Team and actively work with them to ensure that any images reflect the diversity of our student population.

Action 5.21: Use the department website to showcase the department's commitment and success in advancing the careers of women.

Action 5.22: Increase the visibility of women role models in publications, advertisements and websites relating to department qualifications, research and other activities.

(viii) Outreach activities

The University monitors outreach activity via the Higher Education Business and Community Interaction survey (HEBCIS). The return for 2014-15 shows that 19 departmental staff were involved in outreach activities ranging from public

lectures to schools' talks. Broadly reflecting the gender balance of the department, 12 men and 7 women took part in this activity covering all grades of staff as shown in Table 15.

Role	Female	Male
Professor	1	6
Senior Lecturer	2	1
Lecturer	1	5
Senior Researcher	1	0
Researcher	2	1

Table 15: Outreach activity by gender and role in 2014/15

The data include Regional Academic staff who organise and participate in a diverse range of external events across the regions and nations of the UK (e.g. the annual Wigtown Book Festival in Scotland).

The Open University has a strong media presence through the Open Media Unit and department staff regularly contribute as academic advisers to BBC programmes. Department members are also encouraged to develop MOOCs. Media training is available for all staff and the gender balance is monitored and recorded at Faculty level.

All external activity of this kind is recognised in workload planning under a 'knowledge exchange' category and is strongly encouraged for promotion cases.

Action 5.23: Monitor outreach activity to ensure a gender balance at such events.

(6132 words)

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6. CASE STUDIES: IMPACT ON INDIVIDUALS

Recommended word count: Silver 1000 words

Two individuals working in the department should describe how the department's activities have benefitted them.

The subject of one of these case studies should be a member of the self-assessment team.

The second case study should be related to someone else in the department. More information on case studies is available in the awards handbook.

7. FURTHER INFORMATION

Recommended word count: Bronze: 500 words | Silver: 500 words

Individual members of the department have been involved in a number of external networks and initiatives related to women in engineering, for example the Women's Engineering Society. We participate in National Women in Engineering Day (NWED) and are organising our own female student conference to coincide with NWED in 2016. Several of our SAT members (and departmental colleagues) are involved in other equality related work, for example to support disabled students through developing and implementing innovative learning technologies. One of our Regional Academic staff is a founding member of the National Association of Disabled Staff Networks (NADSN).

(97 words)

Total word count: 10473 words

8. ACTION PLAN

The action plan should present prioritised actions to address the issues identified in this application.

Please present the action plan in the form of a table. For each action define an appropriate success/outcome measure, identify the person/position(s) responsible for the action, and timescales for completion.

The plan should cover current initiatives and your aspirations for the next four years. Actions, and their measures of success, should be Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

See the awards handbook for an example template for an action plan.



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The Open University's Department of Engineering and Innovation Athena Swan Bronze Application Action Plan.

 Actions which are a priority are highlighted in blue.

Section Reference	Planned action/ objective	Rationale (i.e what evidence is there that prompted this action/ objective?)	Key outputs and milestones	Timeframe (start/end date)		Person responsible (include job title)	Success criteria and outcome
3. The Self-Assessment Process							
3.1	Establish an annual cycle of reporting at department meetings on Athena SWAN/ gender equality issues.	Not currently done and aligns with overall Athena SWAN actions for the University and Faculty.	Department is informed, and involved in the Athena SWAN initiative. Issues of equality and diversity are routinely considered as part of all decisions.	April 2016	April 2017 and review annually	SAT Chair and Head of Department	All staff able to articulate issues and appropriate actions taken.

3.2	Highlight and maintain the visibility of the SAT and ensure succession planning for team members.	Gender equality issues are prioritised within a small group. Succession planning essential.	SAT membership reviewed annually and changed as appropriate. New Chair inducted.	April 2016	April 2017	Head of Department and SAT Chair	SAT membership refreshed to maintain committed team. New SAT Chair in place by April 2017.
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A Picture of the Department

Section 4.1: Students

4.1	Determine whether the differences in pass rates for entry level modules by gender are statistically significant, and if so, investigate reasons for the differences.	Improvement in pass rates for all students ensuring increased progression to further study.	Report on reasons for differential pass rates by gender shared with qualification teams.	October 2017	October 2018	SAT Chair working with Qualification Leads	Pass rates improved for entry level modules. More students progressing to next stage of study.
4.2	Investigate potential gender imbalance of withdrawal from study.	Data appears to show that women are withdrawing from study at a higher rate than men.	Report of withdrawal pattern by entry date. Analysis of withdrawal survey by gender to determine if there are any reasons	October 2017	October 2018	SAT Chair working with Faculty data interpreter	Report delivered to SAT and shared with Student Support Team. Students at risk of

			disproportionately affecting women.				withdrawal identified and supported. Fewer students withdrawing from study unnecessarily.
4.3	Investigate decrease in proportion of female students at L1.	Data shows that the proportion of female students at L1 has decreased since October 2012.	Qualification Leads take ownership of action and produce joint report.	October 2017	October 2018	Qualification Leads	Reasons for decrease in female students articulated and understood and communicated to Faculty. Review of curriculum offer by qualification.
4.4	Carry out investigation into female student intentions at Level 1 through an online survey,	Such qualitative data is not currently collected routinely even at university level,	Project report disseminated to department, Faculty and University, leading to better	October 2017	March 2018	Project leader and resource allocated from the department. Project	Robust evidence with which to plan further actions.

	together with focus group and interviews.	but it is known that students often change their module and qualification plans.	understanding of reasons for reduced progression to higher levels of study and identification of possible solutions.			managed via eSTEEem (the Faculty group which oversees STEM pedagogical scholarship).	
4.5	Organise conference for women students on engineering qualifications to coincide in June 2016 with National Women in Engineering Day (NWED).	Proportions of women on engineering qualifications are low and students may feel isolated.	Conference organising team formed. Travel bursaries established. Keynote speakers identified.	April 2016	June 2016	SAT Chair and conference organising team	Good attendance at conference. Network of female engineering students established. Conference becomes an annual event in line with NWED.
4.6	Develop information, advice, guidance (IAG) and training (including case studies) on gender issues for use with Student Support Team, Marketing and Regional Academic staff who	These frontline staff do not currently provide proactive support for potential students and only limited support for current students.	New and potential women students are fully informed about their future studies and choices. They feel confident about enrolling for	Dec. 2017	Dec. 2018	Student Support Team Lead and Director of Teaching	IAG document written and SST training event held. Proactive guidance issued for

	advise potential Engineering and Innovation students at enrolment and during their studies.	They may be unaware of gender issues affecting study.	Engineering and Innovation courses.				female student enquirers.
4.7	Investigate why the postgraduate curriculum appears to be more attractive to women than the undergraduate curriculum.	Data shows that the proportion of women on the postgraduate curriculum is higher than undergraduate curriculum.	Better understanding of demographic of students on postgraduate courses. Report informing curriculum strategy for the department.	Nov. 2016	April 2017	Director of Teaching and Programme Directors	Report informs undergraduate and postgraduate curriculum strategy. Attractive curriculum offer developed over 5-year department plan.
4.8	Monitor and report applications and acceptance rates for postgraduate research students by gender.	Data not previously collected and analysed at department level and aligns with university Equality and Diversity strategy.	Applications and acceptances reported annually to Department Management Team and shared with department as a whole. Any gender issues are identified.	Sept. 2016	Dec. 2017 and annually	Director of Research with support from Department Office Manager.	Clear picture of applications and acceptance rates by gender and any issues identified. Gender balance of PhD

							students maintained and improved.
4.9	Ensure records held in the department for completion of research degrees are accurate and up-to-date to enable monitoring of differences between part-time and full-time completion rates.	Current records of completion are incomplete, do not distinguish between full and part-time students and are held in different places.	Systematic recording of completion rates by gender and mode of study. Annual report issued to department.	Sept. 2016	Sept. 2017 and annually	Director of Research with support from Postgraduate Tutors and Department Office Manager	Robust system for recording completion of research degrees developed. Annual report to Department Management Team.
4.10	To carry out an investigation to identify the scale and nature of student transition from undergraduate to postgraduate study and research within the department.	Such data is not currently collected routinely, even at university level, and so without it we cannot know if there are gender issues to address.	Project report disseminated to department, Faculty and University, leading to deeper understanding of transition from undergraduate to postgraduate study and research.	March 2017	Dec. 2017	Project leader and resource allocated from the department. Project is managed via eSTEEeM.	Robust evidence with which to plan further actions and inform 5-year curriculum strategy. Increased number of students progressing from undergraduate to

							postgraduate study.
Section 4.2: Staff							
4.11	Ensure job adverts promote the department as supportive for women, mention flexible working, and the proportion of women at senior levels.	Job adverts currently offer limited information about support for women.	Text developed for job adverts promoting department as supportive environment for women. Text used in all academic and research job adverts.	April 2016	April 2017 and review	Head of Department	Increase in number of female applicants applying for posts, particularly early career women.
4.12	Use 'women in science and engineering' networks to advertise jobs and actively encourage suitable women to apply.	Lower proportion of female Central Academics at Lecturer grade suggests the department needs to recruit early career female staff to maintain and improve gender balance.	Increase in number of female applicants for Central Academic posts.	April 2016	April 2017 and review	SAT Chair working with Head of Department	Gender balance of department staff is maintained and improved. More female staff adds to the diversity, and improves culture of the department.

4.13	Use the department website to showcase the department's commitment and success in advancing the careers of women.	As above.	Increase in number of female applicants for posts.	August 2016	August 2017	SAT Chair supported by Department Management Team	Women featuring prominently on the department website. More applications from women for academic and research posts.
4.14	Explore and understand why women appear to be disproportionately attracted to Regional Academic role.	Data shows that the majority of Regional Academic staff are women.	Conduct survey and interviews with all Regional Academic staff in the department to establish if a link exists between the role and gender.	April 2017	July 2017	Regional Academic Lead	Report produced which informs department 5-year staffing plan. Deeper understanding of Regional Academic role and whether it facilitates female entry to academic posts.

4.15	Encourage and monitor Regional Academic staff progression to Professorial grade.	Promotion criteria changed in 2015.	Annual report of promotions to Professorial grade.	October 2016	October 2017 and review	Head of Department	<p>CDSA appraisers fully informed on Professorial promotion route for Regional Academic staff.</p> <p>More Regional Academic staff promoted to Professor.</p>
4.16	Monitor the effect of major institutional restructuring, which will disproportionately impact on Regional Academic staff, on the recruitment and career progression of those staff.	Major institutional restructuring implemented from August 2016. As most Regional Academic staff are women this is likely to have a disproportionate effect.	Interviews held with Regional Academic staff at regular intervals in the first two years following the restructure.	Sept. 2016	Sept. 2018	Regional Academic Lead supported by Head of Department and Associate Dean (Regions and Nations)	<p>Regional Academic staff are fully supported during the transition to 'homeworking' and the effects are fully understood.</p> <p>Regional Academic staff positive about new structures.</p>

Supporting and advancing women's careers

Section 5.1 Key transition points: academic staff

5.1	Ensure all staff on interview panels have undergone equality & diversity and unconscious bias training.	It is only necessary for the Chair to undergo this training but we would like to go beyond this requirement and make staff aware of unconscious bias.	Rolling programme of training for all academic and research staff.	May 2016	May 2018 and review	Head of Department with support from CDSA appraisers	All staff aware of unconscious bias. Robust interview panels and fair selection.
5.2	Work towards ensuring that interview panels for academic staff have at least two women and two men.	University policy states panels must have at least one man and one woman. We would like to strive to ensure a better gender balance.	Future interview panels have better gender balance.	May 2016	May 2018 and review	Head of Department	Gender balanced interview panels. Robust interview panels and fair selection.
5.3	Provide training for staff in understanding the new promotions criteria and preparing for promotion cases, including gaining HEA Fellowship.	New promotion criteria require HEA Fellowships in some cases.	Promotion criteria successfully communicated to all staff. Reviewed annually during CDSA.	Sept. 2016	Sept. 2017 and annually	Head of Department supported by CDSA appraisers	All staff aware of revised promotion criteria. More staff have Fellowship of

							HEA at various levels.
5.4	Monitor the appointment of staff to positions of responsibility, and ensure that women continue to be given appropriate leadership roles to assist with promotion, particularly to Professor.	Few women promoted to Professor in period under review.	Female staff made aware of opportunities for leadership roles. Gender balance of staff in leadership roles within the department.	August 2016	August 2017 and review	Head of Department supported by Department Management Team	More women in leadership roles. Women successful in promotion to Professor.
5.5	Ensure that each Regional Academic at Senior Lecturer grade has a balanced workload which permits them to spend time on academic activities appropriate for a Professorial promotion case.	No Regional Academic staff promoted to Professor.	Workload plans allow space for appropriate academic activities. All Regional Academic staff workload plans reviewed at least annually.	May 2016	May 2017 and review	Head of Department supported by CDSA appraisers	Regional Academic staff engage with appropriate academic activities. Regional Academic staff promotions to Professor.
Section 5.3 Career development: academic staff							
5.6	Monitor uptake of academic staff training and development in a systematic way.	No routine recording of training exists at department level.	System established for recording staff training activity.	May 2016	May 2017 and review	Department Office Manager	System embedded in business as usual.

							Clear picture of staff training and gaps identified.
5.7	Encourage uptake of various leadership development programmes for Senior Lecturers.	Take-up of leadership development programme is currently low.	Leadership programmes advertised to all Senior Lecturers. At least one member of department attending such programmes per year.	May 2016	May 2018 and review	Head of Department supported by CDSA appraisers	Senior Lecturer uptake of leadership programmes. More department staff in Senior Leadership positions.
5.8	Monitor and review the membership of module teams to ensure a gender balance.	Gender balance is not currently taken into account when forming module teams.	Module team membership shared with whole department. Module team membership reviewed annually.	July 2016	July 2017 and review	Director of Teaching	More opportunity for staff to join module teams. Module team membership gender balanced.
5.9	Promote opportunities for research staff to gain teaching experience.	Distance-learning environment means little opportunity for	Residential school and Associate Lecturer opportunities	July 2016	July 2017 and review	Director of Research and Director of Teaching	More research staff tutor at residential

		research staff to gain teaching experience.	promoted to research staff at regular intervals.				school and/or become ALs. Researchers better equipped for academic careers.
5.10	Investigate the reasons for the fall in the number of female staff submitting grant applications.	Evidence suggests the number of women submitting grant applications is falling.	Review of evidence. Quarterly reports of bidding activity submitted to Department Management Team.	May 2016	May 2017 and review	Director of Research	Quarterly reports to Department Management Team. Early intervention to adjust workloads and enable time to write bids. Bid rate improves among female staff.
Section 5.5 Flexible working and managing career breaks							
5.11	Establish a buddy scheme for individuals	Staff are able to talk to someone who has recently experienced	Register of potential 'buddies' established.	May 2016	May 2018	SAT Chair	Sufficient staff volunteering as 'buddies'.

	prior to maternity or adoption leave.	maternity or adoption leave.			and review		Staff better supported before maternity or adoption leave.
5.12	Head of Department and member of staff on maternity or adoption leave to agree clear plan for KIT days.	Better support for staff on maternity or adoption leave.	Understanding of function of KIT days.	May 2016	May 2018 and review	Head of Department	Staff informed of function and purpose of KIT days. Staff on maternity or adoption leave feel confident on return to work.
5.13	Work with staff on an individual basis to ensure a smooth return to work and enable them to pick up their research/scholarship and teaching as appropriate for career progression.	Maternity and adoption leave is an infrequent occurrence; staff individual circumstances fully appreciated.	Agreed plan for individual staff. Cover for teaching and/or research in place.	May 2016	May 2018 and review	Head of Department	Staff confident to return to work after maternity or adoption leave. Career trajectory maintained.

5.14	Ensure all staff are aware of the statutory entitlement to paternity, shared parental, adoption, and parental leave.	Effective communication to staff on existing policy and changes.	Staff know where to find information on policies. Policy changes communicated when they occur.	May 2016	May 2018 and review	Head of Department	Staff aware of choices with respect to parental leave. Increased take-up of such leave.
5.15	Ensure that all staff are fully aware of the 'agile working' policy.	As above.	As above.	May 2016	May 2018 and review	Head of Department	Staff feel confident about requesting a change to their working pattern. Better work-life balance for staff.
Section 5.6: Organisation and culture							
5.16	SAT to review annually the results of the 'Pulse' survey to identify and act on any gender specific issues.	Issues identified in the survey not currently reviewed by gender.	'Pulse' survey made available to department by gender. Annual review.	Oct. 2016	Oct. 2017 and annually	SAT Chair with support from OU Institute of Educational Technology	Issues affecting one gender significantly more than another are identified and acted upon.

							'Pulse' survey reveals fewer gender differences.
5.17	Establish an up-to-date list of committee membership for department staff to enable monitoring of potential internal 'committee overload'.	No systematic method of collecting this data at present.	Accurate list of committee membership.	May 2016	May 2018 and review	Departmental Office Manager working with CDSA appraisers	Accurate list available for all staff to view. Individual 'committee overload' identified and resolved.
5.18	Encourage female staff to seek opportunities to enhance external profile, via representation on national and international committees and bodies.	Internal survey revealed that female staff less likely to be members of external committees.	CDSA appraisers ensure that female staff are aware of opportunities. External opportunities communicated to staff.	May 2016	May 2018 and review	Head of Department with support from CDSA appraisers	More women staff become members of external committees. Enhanced career trajectory for female staff.
5.19	Analyse workload distribution by gender at department level to ensure equitable balance.	Balanced workload enhances career development of individual staff.	Gender analysis of departmental workload plans. Annual cycle implemented.	June 2016	July 2016 and review annually	Head of Department with Director of Teaching and Director of Research	Teaching and research time not biased by gender. Staff have balance of

							teaching and research or scholarship in their workload plans.
5.20	Actively ensure the gender balance of speakers at the departmental monthly seminar series is maintained.	Equal gender balance evidenced.	Seminar series speakers reviewed regularly. 6-monthly cycle of review.	August 2016	Feb. 2017 and review	Director of Research	Men and women represented equally as speakers.
5.21	Use the department website to showcase the department's commitment and success in advancing the careers of women.	Department's commitment to advancing the careers of women is publicised to internal and external audiences.	Case studies published on department website.	Jan. 2017	Jan. 2018 and review	Website Lead	A bank of case studies established which can be published as appropriate. Increase in women applicants for posts in the department.
5.22	Increase the visibility of women role models in publications,	Department's commitment to advancing the	Case studies published in	Jan. 2017	Jan. 2018	Website Lead, Programme Directors	Case studies of role models visible in

	advertisements and websites relating to Engineering and Innovation qualifications, research and other activities.	careers of women is publicised to internal and external audience. Students see positive role models.	appropriate publications. Refreshed on an annual basis.		and review		multiple publications. Increased visibility of role models encourages potential staff and students.
5.23	Monitor outreach activity to ensure a gender balance at such events.	Monitoring of gender balance not currently undertaken,	Annual report produced to coincide with HEBCIS return.	August 2016	August 2017 and review	Head of Department with support from Department Management Team	Gender balance at outreach events recorded. Steps taken to rectify any gender imbalance identified by ensuring that opportunities for outreach activities communicated effectively.