Athena SWAN Bronze department award application

Name of university:	Brunel University London
Department:	Computer Science
Date of application:	April 2016
Date of University Bronze Award:	April 2012
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29 April 2016

Dear Athena SWAN team,

I am very pleased to give my full support to the Department's application for the Athena SWAN Bronze Award. This project is important to me on a personal level and a successful outcome would be a great legacy from my tenure as Head of Department (2013-16). Athena SWAN encapsulates values and goals that I believe are fundamental to any happy, equitable and decent academic department. With the support of the Department and College Dean's commitment I am confident that these values and goals will be carried forward once my tenure ends.

Three factors in particular have spurred me into action. First, our long term imbalance between male and female student numbers especially at undergraduate level. Although this is a national phenomenon, it is no less frustrating for that. Second, I became aware of University data indicating that men are more likely to apply for promotion than women, however, women are more likely to be successful. Third, and related, women are significantly under-represented at reader and professorial levels. Thus, I've been an active member of the self-assessment team (SAT) since its inception.

One of the areas I have sought to address has been making our work-allocation more equitable. Our application provides an opportunity to further examine workloads in terms of gender balance and for any unconscious biases.

Central to our application is the leadership of Dr Annette Payne, who generously volunteered for the role. With Annette's lead, we established a mixed-gender SAT that is representative of our full staff profile. In the last 19 months, the SAT reviewed our current position, surveyed the departmental community (with a response rate of over 70%), analysed outcomes, and identified appropriate SMART actions.

I believe that irrespective of our application outcome, the Athena SWAN process has already been an immensely useful experience for our department. To aid succession planning, Athena SWAN activities will become a visible part of workload-allocation and we are securing the support of the next Head of Department (2017 onwards).

Since joining Brunel in 2005, I have been struck by the sense of collegial support within the Department and felt privileged to be part of such a welcoming community. Maintaining and growing this community has been a high priority and I strongly believe that our Athena SWAN process will be a key element in continuing this journey. The British Computer Society's recent commendation of our efforts to support female undergraduate students as a national example of Best Practice is also a great encouragement.

Developing this application has been a challenging yet valuable experience for us and is setting in train long-term changes of attitude as a process that moves beyond platitudes to proper scrutiny and evidence-based action for the future.

If that proves to be the case I will be extremely happy.

Yours sincerely

Professor Martin Shepperd

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LIST OF ABBREVIATIONS

AP	Action Plan
BC	Business Computing degree programme
BME	Black and Minority Ethic

CEDPS	College of Engineering, Design and Physical Sciences
CS	Computer Science degree programme
CV	Curriculum Vitae
E&D	Equality and Diversity
EU	European Union
FoIT	Foundations of Information Technology course
HoD	Head of Department
IS	Information Systems degree programme
MSc	Master of Science
NSS	National Student Survey
PDR	Professional Development Review
PGR	Postgraduate Research
PGT	Postgraduate Taught
PhD	Doctorate of Philosophy
SAT	Self-Assessment Team
STEM	Science, Technology, Engineering and Maths
UG	Undergraduate
UK	United Kingdom

2. The self-assessment process: maximum 1000 words

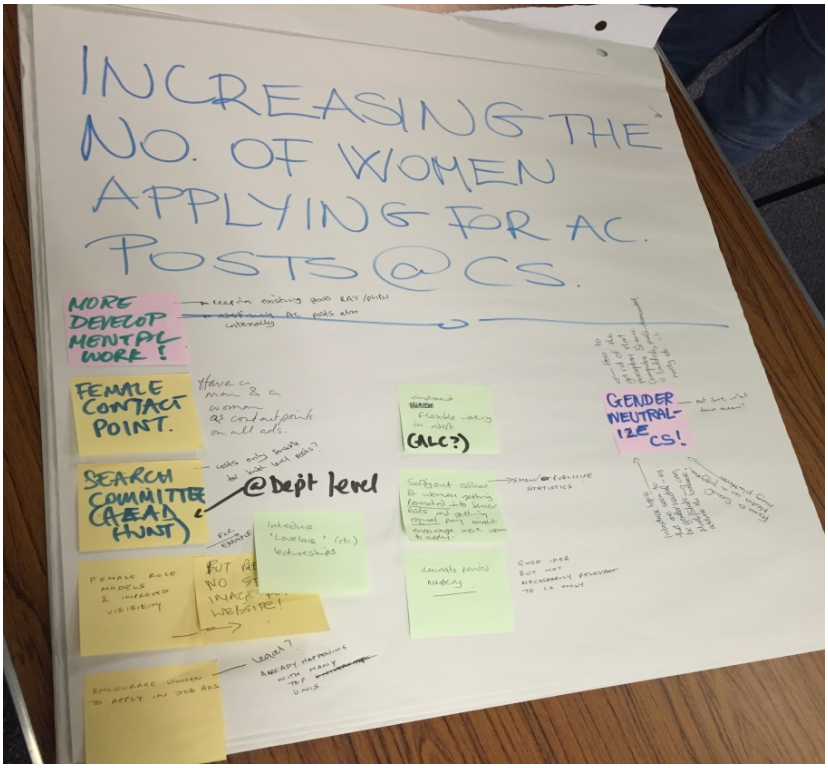
Describe the self-assessment process. This should include:

a) A description of the self-assessment team: members' roles (both within the department and as part of the team) and their experiences of work-life balance.

Our SAT which is a working group within the department has a total of 8 members (4 women and 4 men), ranging from the HoD to a PhD student:

SAT member	SAT role	Academic and personal profile
Dr Annette Payne *Lecturer*	SAT chair; academic lead for Athena SWAN	Champions parental leave returners; mentors women ECRs. Has a young family and shares parental care with husband (also in full-time employment). Recently sole carer of an elderly relative.
Professor Martin Shepperd *Head of Department*	Management perspective; regular feedback on feasibility of action points	Joined Brunel in 2005, HoD since 2013. When not working, enjoys running, music, and living in London with his partner. His daughter and son have STEM careers.
Carol Elliott *College Projects Officer; School Planning Manager*	Compiled and presented data for student data sections	Champions caring for elderly family. Balances work with supporting elderly mother (with severe short-term memory problems) and managing her care.
Professor Panos Louvieris *Professor*	Reviewed survey documentation	When not working his interests include his family life, music, and cycling in the New Forest.
Dr Anastasia Papazafeiropoulou *Senior Lecturer*	Compiled data and analysis for staff data section with Dr Eatock	Joined Brunel in 2002. When not working, engages in and teaches mindfulness meditation, practices yoga, and is interested in nutrition and alternative therapies.
Dr Ian Blackman *Senior Lecturer*	Compiled data and analysis for organisational culture section	Joined the department in 2015. Racing kayaking coach for a group of teenagers. Two kids at university, one to go. Wife holds a leading role in the City of London.
Dr Julie Eatock *Postdoctoral Researcher*	Compiled data and analysis for staff data section with Dr Papazafeiropoulou	Full-time postdoc research fellow; chair of the Brunel Research Staff Association. Recently became a grandparent and shares caring responsibilities.
Najeeb Gambo Abdulhamid PhD student	Represents students on the SAT	Humanitarian, volunteer, and advocate for girl-child education. Interested in politics and issues related to entrepreneurship, personal development and mentoring.

b) an account of the self assessment process: details of the self assessment team meetings, including any consultation with staff or individuals outside of the university, and how these have fed into the submission.



The SAT was set up in July 2014; generally meeting three times a year on average, but in the last year it has met on a monthly basis. We typically agree to discuss a topic or issue and how any actions may be implemented to make a change, or we discuss data that has been gathered. We held four staff consultations: in July 2015 at our annual retreat attended by most staff, at departmental meetings held termly, in early 2016 via a staff survey (over 70% completion rate), and at an action planning workshop in March 2016 (see photo below). Athena SWAN activities form a permanent agenda item at departmental meetings. To link our activities to the students, we have a PhD student on the SAT, while student reps are present at all departmental meetings. In order to collect best practice and discuss strategies, SAT members participated in external gender equality-themed events: Carol Elliot and Annette Payne attended a British Computer Society CignetS event (December 2014) and the annual BCS Women Lovelace Colloquium every year for the past three years, Martin Shepperd attended the Council of Professors and Heads of Computing conference “CignetS: what do you want from an Athena SWAN for Computer Science community?” (April 2016).

c) plans for the future of the self assessment team, such as how often the team will continue to meet, any reporting mechanisms and in particular how the self assessment team intends to monitor implementation of the action plan.

The SAT will meet termly to lead the implementation of the action plan and evaluate the results of actions. We will shortly implement an annual review cycle of the action plan to update it, to remove completed actions, and revise if necessary. Departmental equality and diversity issues are currently not represented at College-level so we will lobby for a new College-level Equality & Diversity Network Group (AP1.1). Since the department will have a new HoD from January 2017, the College Dean will be briefed on our action plan and its

importance to ensure the new HoD is aware that this is part of their remit (AP1.2). The SAT will compile annual progress reports and share these with departmental and College management (AP1.3), while progress and arising issues will be regularly reported and discussed at staff meetings (where Athena SWAN is already a standing agenda item), and a dedicated Athena SWAN area will be created on our website in addition to the one already on the College website (AP1.4). The Associate Dean for Equality and Diversity (who sits on the Equality and Diversity Strategic Management Committee) will be regularly briefed on actions and progress, which will also be cascaded to the University SAT chaired by the Pro-Vice Chancellor (Equality, Diversity, and Staff Development) by Annette Payne, who is a member of this committee (AP1.5).

As academic lead, Dr Payne will coordinate the action plan (with time allocated in her workload as administrative duty), delegating any tasks to SAT members and beyond as necessary. Annual staff surveys will be used to monitor the impact of initiatives, and the academic lead will meet with the College Associate Dean for Equality and Diversity every 6 months to review action plan process (AP1.5). To help succession planning and to ensure Athena SWAN leadership does not rest on a single academic, a deputy academic lead will be appointed to shadow Dr Payne, particularly in preparation for our renewal or upgrade (AP1.6).

[Section 2 contains 848 words in total, excluding highlighted action point references.]

3. A picture of the department: maximum 2000 words

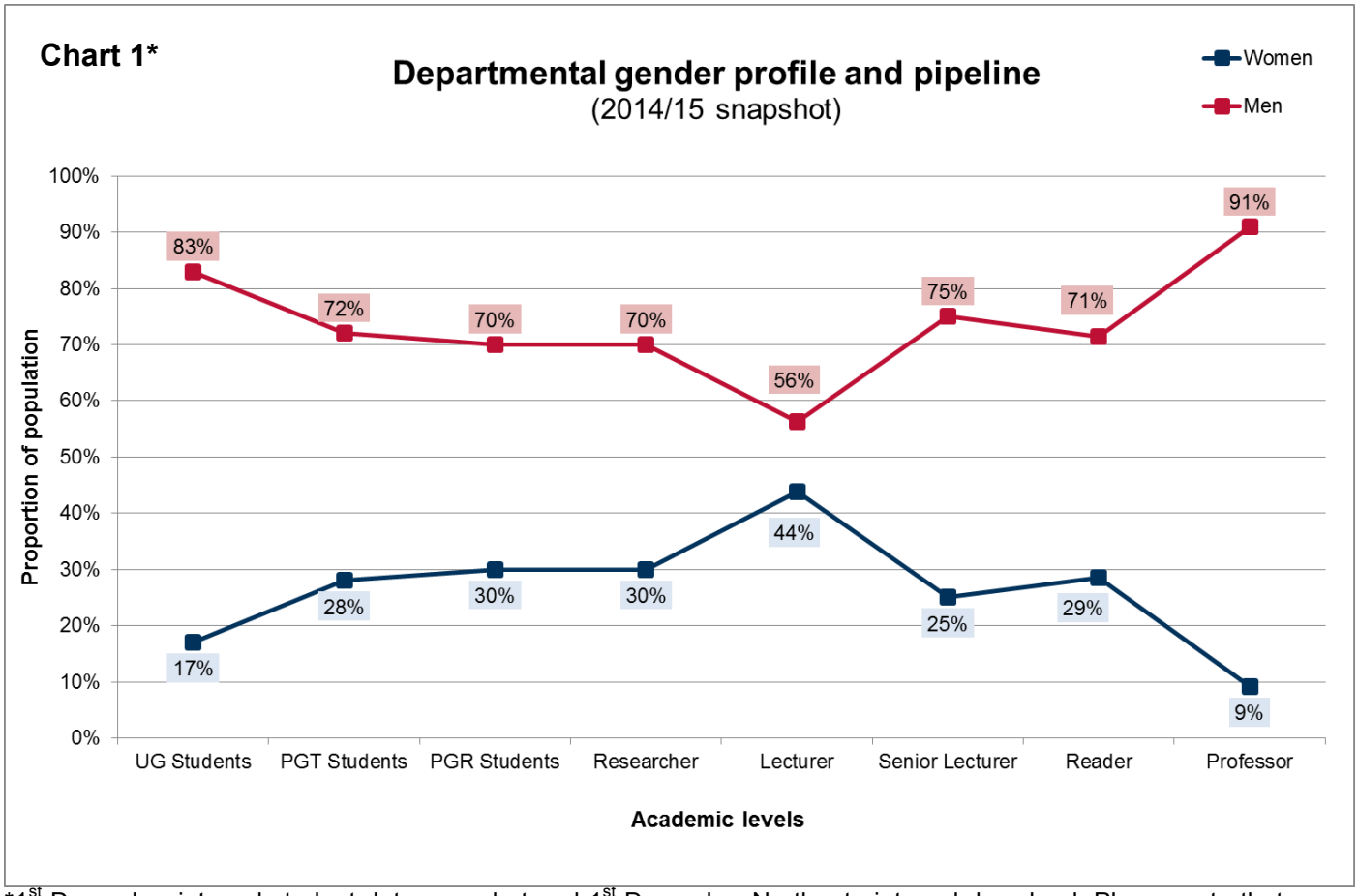
a) Provide a pen-picture of the department to set the context for the application, outlining in particular any significant and relevant features.

Our department was established in 1969, with 36 academics (17% women) and 10 researchers currently engaged in teaching and research focused on vocational courses and applied research. We have high numbers of PhD students and scholarship is highly valued, with all academics holding a doctorate. At present, we are split across two buildings on opposite sides of the campus.

In 2014/15, we had 619 undergraduates (17% women), 58 taught postgraduates (28% women) and 111 research postgraduates (30% women). Most students study full-time, with a 22:1 student-staff ratio. We offer two three-year undergraduate degrees: Computer Science (75% of students) and Business Computing (25% of students). We encourage students to take industrial placement between levels 2 and 3 (uptake ~50%) as it is correlated with better degree outcomes, higher employability and starting salaries. 20-30% of undergrads enrol from non-A level routes, over 50% are from the local area (living at home), and most students have a BME heritage.

Customarily, one of our professors serves as Head of Department for three years (renewable once with Vice-Chancellor consent), and the HoD then appoints other senior roles (Director of Research, Senior Tutor, Head of Teaching & Learning). Currently, one female academic has senior decision-making role (Director of

Research). The HoD manages all academic staff, however some responsibilities are delegated (e.g. research coordination and teaching management).



*1st December internal student data snapshot and 1st December Northgate internal download. Please note that we used centrally held internal data wherever this was possible and only used data from between 2010/11 and 2014/15 to ensure consistency and comparability across data categories even if more recent data was available for certain categories (our partially available 2015/16 data would not add meaningfully to our analysis). Please also note that since some of our data come from different datasets (i.e. captured at different points in the academic year; e.g. our HEIDI student numbers versus internal student census), minor inconsistencies may be seen in numbers and percentages where different datasets are shown to analyse the same area.

Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

Student data

(i) **Numbers of males and females on access or foundation courses** – comment on the data and describe any initiatives taken to attract women to the courses.

We have no foundation course, however students passing the Department of Mathematics' Foundations of Information Technology course can enrol on our degrees. FoIT is not widely advertised and students typically enrol through clearing. Approximately one-third of FoIT students (30-40 students) choose

Computer Science annually, yielding about 1/4 of our UG intake, so FoIT a significant recruitment source, although we do not actively recruit from this student pool. On average, 26% of the FoIT population are women each year, which is higher than the average female proportion of our UG intake (19% for 2011/12 to 2014/15). We believe that more female students could study Computer Science if FoIT was advertised so we can actively recruited from this pool (AP2.1).

Table 1 – FoIT student population by gender*
(2011/12 to 2014/15)

Year	Men	Women	% women
2011/12	64	23	26%
2012/13	74	26	26%
2013/14	82	30	27%
2014/15	72	24	25%

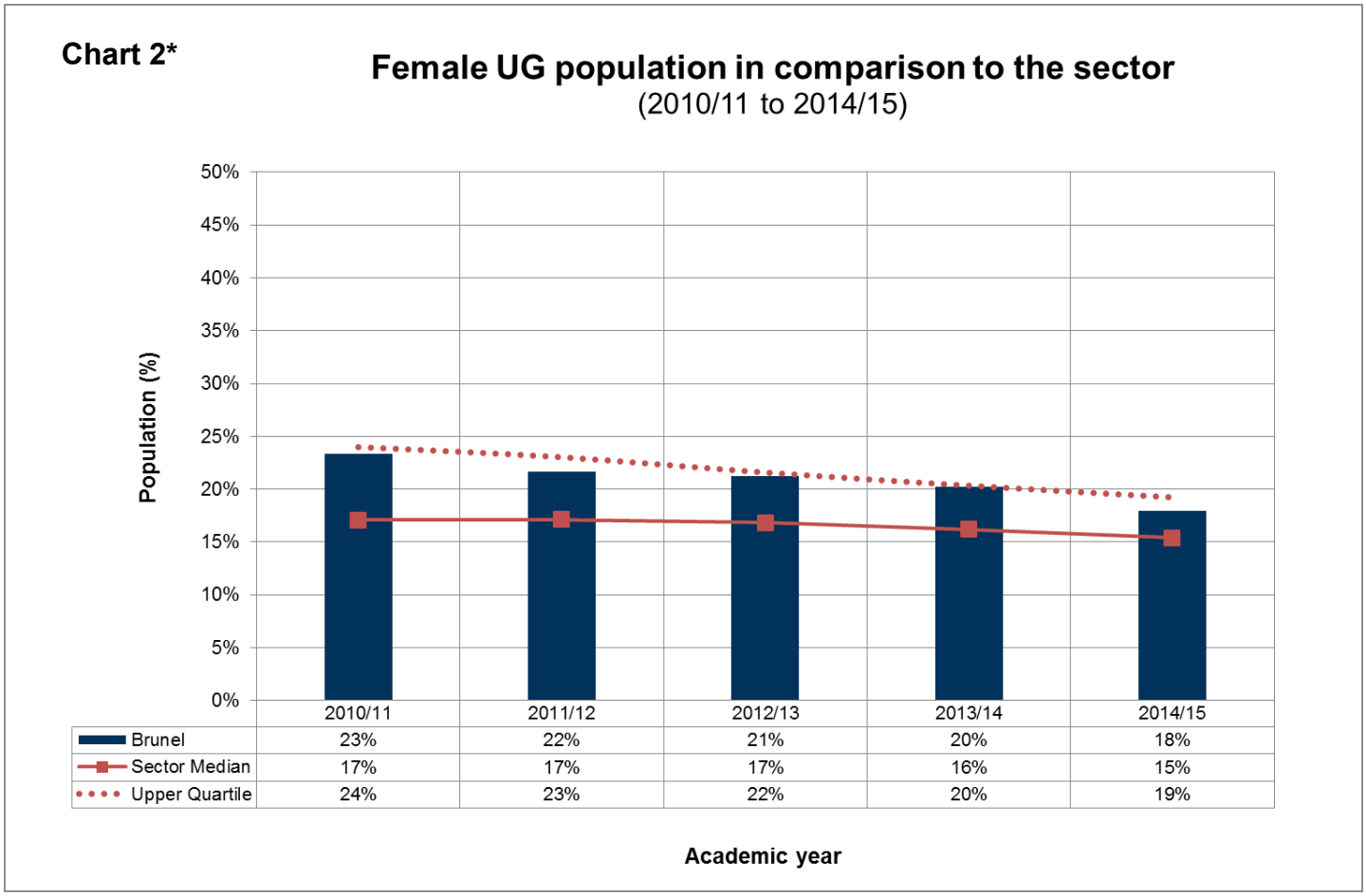
*Internal data from the Department of Mathematics

(ii) **Undergraduate male and female numbers** – full and part-time – comment on the female:male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the impact to date. Comment upon any plans for the future.

Table 2 – UG population and UG first-year students (entrants) by gender*
(2010/11 to 2014/15)

	Overall UG student population				Overall UG new entrants			
Year	Total	Men	Women	%w	Total	Men	Women	%w
2010/11	631	489	142	23%	197	143	54	27%
2011/12	669	527	142	21%	232	184	48	21%
2012/13	647	509	138	21%	189	161	28	15%
2013/14	659	526	133	20%	184	150	34	18%
2014/15	613	507	106	17%	159	133	26	16%

*1st December internal snapshot



*HEIDI data from 2014/15; benchmarking student data for Computer Science (Cost Centre 121)

We only operate part-time mode for students repeating modules. We will investigate whether part-time study could attract students from underrepresented backgrounds as demand and feasibility has not been formally assessed recently (AP2.2).

Our 5-year average female UG proportion (21%) is above the sector median (16%), and although we see a downward trend (notably, a significant and persistent drop in new female entrants from 2012/13 onwards), this appears to be in line with discipline-wide developments. Prior to our self-assessment, we had not identified or addressed the disproportionate representation of UG women. However, our degree-level analysis revealed that our two UG pathways, Computer Science (CS) and Business Computing (BC) (formerly Information Systems or IS) have had different gender profiles over the years (Tables 3 and 4 further down), even though the curricula are largely identical and both share many of the same modules.

The majority of students study CS, with IS/BC only accounting for 1/4 of our student population on average, but IS/BC has a significantly better gender ratio than CS. In 2010/11, the female applicants were almost evenly split between CS (52%) and IS (48%), with 57% of new female students enrolling on IS, while the majority of male students preferred CS (79% of male applicants and 75% of entrants). We then introduced BC in 2011/12 and started phasing out IS, closing it in 2012/13 (see dip on Chart 3). While BC (replacing IS) continued to attract

higher proportions of female students than CS, the course change may have contributed to the significant decrease in female student numbers in 2012/13 (42% decrease in female first-years versus 12% in male first-years) and to the student preference moving towards CS (see entrants on Table 3), yielding a less balanced gender ratio for BC than what IS had in 2010/11.

It is possible that our female numbers were unusually high in 2010/11 and 2011/12, so we will conduct historical analysis and establish more decisively the gendered impact of the IS/BS course-change (AP2.3). Additionally, while the BC module titles have more a "human" connection (which may be more attractive to women than men), we suspect that course-selection is more influenced by gender identity, assumptions of degree content, and perceptions of where it might lead, rather than by a thorough examination of module titles and content by the potential students. We will consult current students to better understand their distinct degree choices (AP2.4). The outcomes of these actions will inform future measures to increase the number and proportion of women.

The destinations prospects after graduation are encouraging for women since 86% entered graduate-level jobs in 2013/14, compared to only 78.8% of our male students. However, we need to investigate whether these are degree-related jobs or perhaps this is a case of more of female UGs being employed at administrative levels (similarly to our female PGT graduates) (AP2.5).

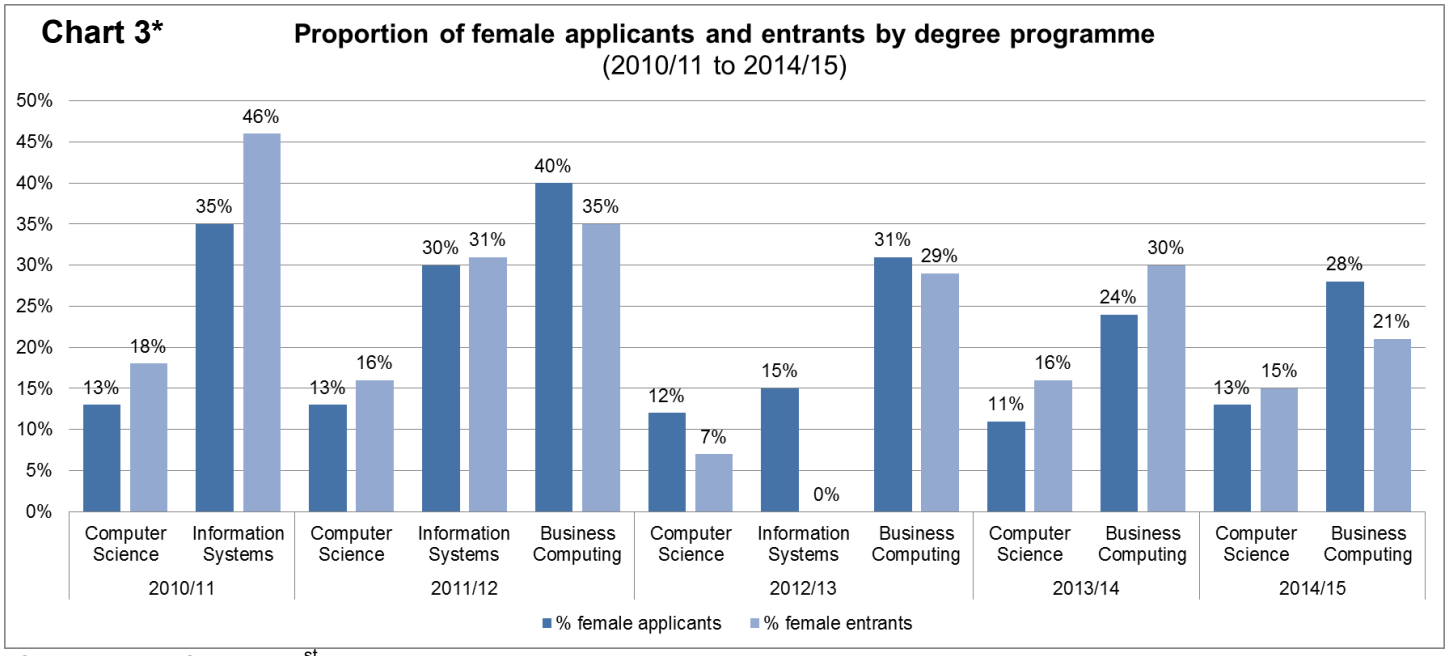


*Chart created from the 1st December internal snapshot data in tables 3 and 4.

Table 3 – UG applications by gender and degree*
(2010/11 to 2014/15)

		UG Applications					
		Women		Men		Grand total	
2010/11	Computer Science	112	52%	722	79%	834	74%
	Information Systems	105	48%	195	21%	300	26%
	Subtotals & % of grand total	*217*	*19%*	*917*	*81%*	***1134***	
2011/12	Computer Science	124	58%	829	81%	953	77%
	Information Systems	76	36%	174	17%	250	20%
	Business Computing	13	6%	19	2%	32	3%
	Subtotals & % of grand total	*213*	*17%*	*1022*	*83%*	***1235***	
2012/13	Computer Science	106	65%	784	85%	890	82%
	Information Systems	2	1%	11	1%	13	1%
	Business Computing	56	34%	125	14%	181	17%
	Subtotals & % of grand total	*164*	*15%*	*920*	*85%*	***1084***	
2013/14	Computer Science	98	68%	771	84%	869	82%
	Business Computing	46	32%	142	16%	188	18%
	Subtotals & % of grand total	*144*	*14%*	*913*	*86%*	***1057***	
2014/15	Computer Science	134	69%	912	86%	1046	83%
	Business Computing	61	31%	154	14%	215	17%
	Subtotals & % of grand total	*195*	*15%*	*1066*	*85%*	***1261***	

*1st December internal snapshot data. When reading left to right, subtotals in grey-shaded fields stand for total number of students *from one gender*, and percentages in grey-shaded fields stand for proportion of one gender within the total applications. When reading top to bottom, percentages in white fields relate to the same gender and show that gender's distribution across different degrees.

Table 4 – UG first-year students (entrants) by gender and degree*
(2010/11 to 2014/15)

		UG Entrants					
		Women		Men		Grand total	
2010/11	Computer Science	23	43%	107	75%	130	66%
	Information Systems	31	57%	36	25%	67	34%
	Subtotals & % of grand total	*54*	*27%*	*143*	*75%*	***197***	
2011/12	Computer Science	25	52%	134	73%	159	69%
	Information Systems	17	35%	38	21%	55	24%
	Business Computing	6	13%	11	6%	17	7%
	Subtotals & % of grand total	*48*	*21%*	*183*	*79%*	***231***	
2012/13	Computer Science	18	64%	134	83%	152	80%
	Information Systems	0		3	2%	3	2%
	Business Computing	10	36%	24	15%	34	18%
	Subtotals & % of grand total	*28*	*15%*	*161*	*85%*	***189***	
2013/14	Computer Science	23	68%	124	83%	147	80%
	Business Computing	11	32%	26	17%	37	20%
	Subtotals & % of grand total	*34*	*18%*	*150*	*82%*	***184***	
2014/15	Computer Science	19	73%	106	80%	125	79%
	Business Computing	7	27%	27	20%	34	21%
	Subtotals & % of grand total	*26*	*16%*	*133*	*84%*	***159***	

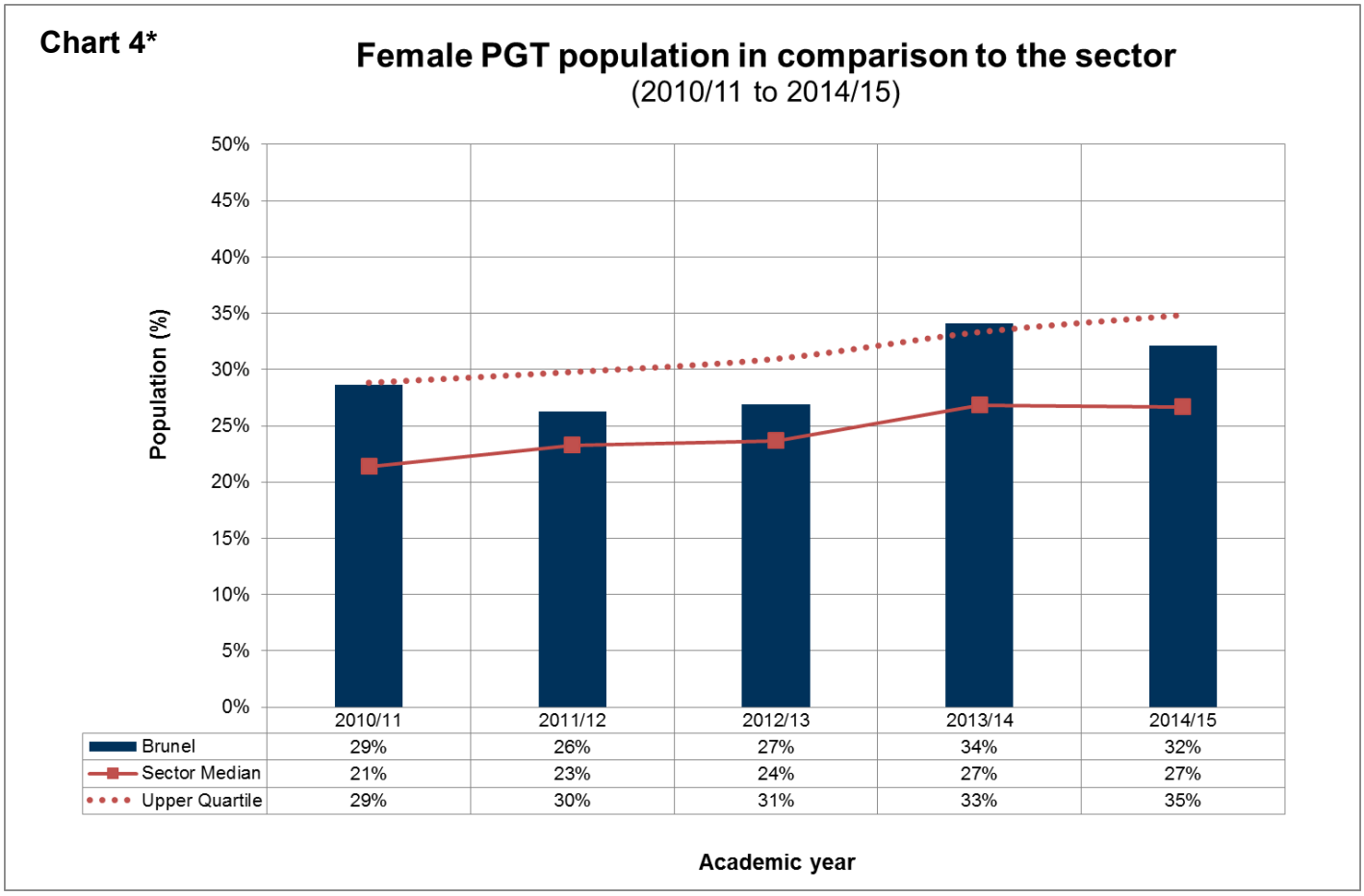
*1st December internal snapshot data. When reading left to right, subtotals in grey-shaded fields stand for total number of students *from one gender*, and percentages in grey-shaded fields stand for proportion of one gender within the total entrants. When reading top to bottom, percentages in white fields relate to the same gender and show that gender's distribution across different degrees.

(iii) **Postgraduate male and female numbers completing taught courses** – full and part-time – comment on the female:male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the effect to date. Comment upon any plans for the future.

Table 5 – PGT population and first-year students (entrants) by gender*
(2010/11 to 2014/15)

	PGT student population				PGT new entrants			
Year	**Total**	**Men**	**Women**	**%w**	**Total**	**Men**	**Women**	**%w**
2010/11	312	236	76	24%	156	119	37	24%
2011/12	235	183	52	22%	104	77	27	26%
2012/13	146	108	38	26%	84	62	22	26%
2013/14	110	77	33	30%	55	38	17	31%
2014/15	58	42	16	28%	43	31	12	28%

*1st December internal snapshot data.



*HEIDI data from 2014/15; benchmarking student data for Computer Science (Cost Centre 121)

The proportion of female PGTs is consistently higher than at undergraduate level, with the department generally ranking above the sector median (Chart 4). The gender-breakdown of applicant and first-year students for each course between 2010/11 and 2014/15 is presented in Tables 6 and 7. We note that between 2010/11 and 2013/14 male applicants and entrants were split roughly evenly across our two PGT programmes, but women consistently preferred to choose Information System Management to Business Systems. With the introduction of Digital Science and Analytics in 2014/15, the female preference appears more balanced across the three programmes, similarly to the male preference (see Table 7).

Table 6 – PGT applications by gender and degree*
(2010/11 to 2014/15)

		PGT Applications					
		Women		Men		Grand total	
2010/11	Business Systems	72	32%	201	37%	273	36%
	Info Systems Management	153	68%	341	63%	494	64%
	Subtotals & % of grand total	*225*	*29%*	*542*	*71%*	***767***	
2011/12	Business Systems	52	37%	158	43%	210	42%
	Info Systems Management	87	63%	209	57%	296	58%
	Subtotals & % of grand total	*139*	*27%*	*367*	*73%*	***506***	
2012/13	Business Systems	47	36%	155	45%	202	43%
	Info Systems Management	85	64%	187	55%	272	57%
	Subtotals & % of grand total	*132*	*28%*	*342*	*72%*	***474***	
2013/14	Business Systems	36	33%	112	46%	148	42%
	Info Systems Management	73	67%	133	54%	206	58%
	Subtotals & % of grand total	*109*	*31%*	*245*	*69%*	***354***	
2014/15	Business Systems	24	23%	91	38%	115	34%
	Info Systems Management	53	52%	97	41%	150	44%
	Data Science and Analytics	23	23%	44	18%	67	20%
	Digital Service Design	2	2%	7	3%	9	2%
	Subtotals & % of grand total	*102*	*30%*	*239*	*70%*	***341***	

*1st December internal snapshot data. When reading left to right, subtotals in grey-shaded fields stand for total number of students *from one gender*, and percentages in grey-shaded fields stand for proportion of one gender within the total applications. When reading top to bottom, percentages in white fields relate to the same gender and show that gender's distribution across different degrees.

Table 7 – PGT first-year students (entrants) by gender and degree*
(2010/11 to 2014/15)

		PGT Entrants					
		Women		Men		Grand total	
2010/11	Business Systems	14	38%	49	41%	63	40%
	Info Sys Management	23	62%	70	59%	93	60%
	Subtotals & % of grand total	*37*	*24%*	*119*	*76%*	***156***	
2011/12	Business Systems	12	44%	44	57%	56	54%
	Info Sys Management	15	56%	33	43%	48	46%
	Subtotals & % of grand total	*27*	*26%*	*77*	*74%*	***104***	
2012/13	Business Systems	8	36%	41	66%	49	58%
	Info Sys Management	14	64%	21	33%	35	42%
	Subtotals & % of grand total	*22*	*26%*	*62*	*74%*	***84***	
2013/14	Business Systems	5	29%	24	60%	29	51%
	Info Sys Management	12	71%	16	40%	28	49%
	Subtotals & % of grand total	*17*	*30%*	*40*	*70%*	***57***	
2014/15	Business Systems	4	33%	11	35%	15	35%
	Info Sys Management	5	42%	11	35%	16	37%
	Data Science and Analytics	3	35%	9	30%	12	28%
	Digital Service Design						
	Subtotals & % of grand total	*12*	*28%*	*31*	*72%*	***43***	

*When reading left to right, subtotals in grey-shaded fields stand for total number of students *from one gender*, and percentages in grey-shaded fields stand for proportion of one gender within the total entrants. When reading top to bottom, percentages in white fields relate to the same gender and show that gender's distribution across different degrees.

PGT students predominantly come from other UK universities (in 2014/15, 56% had a degree from another university and only 22% had a degree from Brunel, while the remaining 22% have overseas qualifications), indicating that our UG students generally do not want to progress onto postgraduate study with us (so our PGT gender ratio is largely independent of the UG ratio). We would like to encourage more UG students onto higher degrees, especially in light of the significant and persistent downward trend in PGT numbers. However, this may be challenging due to the distinct student profiles at these levels – as a first step, we will consult current UG and PGT students to better understand career aspirations (AP2.6). Additionally, most of our students are full-time, while part-time study could be better promoted (AP2.7).

The employment destination of PGT students is less encouraging that for UG women, with only 75% of employed female students being in graduate-level jobs, with the remaining 25% of employed female students working in administrative and clerical posts, while all employed male students are in graduate jobs. As these first-destination choices appear gendered, we will consult our alumni to understand career choices (AP2.5).

Postgraduate male and female numbers on research degrees – full and part-time – comment on the female:male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the effect to date. Comment upon any plans for the future.

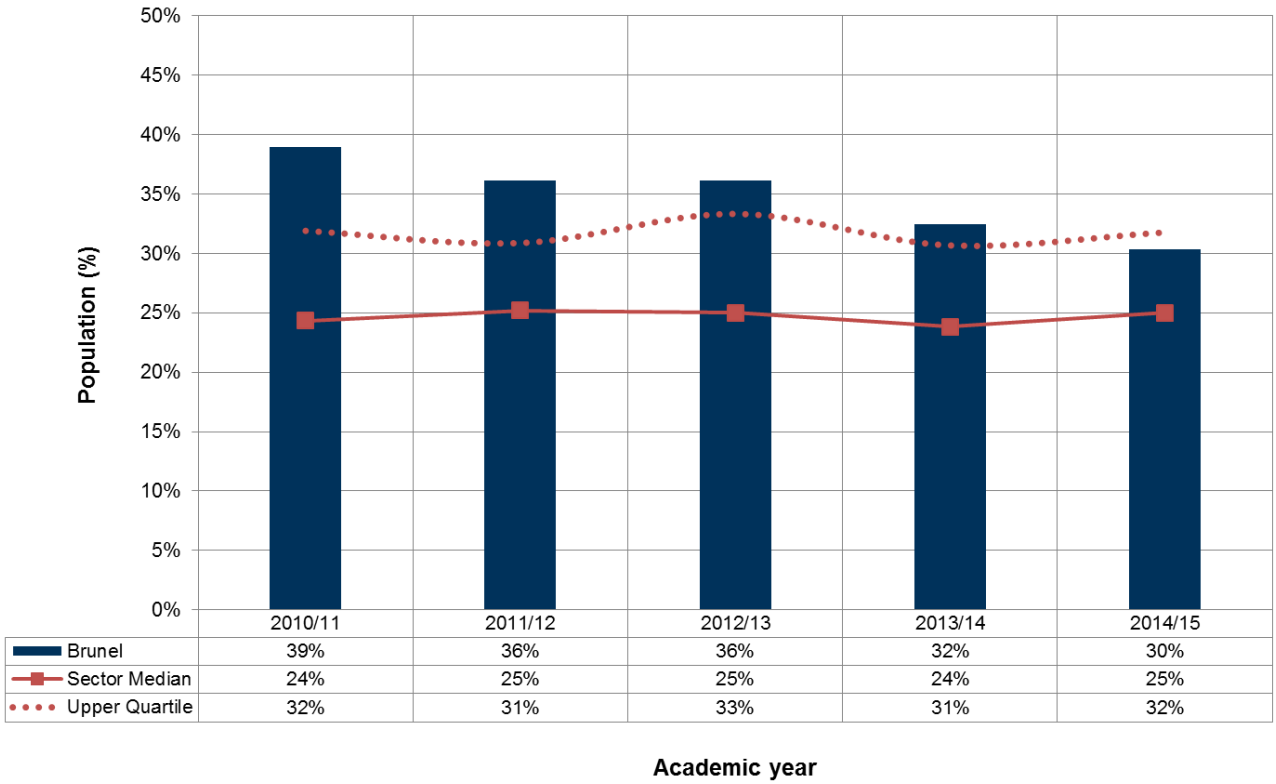
Table 8 – PGR population and first-year students (entrants) by gender*
(2010/11 to 2014/15)

	PGR student population				PGR new entrants			
Year	**Total**	**Men**	**Women**	**%w**	**Total**	**Men**	**Women**	**%w**
2010/11	127	82	45	35%	20	11	9	45%
2011/12	140	92	48	34%	20	16	4	20%
2012/13	133	84	49	37%	8	6	2	25%
2013/14	127	82	45	35%	14	12	2	14%
2014/15	111	78	33	30%	10	8	2	20%

*1st December internal snapshot data.

Chart 5*

Female PGR population in comparison to the sector
(2010/11 to 2014/15)



*HEIDI data from 2014/15; benchmarking student data for Computer Science (Cost Centre 121)

In 2014/15, 30% of PhDs were female (Chart 5), placing us just under the national upper-quartile, and we have been consistently above the median in the last 5 years.

Although we noted that female PGR student numbers decreased more significantly than male student numbers in recent years, we have not introduced any initiatives to date to explore this. We will consult current and recent female PhDs to establish what made them choose us (AP2.4). Findings will influence future actions aimed at increasing PhD student numbers and maintaining the female ratio of this population.

It should be noted that the majority of our PGT students decide to seek degree-related employment rather than continue studies at doctorate level (only 24% of current PGR students have degrees from Brunel). Further more, over 70% of our PhDs are classified as overseas students, often funded by their government and expected to leave the UK upon graduation to take up lectureships in their home countries. These factors have a significant impact on our PGT-to-PGR and PGR-to-postdoc progression points, and we will establish how we can increase progression at both points by consulting students on their career plans (AP2.6).

(iv) **Ratio of course applications to offers and acceptances by gender for undergraduate, postgraduate taught and postgraduate research degrees** – comment on the differences between male and female application and success rates and describe any initiatives taken to address any imbalance and their effect to date. Comment upon any plans for the future.

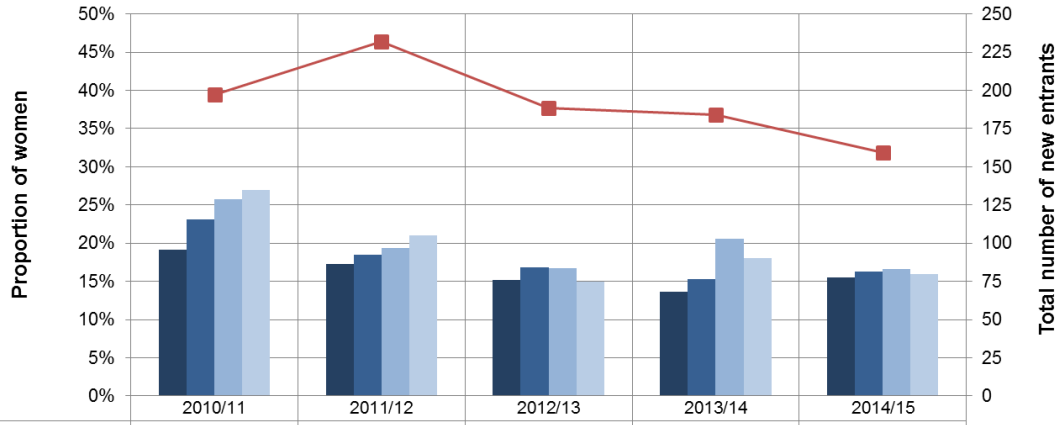
Table 9 – UG recruitment progression and success rates in stages*
(2010/11 to 2014/15)

Undergraduate recruitment progression		Applications	Offers	Acceptances	Entrants	% Applicants offered	% Offers accepted	% Accepted enrolled
2010/11	Women	215	139	71	54	65%	51%	76%
	Men	919	464	201	143	50%	43%	71%
	%female	*19%*	*23%*	*26%*	*27%*			
2011/12	Women	210	139	63	48	66%	45%	76%
	Men	1025	595	268	184	58%	45%	69%
	%female	*17%*	*19%*	*19%*	*21%*			
2012/13	Women	163	110	43	28	67%	39%	65%
	Men	921	537	209	161	58%	39%	77%
	%female	*15%*	*17%*	*17%*	*15%*			
2013/14	Women	148	110	64	34	74%	58%	53%
	Men	909	621	242	150	68%	39%	62%
	%female	*14%*	*15%*	*21%*	*18%*			
2014/15	Women	190	134	50	26	71%	37%	52%
	Men	1017	701	245	133	69%	35%	54%
	%female	*15%*	*16%*	*17%*	*16%*			

*1st December internal snapshot data.

Chart 6*

UG applications, offers, acceptances, and entrants
(2010/11 to 2014/15)



	2010/11	2011/12	2012/13	2013/14	2014/15
% Female of Total Applications	19%	17%	15%	14%	15%
% Female of Total Offers	23%	19%	17%	15%	16%
% Female of Total Acceptances	26%	19%	17%	21%	17%
% Female of Total Entrants	27%	21%	15%	18%	16%
Total no. of Applications	1134	1235	1084	1057	1261
Total no. of Offers	603	734	647	731	835
Total no. of Acceptances	272	331	252	306	295
Total Number of New Entrants	197	232	188.5	184	159

Academic year

*1st December internal snapshot data.

Table 9 and Chart 6 show UG applications, offers, acceptances, and entrants for the last 5 years. We note that although the number of female applicants is consistently below 20%, female applicants are more likely to receive an offer and are slightly more likely to accept it (in each of these 5 years, the female proportion of offered, accepted, and entrant applicants surpassed the female proportion of applicants). While at this stage we do not plan to take direct action in this area beyond continued gender-monitoring, we expect that our actions around diversifying our recruitment and outreach teams (AP2.8) and future actions coming out of more regular monitoring of student numbers (AP2.9) will have a positive impact on our decreasing female applicant numbers.

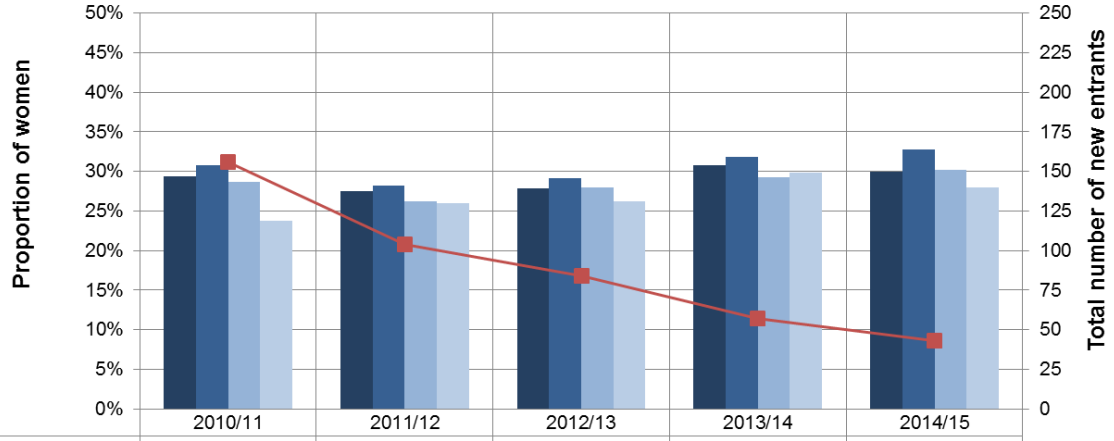
Table 10 – PGT recruitment progression and success rates in stages*
(2010/11 to 2014/15)

Taught postgraduate recruitment progression		Applications	Offers	Acceptances	Entrants	% Applicants offered	% Offers accepted	% Accepted enrolled
2010/11	Women	223	188	54	37	84%	29%	69%
	Men	544	416	130	119	76%	31%	92%
	%female	*29%*	*31%*	*29%*	*24%*			
2011/12	Women	137	111	32	27	81%	29%	84%
	Men	369	283	90	77	77%	32%	86%
	%female	*27%*	*28%*	*26%*	*26%*			
2012/13	Women	133	105	35	22	79%	33%	63%
	Men	341	255	90	62	75%	35%	69%
	%female	*28%*	*29%*	*28%*	*26%*			
2013/14	Women	110	85	31	17	77%	36%	55%
	Men	244	179	75	38	73%	42%	51%
	%female	*31%*	*32%*	*29%*	*30%*			
2014/15	Women	103	81	24	12	79%	30%	50%
	Men	238	163	62	31	68%	38%	50%
	%female	*30%*	*33%*	*30%*	*28%*			

*1st December internal snapshot data.

Chart 7*

PGT applications, offers, acceptances, and entrants
(2010/11 to 2014/15)



	2010/11	2011/12	2012/13	2013/14	2014/15
% Female of Total Applications	29%	27%	28%	31%	30%
% Female of Total Offers	31%	28%	29%	32%	33%
% Female of Total Acceptances	29%	26%	28%	29%	30%
% Female of Total Entrants	24%	26%	26%	30%	28%
Total no. of Applications	767	506	474	354	341
Total no. of Offers	604	394	360	264	244
Total no. of Acceptances	185	122	125	106	86
Total Number of New Entrants	156	104	84	57	43

Academic year

*1st December internal snapshot data.

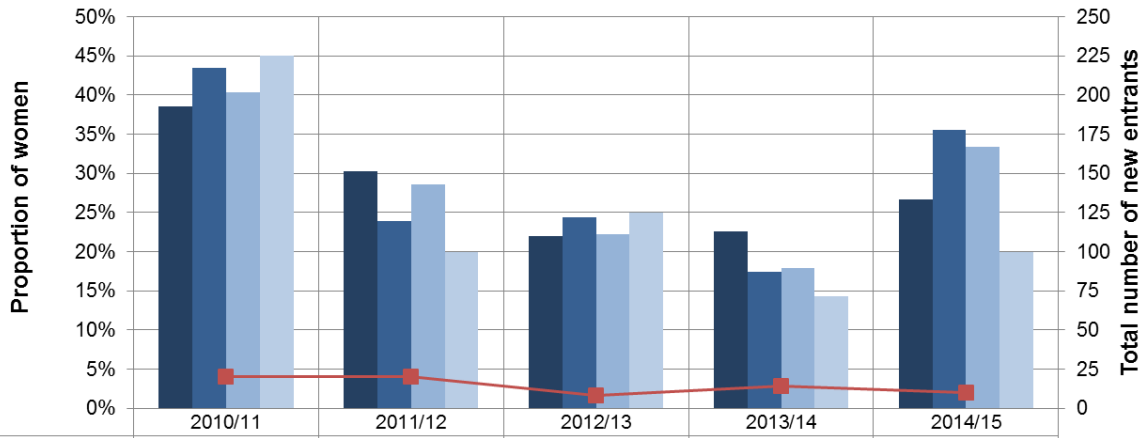
Table 10 and Chart 7 show PGT applications, offers, acceptances, and entrants for the last 5 years. The proportion of women is consistently around 30% at each stage of the process, which is encouraging, especially in light of the lower female proportions at UG-level. However, to maintain this ratio we need to gain a better understanding of why PGT courses attract proportionally more women than UG courses (AP2.4 and AP2.6). Similarly to our UG female applicants, female PGT applicants are more likely to get offers than men, but acceptance and uptake then generally balance out (with some fluctuation one way or the other over the years). One notable trend is the very significant but gender-balanced decrease in overall PGT numbers since 2010/11. As we introduce new courses to appeal to more students in the near future, we will monitor if any of these are more favoured by women (AP2.9).

Table 11 – PGR recruitment progression and success rates in stages*
(2010/11 to 2014/15)

Research postgraduate recruitment progression		Applications	Offers	Acceptances	Entrants	% Applicants offered	% Offers accepted	% Accepted enrolled
2010/11	Women	63	40	25	9	63%	63%	36%
	Men	98	52	37	11	53%	71%	30%
	%female	*39%*	*43%*	*40%*	*45%*			
2011/12	Women	46	11	6	4	24%	55%	67%
	Men	106	35	15	16	33%	43%	107%
	%female	*30%*	*24%*	*29%*	*20%*			
2012/13	Women	27	9	4	2	33%	44%	50%
	Men	96	28	14	6	29%	50%	43%
	%female	*22%*	*24%*	*22%*	*25%*			
2013/14	Women	34	12	7	2	35%	58%	29%
	Men	112	57	32	12	51%	56%	38%
	%female	*23%*	*17%*	*18%*	*14%*			
2014/15	Women	36	21	12	2	58%	57%	17%
	Men	99	38	26	8	38%	68%	31%
	%female	*27%*	*36%*	*33%*	*20%*			

*1st December internal snapshot data.

Chart 8*



	2010/11	2011/12	2012/13	2013/14	2014/15
% Female of Total Applications	39%	30%	22%	23%	27%
% Female of Total Offers	43%	24%	24%	17%	36%
% Female of Total Acceptances	40%	29%	22%	18%	33%
% Female of Total Entrants	45%	20%	25%	14%	20%
Total no. of Applications	161	152	123	146	135
Total no. of Offers	92	46	37	69	59
Total no. of Acceptances	62	21	18	39	39
Total Number of New Entrants	20	20	8	14	10

Academic year

*1st December internal snapshot data.

Table 11 and Chart 8 show PGR applications, offers, acceptances, and entrants to for the last 5 years. We note that the proportion of female entrants was a very encouraging 45% in 2010/11, however this declined to 14% by 2013/14 and only improved to 20% in 2014/15 due to a corresponding drop in male entrants. We will establish whether the 45% female ratio in 2010/11 was a one-off anomaly (it would appear so as we had a correspondingly high number of applicants that year) (AP2.3). The male and female success rates do not show any clear trend at present, however we are mindful of the low student numbers here.

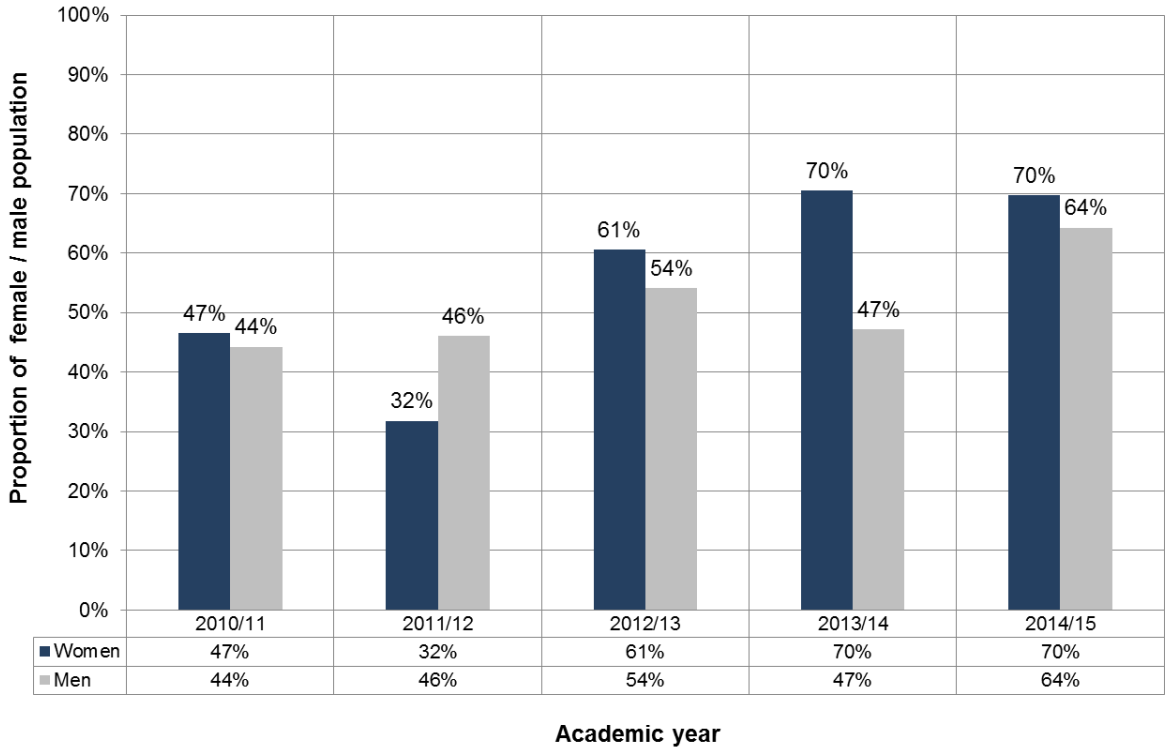
(v) **Degree classification by gender** – comment on any differences in degree attainment between males and females and describe what actions are being taken to address any imbalance.

Table 12 – UG attainment of "good degrees" (1st and 2i) by gender*
(2010/11 to 2014/15)

	Student population			Women			Men		
	Graduates	%women	%female good degree	Total women	Good degrees	%good degree	Total men	Good degrees	%good degree
2010/11	165	26%	27%	43	20	47%	122	54	44%
2011/12	161	14%	10%	22	7	32%	139	64	46%
2012/13	149	26%	28%	38	23	61%	111	60	54%
2013/14	167	26%	35%	44	31	70%	123	58	47%
2014/15	170	19%	21%	33	23	70%	137	88	64%

*From SITS InfoView Report on Awards

Chart 9*



*From SITS InfoView Report on Awards

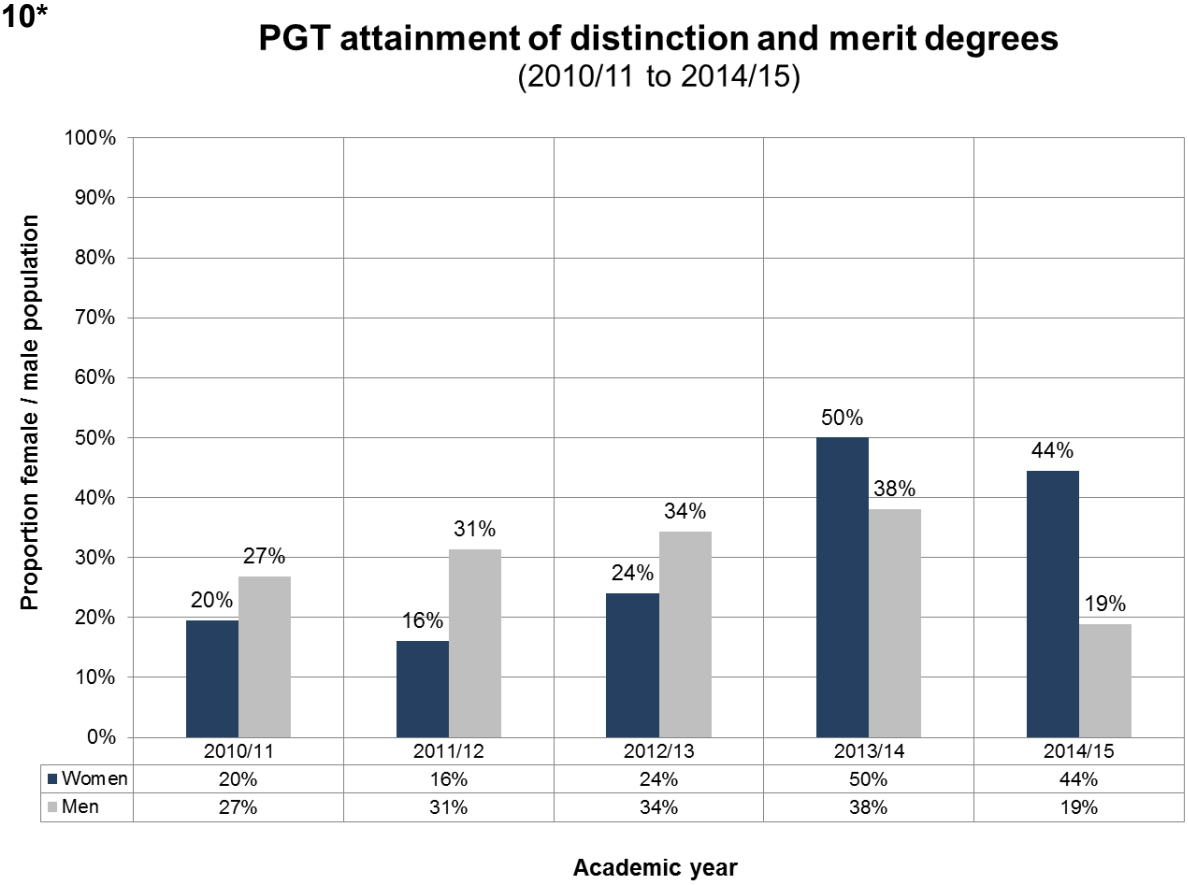
Table 12 and Chart 9 show that women generally outperformed men in securing good degrees, however volatility is to be expected due to the smaller size of our female cohort. We are reassured by the present trend, but will granulise to degree-level as the different gender profiles of our UG pathways may impact attainment-trends.

Table 13 – PGT attainment of "good degrees" (distinction/merit) by gender*
(2010/11 to 2014/15)

	Student population			Women			Men		
	Graduates	%women	%female good degree	Total women	Good degrees	%good degree	Total men	Good degrees	%good degree
2010/11	128	36%	29%	46	9	20%	82	22	27%
2011/12	133	23%	12%	31	5	16%	102	32	31%
2012/13	89	28%	18%	25	6	24%	64	22	34%
2013/14	58	28%	25%	16	8	50%	42	16	38%
2014/15	55	33%	35%	18	8	44%	37	7	19%

*From SITS InfoView Report on Awards

Chart 10*

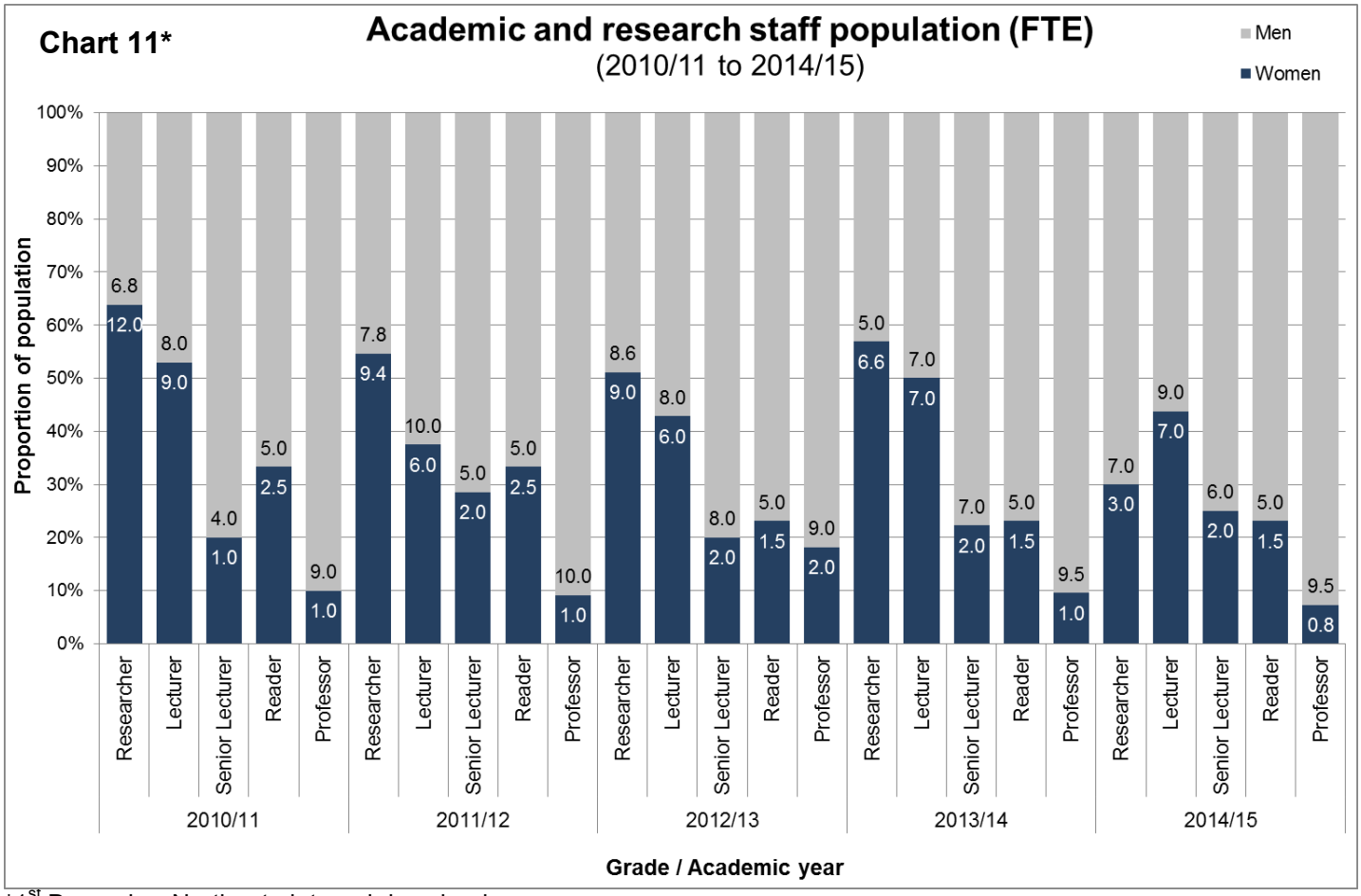


*From SITS InfoView Report on Awards

Table 13 and Chart 10 show the female and male PGT differences in attaining a distinction or merit award, where men appear to have consistently performed better in earlier years. To interrogate this, we will further granulise by degree pathways and cover 10 years, aside from consulting our students on degree-choice and aspirations (AP2.4 and AP2.6).

Staff data

(vi) **Female:male ratio of academic staff and research staff** – researcher, lecturer, senior lecturer, reader, professor (or equivalent). Comment on any differences in numbers between males and females and say what action is being taken to address any underrepresentation at particular grades/levels



*1st December Northgate internal download

Historically, we had very few female professors, with only one woman holding a professorship at present. The situation for readers and senior lecturers is slightly better (2 of 5 readers and 2 of 6 senior lectures are women; 30% of researchers are women in 14/15), and significantly better for lecturers we have had nearly equal distribution between men and women. While our overall female ratio (17%) is below the discipline's 22% average (14/15 HESA data), our near-parity of lecturers is beyond the 25% female lecturers HESA average (partly because we mostly only recruited lecturers recently). Our challenges are (1) helping researchers move into academia, (2) promoting female lecturers to senior lecturers, and (3) assisting female readers to professorship. Data-analysis in later sections suggests that promotion-ready staff may put off application and some are leaving rather than progressing. We address and action all of these issues in Section 4.

(vii) **Turnover by grade and gender** – comment on any differences between men and women in turnover and say what is being done to address this. Where the number of staff leaving is small, comment on the reasons why particular individuals left.

Staff numbers are static with small academic staff turnover so we found it helpful to consider the individual reasons of leaving. Since 2010, 7 academics left (5 men and 2 women); all men to more senior or career-enhancing roles at other institutions, with two also having family reasons to move; the women wanted to explore non-academic careers in the industry (neither stayed in STEM). Our analysis has been hampered by the fact that exit interviews are informal and not uniform across the University and department. We will establish appropriate departmental systems and collect more robust leaver data (AP2.10).

[Section 3 contains 2024 words in total; excluding tables, table/chart titles, and highlighted action plan references.]

Supporting and advancing women's careers: maximum 5000 words

Key career transition points

a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

(i) **Job application and success rates by gender and grade** – comment on any differences in recruitment between men and women at any level and say what action is being taken to address this.

Table 14 – Staff recruitment stages and success rates by gender*
(2010/11 to 2014/15)

		Applied	Shortlisted	Offered	Appointed	% Applied shortlisted	% Shortlist offered	% Offered appointed	% Applied appointed
2010/11	Women	69	16	2	1	23%	13%	50%	1.4%
	Men	152	17	5	3	11%	29%	60%	1.9%
	%Female	31%	48%	29%	25%				
2011/12	Women	48	11	2	3	23%	18%	150%	6.2%
	Men	125	18	4	3	14%	22%	75%	2.4%
	%Female	28%	38%	33%	50%				
2012/13	Women	25	7	2	1	28%	29%	50%	4.0%
	Men	41	10	2	2	24%	20%	100%	4.8%
	%Female	38%	41%	50%	33%				
2013/14	Women	44	10	2	0	23%	20%	0%	0%
	Men	148	34	6	2	23%	18%	33%	1.3%
	%Female	23%	23%	25%	0%				
2014/15	Women	26	3	0	0	12%	0%	0%	0%
	Men	56	15	7	3	27%	47%	43%	5.3%
	%Female	32%	17%	0%	0%				
Overall	Women	212	47	8	5	22%	17%	63%	2.3%
	Men	522	94	24	13	18%	26%	54%	2.4%
	%Female	29%	33%	25%	28%				

*Dates used for this table are taken from initial application – due to the length of time of recruitment the appointee may have started in the following academic year. Please note that there was one male appointee who was appointed through the KTP process rather than the normal recruitment process and therefore is not included in this data set. Additionally, the significant difference between the total numbers of offered and appointed candidates is a result of a recording mechanism in the University's central database: while applied, shortlisted, and offered numbers are included in this dataset for both external and internal candidates, the appointees only include "new starters", i.e. staff moving within the department is not recoded as a new starter, just as an "offer" – HR is in the process of resolving this issue, however this was not possible in time for our submission.

Table 14 shows our analysis of all vacancies in the past 5 years. Women were somewhat more likely to be shortlisted but of those shortlisted, men are slightly more likely to be made an offer. However, of those made an offer, women are then slightly more likely to be appointed. Overall, 2.3% of female candidates and 2.4% of male candidates were appointed in the last 5 years, suggesting that there has been no significant general imbalance in the progression of women and men through the recruitment process.

We are somewhat concerned that in the last two years a smaller portion of the female candidates progressed through the shortlisting and offer stages, and no female candidate was appointed, even though the applicant gender ratio was similar to those in previous years. Thus, we disaggregated our data to academic and researcher posts and examined success rates through the recruitment stages for both staff type (Table 15 below). While our researcher applicant pool was much more balanced than our academic one, we appointed more than twice as many male researchers (7.4%) than female ones (3.4%), and our academic appointee number was almost entirely balanced (1.1% of female applicants appointed versus 1% of male applicants – although the academic numbers may be too low for reliable analysis). In addition to the actions identified in the recruitment section further down, we will examine whether the advertisements and grading for these vacancies had any influence on these figures (AP3.1).

Table 15 – Staff recruitment stages and success rates by gender and grade*
(2010/11 to 2014/15)

			Application	Shortlisted	Offered	Appointed	% Applied shortlisted	% Shortlist offered	% Offered appointed	% Applied appointed
Academic vacancies	2010/11	Women	28	3	0	0	11%	0%	n/a	n/a
		Men	71	2	1	1	3%	50%	100%	1.4%
		%female	28%	60%	0%	0%				
	2011/12	Women	30	2	1	1	7%	50%	100%	3.3%
		Men	95	8	2	2	8%	25%	100%	2.1%
		%female	24%	20%	33%	33%				
	2012/13	Women	0	0	0	0	n/a	n/a	n/a	n/a
		Men	0	0	0	0	n/a	n/a	n/a	n/a
		%female	0%	0%	0%	0%				
	2013/14	Women	23	1	0	0	4%	0%	n/a	0%
		Men	114	18	3	0	16%	17%	0%	0%
		%female	17%	5%	0%	0%				
	2014/15	Women	12	1	0	0	8%	0%	n/a	0%
		Men	26	4	1	0	15%	25%	0%	0%
		%female	32%	20%	0%	0%				
	Overall	Women	93	7	1	1	8%	14%	100%	1.1%
		Men	306	39	7	3	13%	18%	43%	1.0%
		%female	23%	15%	13%	25%				
Researcher / post-doc vacancies	2010/11	Women	41	13	2	1	32%	15%	50%	2.4%
		Men	81	15	4	2	19%	27%	50%	2.5%
		%female	34%	46%	33%	33%				
	2011/12	Women	18	9	2	2	50%	22%	100%	11.1%
		Men	30	10	2	1	33%	20%	50%	3.3%
		%female	38%	47%	50%	67%				
	2012/13	Women	25	7	2	1	28%	29%	50%	4.0%
		Men	41	10	2	2	24%	20%	100%	4.9%
		%female	38%	41%	50%	33%				
	2013/14	Women	21	9	2	0	43%	22%	0%	0%
		Men	34	16	3	2	47%	19%	67%	5.9%
		%female	38%	36%	40%	0%				
	2014/15	Women	14	2	0	0	14%	0%	n/a	0%
		Men	30	11	6	3	37%	55%	50%	10.0%
		%female	32%	15%	0%	0%				
	Overall	Women	119	47	7	4	39%	15%	57%	3.4%
		Men	135	62	17	10	46%	27%	59%	7.4%
		%female	47%	43%	29%	29%				

* The difference between the total numbers of offered and appointed candidates is a result of a recording mechanism in the University's central database: while applied, shortlisted, and offered numbers are included in this dataset for both external and internal candidates, the can appointees only include "new starters", i.e. internal appointments currently cannot be recoded as new starters.

(ii) **Applications for promotion and success rates by gender and grade** – comment on whether these differ for men and women and if they do explain what action may be taken. Where the number of women is small applicants may comment on specific examples of where women have been through the promotion process. Explain how potential candidates are identified.

Table 16 – Promotion applications numbers by gender and grade*
(2010/11 to 2014/15)

		To professor		To reader		To senior lecturer	
		Men	Women	Men	Women	Men	Women
2011/12	Eligible	5	3	4	2	9	5
	Applied	1	1	2	–	2	–
	Successful	–	1	–	–	2	–
2012/13	Eligible	5	2	6	2	6	5
	Applied	2	–	1	–	2	–
	Successful	–	–	1	–	1	–
2013/14	Eligible	5	2	6	2	7	6
	Applied	–	1	–	–	–	1
	Successful	–	–	–	–	–	–
2014/15	Eligible	4	2	5	2	7	6
	Applied	2	2	–	–	2	3
	Successful	–	1	–	–	1	1

*Internal HR data

Table 17 – Promotion applications success rates by gender and grade*
(2010/11 to 2014/15)

		Applied	Successful	% successful
Senior lecturer	Women	4	1	25%
	Men	6	4	67%
	%female	40%	20%	
Reader	Women	0	n/a	n/a
	Men	3	1	33%
	%female	0%	n/a	
Professor	Women	4	2	50%
	Men	5	0	0%
	%female	44%	100%	
Overall	Women	8	3	***37.5%***
	Men	14	5	***35.7%***
	%female	36%	38%	

*Internal HR data

Table 16 shows that generally only a small portion of eligible staff applies for promotion – eligible staff are those who held their current grade for at least a year (staff on probation are not normally eligible to apply). While application and success rates fluctuate year-on-year, 20% of the eligible men and 21% of the eligible women apply for promotion each year on average. In the last 5 years, 35.7% of all male applicants and 37.5% of all female applicants were successful (Table 17), suggesting that the process itself is not biased against either gender.

We believe that proposed changes to the University promotion criteria resulted in higher application rates for 2014/15 as eligible staff may have wished to pre-empt having to apply in 2015/16 under new criteria that had remained unconfirmed by the 2014/15 promotion-application deadline. Historically, criteria changes are often only announced close to the deadline; we hope no further changes will occur in the near future to allow staff to plan their promotion strategy.

Candidates for promotion are invited to nominate themselves and to arrange a discussion of their suitability with their line manager. Informal assistance then may or may not occur with the application process, largely dictated by whether the candidate has a mentor. The new procedure for 2015 involves the application first being considered by a department panel, which may include senior members of a candidate's research institute, and successful departmental applications are then considered by the College panel. For promotion to readerships and professorships, additional interviews are held and external references are sought (prior to 2015, interviews and external references were sought for all candidates). If a line-manager considers a candidate unsuitable, staff can still apply.

Female colleagues have reported that “the process is not transparent and at times seems unfair”, “the criteria are confusing and constantly changing” “we don’t know if we meet the criteria or not”, “assistance is adhoc and relies on who you know and who your friends are”, “I had a lot of help from my mentor who was appointed as part of the University’s Athena SWAN initiative”, “would have liked more help in my subject area”, “I didn’t know what they were expecting or looking for”, “the new criteria are an improvement on the previous ones as they purport to take into account your teaching and other work rather than the emphasis being on your research, however let’s see who is successful, actions speak louder than words.” Based on our survey comments, male colleagues appear to have very similar experience and opinion.

We will address the informality and unevenness of promotion preparation assistance by ensuring that promotion is discussed at appraisals (which is nominally already part of the recently re-launched appraisal process), and by a more formalised and equitable mentoring system (AP3.5), with intention to apply forwarded to the HoD well in advance of the deadline, and we will ensure that staff gain a better understanding of the promotions process and expectations (AP3.2).

At the start of the annual promotions round, a series of workshops are held at university level describing the process, to which all members of staff are invited via e-mail. Colleagues who have attended have said that they are useful for generic help but do not offer individual or subject specific help, however the last ones occurred before the new criteria had been published so were not as helpful as they might have been. The University’s initiative to increase the application rate among women is the annual women-only promotion workshop. This is lead by senior academic women, with ‘lessons-learnt’ talks from promoted women who had previously been unsuccessful. Attendees then work in pairs to identify each other’s unique ‘selling point’, followed by interactive exercises on using positive language, and closing with applicants writing the opening sentence for each category of the application form. Members of our department have attended but not all women applicants. The workshops are highly rated by participants for generic help and self-confidence boosting; therefore we will investigate attendance-related success rates within Computer Science and ensure the workshop dates are publicised within the department (AP3.4). The University also runs a non-discipline specific mentoring scheme – we will more actively encourage our staff to participate in this, while we explore options for a discipline-specific departmental mentoring system (AP3.5).

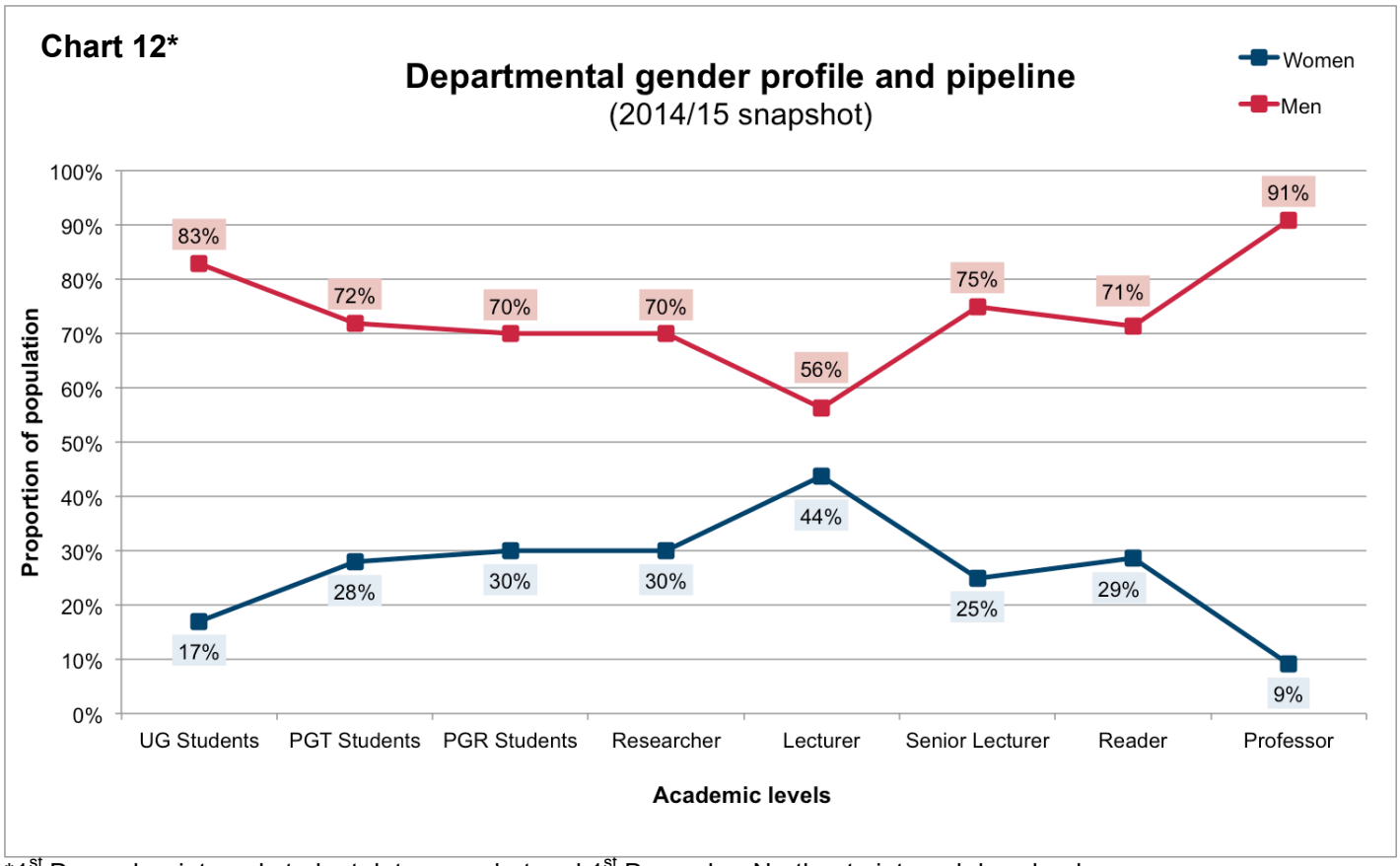
For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) **Recruitment of staff** – comment on how the department’s recruitment processes ensure that female candidates are attracted to apply, and how the department ensures its short listing, selection processes and criteria comply with the university’s equal opportunities policies

At present, there are no measures in place to attract female candidates to the department. Vacancies are advertised on websites and via word-of-mouth. Job descriptions are produced by line-managers (using central forms), with standard templates for the most common posts. The line-manager, reporting to the appropriate College manager, selects interviewees and panel-members, while the panel sets dates/times. At least one panel-member must have attended recruitment and E&D trainings within three years, and managers are advised to keep panels diverse, but this is presently optional so we will implement a more formal requirement of at least one woman and one man on panels (AP3.6).

As the proportion of female applicants is low, we propose to increase the number of female applicants by asking staff to actively recommend and encourage female candidates, and we will evaluate the recent job adverts to ensure these are family-friendly and less prescriptive (AP3.1 and AP3.6).

(ii) **Support for staff at key career transition points** – having identified key areas of attrition of female staff in the department, comment on any interventions, programmes and activities that support women at the crucial stages, such as personal development training, opportunities for networking, mentoring programmes and leadership training. Identify which have been found to work best at the different career stages.



*1st December internal student data snapshot and 1st December Northgate internal download

As discussed earlier, the key transition points, where we see a drop in the representation of women, are from lecturer to senior lecturer and reader, and more acutely, from reader to professor (see Chart 12 above). At present, the Department offers little support over what is offered at University-level. The already mentioned departmental mentoring scheme we are instigating (AP3.5) will also be used to propose additional departmental initiatives that female progression could benefit from.

The department supports University's drive to address the low progression rates for all by informally encouraging staff for promotion (e.g. senior staff noting to individuals that they should apply); this does not target women. There is further informal support from senior management by private arrangement during the application process. Our survey shows that support is not always offered at appraisals, the timing of which (i.e. during the application period) is perhaps not at the point of need. We will initiate the formalisation of a more equitable and inclusive departmental support system (AP3.5).

Career development

For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) **Promotion and career development** – comment on the appraisal and career development process, and promotion criteria and whether these take into consideration responsibilities for teaching, research, administration, pastoral work and outreach work; is quality of work emphasised over quantity of work?

The University re-launched its appraisal system in 2014/15 to align it with its new promotion criteria focusing on quality rather than quantity of work. This new Personal Development Review (PDR) focuses on three areas: research, teaching, and collegiality (including committee membership, outreach work, and pastoral duties). Appraisals were in place for many years for researchers, lecturers, and senior lecturers, but PDRs are now extended to readers and professors, and include professional and support staff. Staff and line-managers are expected to use the PDR system to annually review career development and establish training needs; HR encourages mid-year reviews and offers training to both appraisers and appraisees (25% of our staff attended in the last year).

Appraisals/PDRs are expected to take place for all staff at least annually, however prior to the 2014/15 review/re-launch, the University did not systematically monitor this. In the department, the HoD closely monitors engagement: 86% of staff (90% of women and 85% of men) now reported that they had a PDR last year, 75% agreed (78% of appraised women and 74% of appraised men) that progression was usefully discussed.

However, 26% disagreed that progression/promotion was usefully discussed, 27% of those appraised think the appraisers do not take issues seriously, and 20% of researchers have not had an appraisal in over 2 years. Staff also voiced concerns that – due to the size of the department – appraising is delegated to professors, outcomes are not always followed up, and the process is something of a box-ticking exercise.

The University supports all staff considering promotion through annual information sessions on the criteria and process, and offers women-only workshops to female candidates (see section ii above; 9 female attendees since 2013). These events are promoted widely within the department by e-mail encouraging attendance, and the HoD circulates the promotion criteria and procedures. The HoD and mentors, for those that have them, offer advice prior to application, and provide written and verbal feedback to unsuccessful applicants. Any feedback can be used as discussion points at the next appraisal. However, the receipt of feedback is dependant on whether someone has a mentor and is not always constructive.

The above issues all informed AP3.2, AP3.3, AP3.4, and AP3.5.

(ii) **Induction and training** – describe the support provided to new staff at all levels, as well as details of any gender equality training. To what extent are good employment practices in the institution, such as opportunities for networking, the flexible working policy, and professional and personal development opportunities promoted to staff from the outset?

At University-level, new staff attend a half-day central induction (6 attendees since 2012) and a half-day E&D session (17 attendees since 2010). They can join themed staff networks (e.g. women's network, LGBTQ network, BME network) that meet termly. Line-managers are trained in effective induction and HR checklists guide managers and staff through the process. Details of the University's flexible working policy and family-friendly policies are available on the HR intranet. We will collate feedback on how accessible these are and publicise the staff networks and family-friendly policies (AP3.7).

The University runs a formal mentoring scheme for probationary academic staff (probation usually lasts for three years, pro-rata for part-time staff). New academics have to undertake the Professional Development in Academic Practice (PDAP) programme, unless they completed a similar at another UK institution. The department does not offer an induction programme; new staff are mentored shortly after joining. New academics can apply for a BREIF award to jump-start research.

Training is available to all staff, researchers and PhD students regardless of their grade. Departmental managers very supportive and actively promote available courses: CDP is advertised through emails and the central Staff Development website. Academic training includes grant and article writing, CV writing, promoting research, safety training, teaching and student supervising skills, communication skills, management skills. There is mandatory training in PhD supervision and work-placement tutoring.

The University provides training on proposal writing and external experts advise on proposals. All grant applications are reviewed by at least two experienced academics, with written feedback. Research groups within the department and at College/University-level support group-members in the writing process, particularly the early-draft stages. The University's Research Support and Development Office assists in identifying funding streams and costing applications.

> (iii) **Support for female students** – describe the support (formal and informal) provided for female students to enable them to make the transition to a sustainable academic career, particularly from postgraduate to researcher, such as mentoring, seminars and pastoral support and the right to request a female personal tutor. Comment on whether these activities are run by female staff and how this work is formally recognised by the department.

At the department level, supervisors offer student advice that is tailored to individuals through the central tutoring@Brunel initiative, designed to "foster a sense of belonging and connection with the University". Tutors are allocated randomly, with opportunity to request a different tutor. Small group or individual sessions are held weekly to discuss academic and other issues (in private, if needed).

We believe this recent increase in face-to-face tutoring for all students has led to a greater student satisfaction amongst female students. In our NSS results, we have noted that women's overall satisfaction steadily increased in the last 3 years, and is currently very high. Additionally, our results show parity in areas where discrimination traditionally may show up, e.g. fair assessment and marking, equal access to and support from staff. Women also reported significant improvement over the years in communication skills and confidence. Lastly, women increasingly find our courses interesting and intellectually stimulating. The British Computing Society recently assessed our courses for their accreditation and, following interviews with students, they noted that we appeared to excel in encouraging women into computing careers through our tutoring techniques and by urging them to take part in activities such as Women Who Code, Code First, and Women in STEM. We believe that this increased female student satisfaction may have translated into better degree outcomes for female students as well, however our focus group actions (AP2.4 and AP2.6).

PhD students select supervisors with guidance from the Director of Research; female students can select a female supervisor, although the driver is research expertise. Female PhD students are encouraged to present at the Lovelace Colloquium organised by the British Computer Society. These activities are run by male and female staff as part of supervising PhD students so not recognised in workloads. We currently have no other initiatives to recognise or address female student isolation – we will initiate a female cross-institutional STEM student-networking group (AP2.11).

Organisation and culture

a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

(i) **Male and female representation on committees** – provide a breakdown by committee and explain any differences between male and female representation. Explain how potential members are identified.

Table 18 – Committee membership by gender
(Snapshot from 2015/16)

Committees in 2015/16 (University, College, or Department)	**Selection method**	**Men**	**Women**
Senate (U)	Election	1	1 (50%)
Education Committee (C)	Selection by HoD	12	2 (14%)
Academic Committee (D)		5	–
Management Committee (D)		5	–
Outreach/Recruitment Committee (D)		4	–
Teaching/Curriculum Committee (D)		10	2 (17%)

Table 18 shows the gender ratio of committee representation. Meeting schedules and membership (except for Senate) are fluid and ad-hoc; we can currently only provide data for this year (figures are from the last time the committee sat). We would expect to see female representation in proportion to our gender ratio (29% of all staff are women). However, women are underrepresented (presently, three committees have no female representation) and it is not always clear to staff how individual members are selected or if staff can put themselves forward. We have a single female professor who, as the only senior female academic, sits on a number of committees. More junior female academics are not expected to be interested in committee work. We will provide clarity to staff on membership selection and increase female representation by opening membership to more junior academics (AP4.1).

(ii) **Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts** – comment on any differences between male and female staff representation on fixed-term contracts and say what is being done to address them.

Table 19 – Academics and researchers on open and fixed contracts by gender*
(2010/11 to 2014/15)

	Open	Fixed	Total	%*
2010/11	**40**	**5**	**45**	**11%**
Academic	39	0	39	0%
Women	13	0	13	0%
Men	26	0	26	0%
Researcher	1	5	6	83%
Women	1	4	5	80%
Men	0	1	1	100%
2011/12	**43**	**18**	**61**	**30%**
Academic	42	0	42	0%
Women	12	0	12	0%
Men	30	0	30	0%
Researcher	1	18	19	95%
Women	1	10	11	91%
Men	0	8	8	100%
2012/13	**43**	**18**	**61**	**30%**
Academic	42	0	42	0%
Women	12	0	12	0%
Men	30	0	30	0%
Researcher	1	18	19	95%
Women	1	8	9	89%
Men	0	10	10	100%
2013/14	**41**	**12**	**53**	**23%**
Academic	40	1	41	2%
Women	12	0	12	0%
Men	28	1	29	3%
Researcher	1	11	12	92%
Women	1	6	7	86%
Men	0	5	5	100%
2014/15	**43**	**9**	**52**	**17%**
Academic	42	0	42	0%
Women	12	0	12	0%
Men	30	0	30	0%
Researcher	1	9	10	90%
Women	1	2	3	67%
Men	0	7	7	100%

*1st December Northgate internal download

As Table 19 shows, all academics have permanent contracts (except for one fixed-term male academic in 2013/14 due to an open-ended appointment-freeze), and all researchers have fixed-term contracts (except for one female researcher, who negotiated her contract before EU regulations gave fixed-term staff open-

ended rights). No immediate gender-related difference can be perceived in our use of fixed-term contracts; researchers are employed on fixed-term contracts regardless of their gender. Since 90% of our researchers wish to move to academia, we will liaise with the University to evaluate current practice (AP4.2).

b) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) **Representation on decision-making committees** – comment on evidence of gender equality in the mechanism for selecting representatives. What evidence is there that women are encouraged to sit on a range of influential committees inside and outside the department? How is the issue of 'committee overload' addressed where there are small numbers of female staff?

Our earlier committee-table lists all influential committees, where staff are involved. At present, it appears that women are not actively encouraged to sit on committees, except for strengthening their promotion cases. This could be due to a perception that female academics may not have time or interest for committee work. Furthermore, since the selection-process is not clear enough and is at times ad-hoc (as identified earlier), we could not find evidence of gender equality in the mechanism for selecting representatives and are implementing appropriate actions (AP4.1).

(ii) **Workload model** – describe the systems in place to ensure that workload allocations, including pastoral and administrative responsibilities (including the responsibility for work on women and science) are taken into account at appraisal and in promotion criteria. Comment on the rotation of responsibilities e.g. responsibilities with a heavy workload and those that are seen as good for an individual's career.

Workload allocations are taken into account at the "citizenship and collegiality" appraisal element and the "collegiality" promotion element. Presently, there is no mechanism for the rotation of onerous or career-shaping tasks. Apart from our Athena SWAN preparation, activities on "women in science" are not routinely recognised. The rotation of responsibilities is not immediately clear, partly because the decision to allocate a role to further an individual's career is taken privately but usually in consultation with the person concerned. Despite these issues (AP4.1 and 4.3 to address these), it is reassuring that 80% of staff (80% of women and 81% of men) agree that workload allocation is transparent.

As workload is not automatically assessed for gender equality, we carried out a comparative analysis of lecturer and senior lecturer workloads as initial workload-allocation assessment (Table 20). A rubric was used to assign scores to task and the effort required, based on experience of these tasks by members of the SAT

team. Total scores were then objectively calculated for each member of staff and averages determined by gender and grade. The quantified result shows female lecturers and senior lecturers having a workload that is on average 20-25% heavier than the workload of male lecturers and senior lecturers. This is primarily because the women on these grades undertake heavier administration and student management duties.

Table 20 – Workload assessment for lecturers / senior lecturers by gender
(2010/11 to 2014/15)

	Admin	Teaching	Student support	Total
Female lecturers	1.2	2.2	1.0	4.5
Male lecturers	0.6	2.0	0.7	3.4
Female senior lecturers	1.0	3.2	1.0	5.1
Male senior lecturers	0.4	2.6	0.7	3.7

This result is coupled with 50% of women agreeing they would benefit from a more formal workload allocation model (against 37% of men agreeing; an additional 41% of women and 26% of men don't know whether they would benefit, and 30% staff disagree that they would benefit – 90% of whom are men). We will formalize the role-allocation; assign more precise weighting to individual tasks (including women in science activities) for comparability, and define term-of-office for named roles (AP4.1 and AP4.3).

(iii) **Timing of departmental meetings and social gatherings** – provide evidence of consideration for those with family responsibilities, for example what the department considers to be core hours and whether there is a more flexible system in place.

Lectures are centrally scheduled between 8am and 8pm. Caring responsibilities are considered informally and individually, permitting changes to suit staff where possible. For instance, departmental meetings and exam boards are between 10:00 and 16:00 to allow all to attend. We will investigate whether a core hours policy would be beneficial (AP4.4).

The majority of those (27% of all staff) who said that timings of networking and social events are awkward were parents. For instance, our end-of-day weekly research seminars may disadvantage carers so we will move the timing to earlier in the day. We have one annual social gathering, a Christmas lunch. As 43% of staff think that more events would be beneficial, we will explore options for 'core hour' social events (AP4.5).

(iv) **Culture** – demonstrate how the department is female-friendly and inclusive. 'Culture' refers to the language, behaviours and other informal interactions that characterise the atmosphere of the department, and includes all staff and students.

68% of staff (70% of women and 67% of men) feel that the atmosphere is friendly, 49% (40% of women and 59% of men) feel it is inclusive, and 51% (50% of women and 52% of men) feel it is welcoming. However, 30% of staff (30% of women and 30% of men) feel the atmosphere is cliquish. We proposed additional social events to encourage staff to mix with colleagues they do not normally work with (AP4.6). To provide opportunity for informal peer-to-peer interaction and foster inclusivity in decision-making, we hold a mandatory annual staff retreat. Feedback shows this as useful but the residential nature may cause issues for carers, so we will review the retreat policy (AP4.7). PhD students hold social events, supported and sometimes organised by the department (with academics attending for support if needed) and a one-day retreat for peer-to-peer support, and regularly present to each other in a supportive atmosphere.

It is reassuring that 92% of staff said they had never been treated unfairly within the department. However, 22% said they noticed occasions when others were treated unfairly, and this may suggest that not everyone felt they could share their experience. Additionally, 16% would be unwilling to and another 24% are unsure whether to report unfair treatment, while 16% (gender-balanced) noted elsewhere that they had sometimes been treated unfairly due to their gender. We will initiate a systematised and focused awareness of E&D (AP4.8 and AP4.9).

(v) **Outreach activities** – comment on the level of participation by female and male staff in outreach activities with schools and colleges and other centres. Describe who the programmes are aimed at, and how this activity is formally recognised as part of the workload model and in appraisal and promotion processes.

Our recruitment and outreach team, which has a fluid membership but usually includes a woman, is engaged in student recruitment by visiting local schools (approximately 10 annually, depending on staff and school availability). This work is recognised in workloads and counted as collegiality activity in appraisal and promotion. We will ensure that women make up at least 20% of these teams (AP2.8).

Our main outreach activity is the annual Adopt-a-bot Challenge, where secondary school pupils in the UK and overseas are given a finch robot to programme and develop creative scenarios. UK teams are usually mixed (~20-30% girls), with an all-girl team winning in 2013/14 (see photo below). Feedback shows the events help girls realise that coding is not just for boys, and foster awareness and interest. We hope this will eventually be reflected in increased applications from all (but especially women).

An example of a more generic outreach activity, led by one of our female academics, was in exhibiting Eve, the Robot Scientist as part of the 'Antenna Live' series at the Science Museum (London) in August 2015. We also hold a software innovation event during the annual Made-in-Brunel festival to showcase student-designed software. Although these activities are suitable for all pupils and students, we will explore girl-specific outreach options.

Flexibility and managing career breaks

a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

(i) **Maternity return rate** – comment on whether maternity return rate in the department has improved or deteriorated and any plans for further improvement. If the department is unable to provide a maternity return rate, please explain why.

Of the current staff, 67% of female academics (but no female researcher) took maternity leave since they started working in the department. In the last 4 years, three academics took maternity leave, all returning on a full-time basis. When surveyed, 50% of those who ever took maternity leave in the department said they experienced difficulties upon return to work so we will propose a cross-University focus group on leave returner experience (AP4.10).

(ii) **Paternity, adoption and parental leave uptake** – comment on the uptake of paternity leave by grade and parental and adoption leave by gender and grade. Has this improved or deteriorated and what plans are there to improve further.

Of the current staff, 33% of male academics (but no male researcher) they took parental leave within the department; Table 21 lists the instances that started or ended since 2011/12 (all at lecturer level).

Table 21 – Number of staff on parental leave and returning from leave*
(2011/12 to 2014/15)

Year	Maternity		Paternity	
	Started	Ended	Started	Ended
2011/12	2	1		
2012/13		1		
2013/14			2	2
2014/15	1			
Total	**3**	**2**	**2**	**2**

*Internal HR data

One academic was eligible but did not take paternity leave, and 22% of those who took paternity leave noted the financial implications were not clear, which influenced the length of their leave. Additionally, only 70% of male academics/researchers and 80% of female academics/researchers reported awareness of central parental leave policies. We will actively communicate leave policies, including the new, shared leave policy (AP4.11).

(iii) **Numbers of applications and success rates for flexible working by gender and grade** – comment on any disparities. Where the number of women in the department is small applicants may wish to comment on specific examples.

All academics and researchers work full-time and we had no formal applications for flexible working in the last three years, however most academics work with informal flexibility to suit individual needs. Actions in the section below address this area.

b) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) **Flexible working** – comment on the numbers of staff working flexibly and their grades and gender, whether there is a formal or informal system, the support and training provided for managers in promoting and managing flexible working arrangements, and how the department raises awareness of the options available.

No staff works formally flexibly (see section above); all staff benefit from informal flexible working through verbal managerial agreement. HR provides online

information on policies, however there is little publicity and no substantive training for managers on handling flexible working requests. Informal arrangements are encouraged by management and are generally not seen as detrimental to careers. This leaves staff vulnerable to changes when line-managers change.

In our survey, only 16% (20% of women and 15% of men) disagreed that flexible working is supported and only 14% believe that flexible working may be harmful to careers. However, many did not know if flexible working was supported (27% in total; 30% of women and 26% of men) and it would harm their career (38% in total; 50% of women and 33% of men). We will actively communicate the University's flexible working policy and examples of requests, and implement monitoring of both formal and informal requests and uptake, and we will encourage managers to undertake relevant training (AP4.12).

(ii)	**Cover for maternity and adoption leave and support on return** – explain what the department does, beyond the university maternity policy package, to support female staff before they go on maternity leave, arrangements for covering work during absence, and to help them achieve a suitable work-life balance on their return.

Allowances are made for pregnant staff to undertake lighter duties to ensure their continued good health (e.g. others assist in labs with movement of equipment and elevated chairs are provided for delivering lectures). Prior to maternity leave, arrangements are made for covering workload during absence by reallocating tasks to others in the department. Research may be continued by a colleague, or, more often, be frozen and resumed upon return. We extend funded fixed-term contracts by the leave period, in addition to statutory maternity leave. These are discussed before maternity leave starts, including details on use of KIT days and how to keep updated with internal developments. The use of KIT days is encouraged and monitored for effectivity.

In our survey, all maternity returners noted that the leave negatively impacted their career (in contrast to 87% of paternity returners disagreeing that their leave damaged their career), and 50% said they experienced difficulties upon returning. We will address issues, such as lack of procedures for discussing return, and formal agreements not being made for resumption of tasks or modules (AP4.13).

When recently surveyed by the University, staff preference was for arranging childcare closer to home rather than via on-campus nursery; therefore the University prioritises its childcare voucher scheme. Through salary sacrifice, staff can save up to £900 annually. While there are currently no breast-feeding and baby-changing facilities on campus, the University already agreed to install facilities by 2019 – we will lobby for earlier implementation (AP4.14).

In 2011/12, the University introduced a competitive Athena SWAN Research Award scheme to support maternity leave returners, statutory adoption leaver, and extended (4 months of over) paternity or adoption leaver in their research – ten awards given University-wide to date, none to Computer Science, although we ensure this is advertised. Awards are based on research proposals (up to £15,000) and are for purchasing equipment, employing research assistants,

attending conferences, or buying-out teaching time. Up to five awards are made each year, with the University capping the total cost at £45,000.

[Section 4 contains 4125 words in total, excluding tables, and table/chart titles.]

5. Any other comments: maximum 500 words

Please comment here on any other elements which are relevant to the application, e.g. other SET-specific initiatives of special interest that have not been covered in the previous sections. Include any other relevant data (e.g. results from staff surveys), provide a commentary on it and indicate how it is planned to address any gender disparities identified.

6. Action plan

Provide an action plan as an appendix. An action plan template is available on the Athena SWAN website. The Action Plan should be a table or a spreadsheet comprising actions to address the priorities identified by the analysis of relevant data presented in this application, success/outcome measures, the post holder responsible for each action and a timeline for completion. The plan should cover current initiatives and your aspirations for the next three years**.** The action plan does not need to cover all areas at Bronze; however the expectation is that the department will have the organisational structure to move forward, including collecting the necessary data.

Department of Computer Science – Athena SWAN Bronze Action Plan (2016 – 2019)

Issues identified	Actions	Expected effect of actions	Persons responsible	Start date	Deadline	Measuring success
1. Departmental embedding and SAT organisation – these are high-priority actions; essential for maintaining Athena SWAN momentum						
1.1. Departmental equality and diversity issues not regularly represented at College-level.	Co-establish a College-level equality & diversity network / committee group, and delegate representation from our SAT	Communication with College and other departments in CEDPS on equality and diversity is improved	HoD and nominated SAT member	May-16	Sep-16	College E&D Network Group set up; departmental SAT representative regularly attends and feedbacks to SAT
1.2. Head of Department changing at the end of 2016	Brief College Dean on departmental Athena SWAN requirements and initiatives, in advance of new HoD selected at the end of 2016	Ensuring action plan is continued throughout the change in leadership	SAT chair, Athena SWAN Coordinator, Pro-Vice Chancellor for E&D	Jun-16	Sep-16	Meeting(s) taken place with HoD and College Dean, who are aware of all details of the action plan and the work required to implement it
1.3. Our action plan needs to be regularly monitored and reviewed	Establish system of annual progress reports and present these to departmental and College management and also the University SAT for information and feedback	Ensuring the action plan is monitored and updated for progress at regular intervals	SAT chair and deputy chair	Dec-16	Jun-17	At least 80% of actions we committed to are implemented (regularly adjusted for implementation, if necessary)
1.4. All staff need to be kept informed about Athena SWAN and the Action Plan	Create dedicated Athena SWAN section on departmental website (external facing) and improve internal SharePoint area to publicise Bronze application and action plan, update on progress, and share	All staff know what is in the action plan, know about the Athena SWAN application and progress	SAT team and website manager.	Sep-16	Jun-17	90% staff know about the Athena SWAN application, the action plan and progress as evidenced via departmental survey (‘pulse check’ survey in mid-2017).

	additional resources					
1.5. University and College management needs to ensure action plan is on schedule	Set up 6-month review meetings with the College Associate Dean for Equality and Diversity and Athena SWAN Coordinator to review action plan progress.	Management are monitoring progress and assisting with any issues that arise. College-level support evident for Athena SWAN action plan and activities.	SAT chair	Jun-16	Dec-16	6-month review meetings set up; College Associate Dean for E&D and Athena SWAN Coordinator feedbacks on departmental action plan every 6 months.
1.6. SAT chair may need to temporarily or permanently leave SAT	Appoint / recruit deputy academic lead for fairer Athena SWAN workload allocation and succession planning	SAT chair tasks are shared and should the SAT chair need to stand down, continuity of the workings SAT and the action plan is maintained	SAT chair, Athena SWAN Coordinator, Pro-Vice Chancellor for E&D	Sep-16	Dec-16	A deputy is appointed and fully briefed on Athena SWAN processes and plans.
2. Student and staff data section – these are medium priority actions, generally to be implemented within 12 to 24 months (nb. some more urgent exceptions)						
2.1. Foundation courses not well-advertised to prospective applicants and we don't actively recruit from this pool	Advertise Mathematics foundation course on Computer Science website; include information on foundation course in recruitment team briefing.	Prospective students from less traditional routes (non-A level routes) are aware that entry is available through foundation course.	Website manager and marketing team	Jun-16	Dec-16	Foundation course permanently featured on website with description of course content and testimonials from former students; outreach team regularly distributes information 15% increase in student numbers on foundation course over three years.
2.2. No data available on whether part-time courses would enable	Collect feedback from student focus groups (including foundation students) to	Up-to-date assessment of whether part-time course options should be	SAT lead and nominated SAT member.	Jun-18	Dec-18	Focus groups(s) conducted; feedback collated and formally reported to departmental and

students from underrepresented socio-economic groups to study computer science.	establish whether part-time course(s) would be popular or needed; consult with Brunel student recruitment team on strategies for part-time courses.	explored by the department.				College management; consultation completed with recruitment ream; if needed, required follow-up action(s) agreed.
2.3. Our female UG PGR intake may have been unusually high in 2010/11 but we don't know why	Conduct historical data analysis and additional research within the department.	More granular and precise insight into the reasons why female numbers have gone down since 2010/11	Nominated SAT member and member of Education Committee	Sep -17	Feb-18	A paper prepared and circulated with analysis of data, including conclusions drawn about the ongoing decrease in female UG numbers
2.4. We need a better understanding of why female and male students make different Computer Science degree choices	Organise focus groups to consult our current students on their applicant preferences, perceptions, and expectations	More granular insight into reasons for distinctly gendered degree choices	Nominated SAT member and member of Education Committee	Dec-16	May-17	Four focus groups (one for each level plus PGT) conducted and the results analysed. (combined implementation with AP 2.6)
2.5. Detailed information about the destination of our students after graduation was not available	Investigate whether the higher number of graduate-level employed female students are CS degree-related jobs or whether more are being employed at administrative levels	Building baseline data on how many of our female students remain in CS related fields	Nominated SAT member and the University Careers and Placement Team	Jan-18	Jun-18	A paper published detailing the destination of our students once they graduated
2.6. We have limited understanding of what the career aspirations of our students are.	Collect focus group data, combining focus group with action 2.4	A better understanding of student aspirations will enable us to provide more tailored support.	Nominated SAT member and the University Careers and Placement Team	Dec-16	May-17	Four focus groups (one for each level plus PGT) will be conducted and the results analysed (combined implementation with action 2.4)
2.7. Availability of part-	Promote part-time study option	Availability of part-time	Outreach and	Jun-17	Dec-17	Focus group/survey shows that

time option for PGT and PGR programmes is not widely known	in appropriate outreach and recruitment activities; create webpage on departmental website detailing part-time study experience	study mode enables prospective students from non-traditional backgrounds to study computer science	recruitment teams; website manager and marketing team			students were/are aware of part-time study mode option; some increase in part-time student numbers is detectable (current uptake is zero)
2.8. No female academic or research staff currently involved in outreach, school visits, and face-to-face recruitment activities	Nominate female representatives to outreach and recruitment team(s), re-assigning some of their admin workload, if necessary (in line with workload allocation exercise outcome)	More equal distribution of outreach tasks among men and women, with both male and female role models presented to prospective students	HoD, outreach and recruitment teams	Sep-16	Oct-16	A least 2 female academic and/or research staff involved in outreach, recruitment, and school visit activities (but in proportion to male:female ratio in the department)
2.9. Gender ratio of student applications, offers, acceptances, and intake not regularly monitored and assessed in detail especially from FoIT and clearing.	Implement annual reporting on applicant, offer, acceptances, and intake numbers from women and men for all Computer Science programmes, including intake from foundation course route.	Department-wide awareness of picture of applicant pool, offered and accepted student body.	Planning, Recruitment team, SAT lead and nominated SAT member	Sep-16	Feb-17	Annual gender ratio reports produced on applications, offers, acceptances, and intake are reviewed and made available to all staff.
2.10. Exit interview processes are informal and not uniform across the University	Implement an appropriate departmental exit interview system and collect more robust leaver data	Gain a better understanding about why staff leave and provide better support to staff who are leaving	HoD and/or staff managers	Jun-16	Dec-16	All staff who leave the department have an exit interview (consider offering to staff who move within Brunel).
2.11. No female student support groups in the department or at College level	Initiate and promote a female student support group	Female students feel supported and are not isolated.	Nominated SAT member	Jun-17	Oct-17	A female support group at College level that meets once a term.

3. Staff career progression – these are mixed priority actions, with the relevant deadline indicating in each case the level of urgency						
3.1. Some doubt as to whether our job adverts are always gender-neutral in language and equally encourage both male and female applicants.	Gender-analyse departmental job advertisements, person specifications, and shortlisting criteria; ensure that family-friendly initiatives and E&D badges are listed on adverts; name at least one male and one female contact.	Job advertisements and person specifications encourage both male and female applicants to apply for positions at the department.	HR, Athena SWAN Coordinator, and nominated SAT member.	Jun-17	Dec-17	Paper prepared on adverts and shortlisting criteria for posts recruited for since 2010/11 (currently ~15).
3.2. Support for promotion is patchy in the department. 27% of staff disagree (70% of whom strongly disagree) that promotions applications are encouraged	Implement system of proactively encouraging staff to apply for promotion during the appraisal process and via mentors and career advice. Senior staff and previously successful applicants to hold 'bitesize' workshops for staff on the promotions process.	Staff feel more encouraged and supported in their promotions plans	HoD, appraisers, recent successful applicants	Aug-16	Feb-17	2014/15 eligible: applied ratio for promotions (35%) is maintained in future promotions rounds; understanding of promotions process increases from 57% to 90%.
3.3. Only 30% of men and 30% of women believe that the promotions process is fair.	Reinforce the system of promotion panels and mentors providing feedback to all applicants, mentioning specific areas for improvement for unsuccessful applicants.	Staff feel more encouraged in their promotions plans and perceive the process as fair.	Promotion panels	Aug-16	Feb-17	At least 70% perceive the promotions process as fair; applicants receive useful feedback after application round (to be established via revised survey question).
3.4. Effectiveness of promotion workshops is not recorded; not all staff considering promotion attend	Implement a system where data is regularly collected from central Staff Development and systematise departmental workshops promotions	Majority of staff seeking promotion attend workshops	HoD, appraisers	Aug-16	Feb-17	Central workshops are reviewed by CS attendees with lessons learnt shared within the department; 90% staff seeking promotion attend workshops

3.5. 51% of academic and research staff report that mentoring and career advice would benefit their development and career progression	Implement a systematised mentoring and advisory system to all staff, where staff are allocated discipline-specific mentors.	All staff feel more supported in their career plans and progression.	HoD, central mentoring scheme team, research group leaders	Jun-16	Feb-17	85% of staff report that meaningful and useful mentoring and career advice is available to them (to be established via revised survey question).
3.6. Consistently low portion of female candidates in recruitment rounds (7:3 male-to-female ratio). Few women apply for posts in the department and gender representation is not mandatory on recruitment panels.	Implement a suite of policies: encourage more women applicants by asking staff to actively recommend women candidates and then encouraging them to apply; investigate adding positive action statement to job advertisements; organise for staff engaged in recruitment process to undergo recruitment and unconscious bias trainings.	A higher number of women apply for positions in the department and progress to interview stage and to job offer. Equal opportunity is strengthened within the recruitment process.	HR, Athena SWAN Coordinator, and HoD	Jun-17	Jun-18	10% increase in the number of women applying for positions. A woman is on every recruitment and interview panel. In each recruitment round, gender ratio at applicant, shortlisted, and interviewed stages are approximating identical levels
3.7. Induction and networks designed to welcome new staff and support existing staff are not well-advertised or assessed for usefulness. Many staff are unaware of the HR information available on our	Implement system of noting attendance and collecting feedback on the induction process, information awareness, and if members of staff have engaged with any networks.	More staff are engaged with the induction process and are aware of the support available to them within and outside the department.	HR, nominated SAT member	Jan-18	Jun-18	90% staff are attending induction workshops and are aware of support networks. They are also aware of where to find information on our website.

website.						
4. Staff culture and organisation – these are mixed priority actions, with the relevant deadline indicating in each case the level of urgency						
4.1. Selection process for committee work is not well understood	Create committee policies: advertise committee vacancies to all staff and allocate seats on the basis of assessed applications; rotate roles every 2 years; enable broader access to committee work through shadowing and member-without-portfolio arrangements.	Committee workload is more equitably shared, with all staff having opportunity to apply for seats and shadowing.	HoD	Jun-17	Dec-17	Committee membership selection process is written and distributed to all staff for information; roles are rotated every 2 years; gender ratio on most committees is in line with staff gender ratio; RAs can get involved in committee work.
4.2. Few researchers on open-ended contracts	Investigate the possibility of more researchers having open-ended contracts	The feasibility of fewer fixed term contracts is investigated	HoD; managers; HR teams	Dec-17	Dec-18	The ability to provide open-ended contracts for our research staff or progressing them onto academic posts is explored
4.3. Workload allocation needs to be gender-analysed for equality, and gender imbalance at lecturer/senior lecturer level addressed	Assess all distributable departmental tasks based on newly proposed 'gender equality' rubric, and include formal allocation of 'women in science' activities.	We can be confident that workload allocation is not just transparent but also equitable across genders and grades	HoD; managers	Jun -17	Jun-18	Onerous tasks are rotated and staff feel that opportunities to further their career are taken into account in workload allocation
4.4. Scheduling teaching and meetings to allow for caring duties is done informally and we don't know if this approach is working,	Assess whether the scheduling of teaching and meetings allows for caring duties establish whether a core hour policy would be beneficial	Security of conditions and arrangements for staff with caring duties	HoD; managers; HR teams advising on flexible working policy.	Sep-17	Jun-18	80% of staff agree that their caring duties are taken into account when teaching and meetings are scheduled (through survey result)

and arrangements are vulnerable if line management changes.						
4.5. 27% of staff (40% of women, 22% of men) noted that the timing of departmental events is "awkward".	Establish what timings would be the most inclusive; rotate timings as appropriate.	Staff are able to attend events.	HoD to liaise with departmental event organisers.	Sep-16	June-17	Less than 15% of staff report that event timings are awkward.
4.6. 54% of staff believes there are not enough departmental events and networking opportunities	Organise more networking and social events for staff especially in core hours.	Staff are able to attend events.	HoD to liaise with departmental event organisers.	Sep-17	Ongoing	Less than 15% of staff report not enough events.
4.7. Issues for staff with caring duties attending the residential retreat	Review the retreat to ensure it is inclusive of all staff and allows all staff to engage with departmental issues	More staff able to engage with ideas to develop the department	HoD to liaise with departmental event organisers.	Sep-17	Apr-18	80% staff able to engage with events to decide actions to issues and develop the department
4.8. 22% of staff reported that they have noticed or experienced unfair treatment due to gender	Equality & diversity briefing for all staff; unconscious bias training for managers.	All staff feel that they are treated fairly and with respect.	All managers	Sep-16	Sep-17	Staff survey shows that recent experience or instances of unfair treatment decreased by at least 50%
4.9. There is no dedicated equality & diversity forum in the department	Re-brand Athena SWAN SAT as Equality & Diversity Committee and refresh membership for wide and proportionate representation.	Accessible forum where departmental equality and diversity topics can be discussed.	SAT team	Dec-16	Mar-17	SAT re-branded and membership expanded to be more representative; new E&D Committee meets at least termly.

4.10. Need to collect feedback from maternity/paternity leave returners	Liaise with the University to set up an institutional focus group for feedback collection.	Issues tacked around returner experience	Nominated SAT member	Jun-17	Jun-18	No returner parents report issues with support when returning to work
4.11. Staff are unsure about parental leave rights, financial implications of leave and where to find information	Work with central HR services to evaluate the available information and actively communicate current leave policies, including the recently introduced shared parental leave	All staff are fully aware of parental leave rights, implications and where to find out more information	HoD; managers; HR teams advising on parental leave policy.	Dec-16	Feb-17	90% staff report that they are fully aware of parental leave rights, implications and where to find out more information
4.12. Very low uptake of flexible working arrangements (only 5% of all respondents worked or currently work flexibly with a formal arrangement)	Organise and deliver briefings and training for managers and staff on flexible working policies, including examples of reasonable requests; encourage managers to discuss and identify flexible working needs during appraisals.	Concerns as to what arrangements can be approved are addressed; managers have confidence to deal with flexible working requests.	HoD; managers; HR teams advising on flexible working policy.	Sep-16	Jun-17	70% of staff agree that flexible working is supported in the department (2016 figure: 57%); staff feel they can request flexible working and that it would not be detrimental to their career (currently 38% are unsure and a further 13% agree that flexible working would harm their career).
4.13. Support after career break is not delivered systematically enough; 2016 staff survey suggests that communication and support prior to and after career break needs improvement	Proactively advise staff on return-to-work assistance prior to start of career break. Ensure managers regularly keep in contact with staff on leave and staff are aware of the use of keeping-in-touch days.	Staff and department are clear on post-break plans; staff are able to rekindle their career after leave and are supported in taking up flexible working, where appropriate.	Departmental managers; College HR Business Associates	Sep-16	Jun-17	Subsequent staff surveys show positive feedback from staff who are about to start and/or return from career break. [38% report they took parental leave, with a clear gender split over their perceptions of whether this break has damaged their career - most men strongly disagree, while most women agree that the leave

						damaged their career]
4.14. The department has no facility for breast feeding mothers or babies currently however a university one has been promised	Work with the University on establishing appropriate facilities and advertise to staff in the department.	Breast feeding mothers are able to return to work with confidence that their child's nutritional needs are met.	Nominated SAT member	Jun-17	Jun-18	90% of staff know that breast-feeding and baby changing facilities are available on campus.