



Department Application Bronze and Silver Award



ATHENA SWAN BRONZE DEPARTMENT AWARDS

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

ATHENA SWAN SILVER DEPARTMENT AWARDS

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

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

COMPLETING THE FORM

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

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

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

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

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

WORD COUNT

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

There are no specific word limits for the individual sections and you may distribute words over each of the sections as appropriate. At the end of every section, please state how many words you have used in that section.

We have provided the following recommendations as a guide.

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

Name of institution	Heriot-Watt University	
Department	School of Mathematical and Computer Sciences	
Focus of department	STEMM	
Date of application	November 2018	
Award Level	Silver	
Institution Athena SWAN award	Date: Nov 2016	Level: Bronze
Contact for application <small>Must be based in the department</small>	Damian Clancy	
Email	d.clancy@hw.ac.uk	
Telephone	[REDACTED]	
Departmental website	www.macs.hw.ac.uk	

1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT

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

An accompanying letter of endorsement from the head of department should be included. If the head of department is soon to be succeeded, or has recently taken up the post, applicants should include an additional short statement from the incoming head.

Note: Please insert the endorsement letter **immediately after** this cover page.

Dear Athena SWAN Assessment Panel

As Head of the School of Mathematical and Computer Sciences, I am very pleased to endorse the School's application for the renewal of our Athena SWAN Award. I joined the School as Head in 2016, and positive change was already happening, as is evidenced throughout by the data we present. Our ambition now is to become recognised as a fair, inclusive and supportive place to study and work, at all levels.

Our application has been compiled by our Self-Assessment Team (SAT). I have been part of the SAT over the past two years, to ensure personally that change permeates all School management's actions. The SAT assembled the body of evidence that informs this submission, and ensured that the information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the School.

The self-assessment has affirmed the significant progress made, but also underlined where more work is needed. Areas of particular concern include the number of female undergraduates, particularly in Computer Science. The outreach and inclusivity actions taken to improve our recruitment of female undergraduate students have intensified and we are confident will deliver results on a longer timescale. On the other hand we are proud of the trajectory of our graduate School, which includes several CDTs and has benefitted from the cohort effect to enhance the support and sense of belonging all students feel. The gender balance of staff in Mathematics has also seen a dramatic improvement following the actions taken by the School. We have reached beyond the boundary of the School, leading on the formulation of the institutional workload model and principles, and supporting female early career staff members to sit on the EPSRC Early Career Forum and on the 'Tapping All Our Talents' review group of the Royal Society of Edinburgh.

The staff survey undertaken in summer 2018 has provided us with more comments and suggestions for improving the environment, particularly for early career staff. It has also given us positive feedback on the change occurred, which has been inspiring and encouraging.

The School's management committee has been instrumental, collectively and individually, in shaping our action plan and is fully committed to continue owning and supporting it. We will periodically review the resources needed to maximise its impact, for example on achieving a truly representative diversity of our student body, and on positive career development.

Academic staff tell us that flexible working works well currently, but we aim to make our commitment to supporting family-friendly working, now firmly embedded in our policies and daily actions, more visible and easily embraced, improving further the small concrete measures, such as support for childcare during business travel, that support the career progression and satisfaction of all staff with caring responsibilities.

We are pleased with the progress to date and we continue on the journey to make inclusion, fairness, transparency and equality of opportunities a reality felt and visible to all our staff, with a strong commitment to making tangible change happen.

Best wishes,

A black rectangular box redacting the signature of Professor Beatrice Pelloni.

Professor Beatrice Pelloni

Head of School

[Section 1: 512 words]

RE: Request for additional words
Athena Swan <Athena.Swan@advance-he.ac.uk>
Wed 14/11/2018 14:51
To: Clancy, Damian <D.Clancy@hw.ac.uk>; athenaswan@ecu.ac.uk <athenaswan@ecu.ac.uk>;

Hi Damian,

Many thanks for your email. We are happy to grant an additional 500 words to the School of Mathematical and Computer Sciences, Heriot-Watt University for their November 2018 submission, given the stated differences between mathematical sciences and computer sciences. The additional words are to allow discipline-specific analysis and reflection.

Please include a copy of this email at the beginning of your application, and state clearly throughout where the additional words have been used.

With best wishes,

Jess

Jessica Kitsell

Equality Charters Adviser

E. [REDACTED]

T [REDACTED]

[500 additional granted words used as follows:

Section 4.1: 300 words

Section 4.2: 150 words

Section 5.6(viii): 50 words]

Table 1 List of Abbreviations

2015 APx	Action Point x of our 2015 submission
ALD	Centre for Academic Leadership and Development
AMS	Department of Actuarial Mathematics and Statistics
CDT	Centre for Doctoral Training
CS	Department of Computer Science
DoA	Director of Administration
F	Female
GPC	Good Practice Checklist
HoD	Head of Department
HoS	Head of School
ICMS	International Centre for Mathematical Sciences
LMS	London Mathematical Society
M	Male
MACS	School of Mathematical and Computer Sciences
Maths	Department of Mathematics
MIGS	Maxwell Institute Graduate School
PDR	Performance and Development Review
PGR	Postgraduate Research
PGT	Postgraduate Taught
PS	Professional Services
SAT	Athena SWAN Self-Assessment Team
SICSA	Scottish Informatics and Computer Science Alliance
T&R	Teaching & Research
T&S	Teaching & Scholarship
UG	Undergraduate

National benchmarking data is sourced from HESA. Student numbers are based on headcounts of students who spend at least half their time reading a specific subject. Student data provided for 2013/14 to 2016/17, with 2016/17 values used for 2017/18. Staff numbers are based on headcounts of staff, for 2014/15 to 2016/17.

2. DESCRIPTION OF THE DEPARTMENT

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

Please provide a brief description of the department including any relevant contextual information. Present data on the total number of academic staff, professional and support staff and students by gender.

The School of Mathematical and Computer Sciences (MACS) is one of five schools making up Heriot-Watt University. MACS has autonomy over its budget, appointments, research strategy and teaching. It has a dedicated administration team embedded in the School and an HR partner directly linked to MACS. Professor Beatrice Pelloni has been Head of School (HoS) since 2016, our first female HoS. Appointment of HoS is through external advertisement, for a (renewable) period of 5 years. Teaching and research activities are overseen by School Director of Learning and Teaching (Professor Jennie Hansen) and Director of Research (Professor Lynne Baillie), each appointed for 3 years.

MACS consists of three academic departments: Actuarial Mathematics and Statistics (AMS), Computer Science (CS) and Mathematics (Maths), each delivering research and teaching. Academic staff belong to one of the three departments, with line management delivered by the relevant Head of Department (HoD). Research staff on fixed-term contracts are line-managed by the Principal Investigator for the project. Professional services (PS) are organised at School level, led by Director of Administration (DoA) Darren Cunningham. MACS offers 33 UG and 26 PGT degree programmes in Edinburgh, as well as PGR degrees in all subject areas. Research activity in the mathematical sciences is integrated in the Maxwell Institute for Mathematical Sciences, consisting of our AMS and Maths departments together with University of Edinburgh School of Mathematics. CS research activity is affiliated with the Scottish Informatics and Computer Science Alliance (SICSA), a group comprising all 14 Scottish university computer science and informatics departments. Throughout the School research activities have a distinctive collaborative flavour.

The University has a strong international presence, with overseas campuses in Dubai (7 MACS academic staff) and Malaysia (10 MACS academic staff). This application considers only UK-based students and staff. However, School officers oversee activities in all locations, and good practice is shared across the School.

In Edinburgh, MACS is based in two adjoining buildings with a shared common room. It is the working environment for 125 academic and research staff (25% female). Our 30 PS staff (73% female) include 8 staff working off-campus at the International Centre for Mathematical Sciences (ICMS), a joint initiative between the University of Edinburgh and Heriot-Watt. Table 2 presents an overview of numbers of UK-based staff and students across the School.

Table 2 Summary of UK-based staff and student numbers (staff headcounts 2018; student headcounts 2017-18)

	Female	Male	% Female
Teaching & Research Staff	25	63	28.4%
Teaching & Scholarship Staff	2	6	25.0%
Research Only Staff	4	25	13.8%
Professional Services Staff	22	8	73.3%
Postgraduate Research Students	31	72	30.1%
Postgraduate Taught Students	93	147	38.8%
Undergraduate Students	317	736	30.1%

Figure 1 shows the structure of the key School committees, led by Management Committee, whose composition is shown in Figure 2. Management Committee's composition, 3F, 7M in 2015, now stands at 7F, 7M.

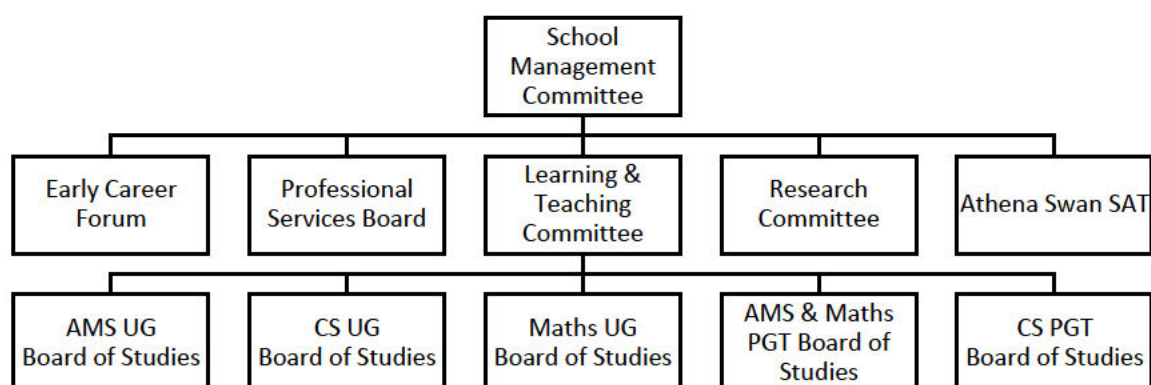


Figure 1 School Management Structure

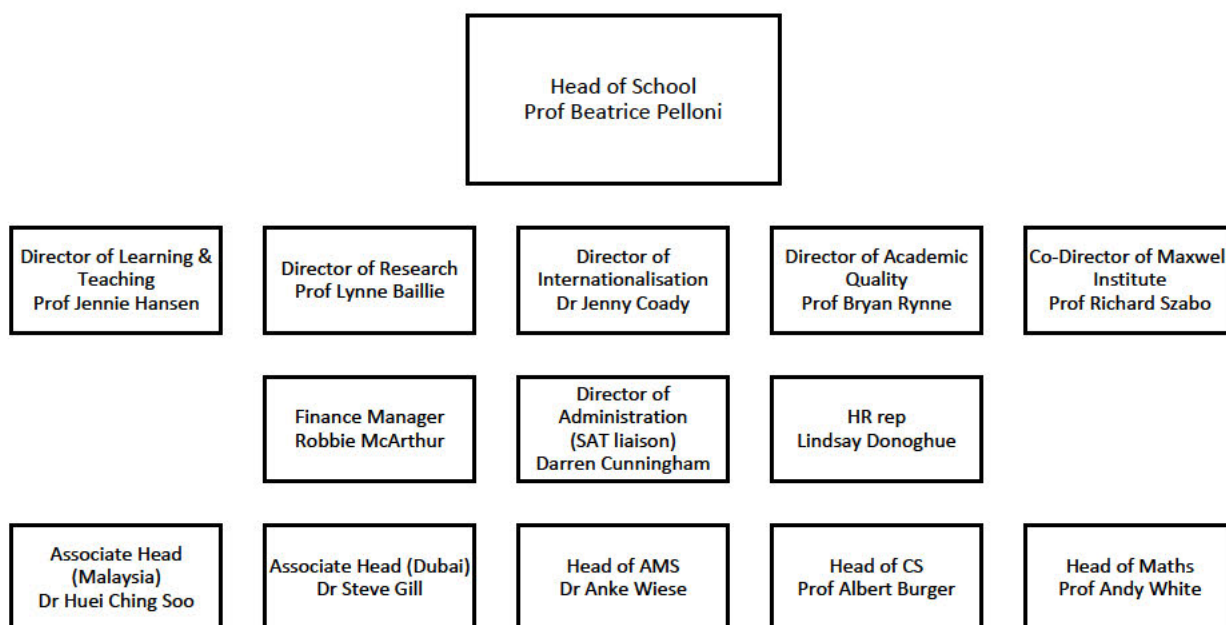


Figure 2 MACS Management Committee

The data we present in this application show that positive change is happening across our areas of activity. Study and working conditions have improved for all, as direct consequence of our increased activity and ambition towards inclusive, fair, transparent practices embedded in all we do. The atmosphere in the School reflects this positive trajectory, illustrated by our two Case Studies (). Staff were surveyed in 2018, just after the HE pensions dispute and a University-wide voluntary redundancy programme. Despite these difficulties the School survey demonstrates a very satisfactory picture, referenced throughout this report.

[Section 2: 631 words]

3. THE SELF-ASSESSMENT PROCESS

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

Describe the self-assessment process. This should include:

- (i) A description of the self-assessment team


Following our successful Bronze submission of April 2015, the SAT initially focused upon implementation of our 2015 Action Plan, with a new chair, Prof Damian Clancy. At this stage a relatively small team (including the chair, clerk, and DoA) were appointed to the SAT, after which all School staff were invited to volunteer, and a number did so. PGR students were invited to join, and there has always been at least one PGR representative in post, with students from all 3 departments having taken part. In the

run-up to our 2018 submission, SAT expanded to be more fully representative of all staff. A cross-section of academic staff at all stages of the career ladder and across all three departments, as well as PS staff, were invited to participate. SAT membership is taken into account within overall workload allocation. SAT membership (13F, 14M) is shown in Table 3.

Table 3 Self-Assessment Team

Name	Role	Gender	Experience
Dr Panagiota Adamopoulou	Assistant Professor (Maths), GPC team member	F	
Dr Diana Bental	Research Associate (CS), SAT core group member	F	
Dr Laura Ciobanu	Associate Professor (Maths), GPC team member	F	
Prof Damian Clancy	Professor (AMS), SAT chair	M	
Darren Cunningham	Director of Administration (PS), SAT core group member; SAT liaison on Management Committee; GPC team member	M	
Dr Fraser Daly	Assistant Professor (AMS), GPC team leader	M	
Derek Davis	Administrative Assistant (PS), GPC team member	M	
Dr Anastasia Doikou	Associate Professor (Maths), GPC team member	F	
Dr Lorenzo Foscolo	Assistant Professor (Maths), GPC team leader	M	
Dr Lilia Georgieva	Assistant Professor (CS), SAT core group member	F	

Prof Gavin Gibson	Professor (AMS), GPC team member	M	
Dr Alasdair Gray	Associate Professor (CS), GPC team member	M	
Dr Lotte Hollands	Associate Professor (Maths), GPC team member	F	
Prof Andrew Ireland	Professor (CS), GPC team member.	M	
Lisa Kinnaird	Administrator (PS), SAT clerk	F	
Dr Anatoly Konechny	Associate Professor (Maths), GPC team member	M	
Dr Fiona McNeill	Associate Professor (CS), SAT core group member	F	
Prof Greg Michaelson	Professor (CS), GPC team leader	M	
Prof Beatrice Pelloni	Professor (Maths) and HoS	F	
Dr Mariya Ptashnyk	Associate Professor (Maths), GPC team leader	F	
Prof Verena Rieser	Professor (CS), GPC team member	F	
Dr Seva Shneer	Associate Professor (AMS), GPC team member	M	
Prof Bernd Shroers	Professor (Maths), GPC team member	M	
Andrea Sneddon	Associate Professor (AMS), GPC team member	F	
Dr Robert Stewart	Assistant Professor (CS), GPC team member	M	
Dr Mark Wilkinson	Research Associate (Maths), GPC team leader	M	

	PhD student (CS), SAT core group PGR representative	F	
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(ii) An account of the self-assessment process

SAT core group meets 6 times per year, with more frequent meetings of sub-teams as necessary. SAT is assisted by Tina Donnelly (University Athena SWAN officer) and Lindsay Donoghue (HR partner), both of whom attend SAT core group meetings. In addition, the SAT chair and clerk have monthly informal meetings with the Athena SWAN project officer to discuss progress and issues arising. Liaison between SAT and School Management Committee is primarily via the Director of Administration, who sits on both groups, with attendance of SAT chair at Management Committee meetings once a term. The SAT chair and clerk and DoA sit on the Champions Group, a committee consisting of SAT members from all Schools of the University. SAT member Dr Fiona McNeill is a member of the University's Athena SWAN SAT. Several MACS staff have attended London Mathematical Society Women in Mathematics Good Practice Workshops and reported back to the SAT.

SAT used the benchmark practices in the Good Practice Checklist (GPC) available from Oxford Research & Policy to analyse policies and practices currently in place in MACS. Five sub-teams were formed corresponding to the Action Areas of the GPC (Figure 3). Each team analyzed the area within their remit by grading the School against each benchmark, considering what progress has been made since our 2015 submission, and determining priorities for further action. Team leaders met three times during the process to discuss progress and share ideas.

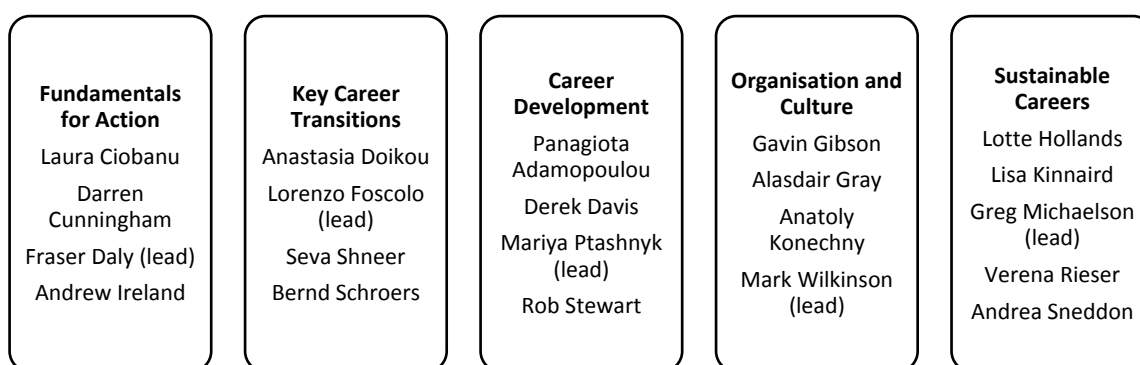


Figure 3 Good Practice Checklist analysis sub-teams

During 2018 we carried out our second employee survey (the first having taken place in 2014). All academic and, for the first time, PS staff, across all of our campuses were surveyed. Table 4 shows participation rates for Edinburgh campus. The number of responses from male PS staff was low, which unfortunately means that, to maintain

confidentiality, no gender breakdown for PS responses can be presented. Response rates were otherwise good. As well as quantitative data in the form of Likert-scale responses, 96 qualitative data items were received. Where possible we compare with results from our 2014 survey, although several 2018 questions were not asked in 2014.

Table 4 Employee survey response rates (Edinburgh campus)

	Responses			Percent of eligible population		
	Female	Male	Total	Female	Male	Total
Academic staff	22	55	77	71%	59%	62%
Professional Services staff	18	4	22	82%	50%	73%

Since students were not included in the survey, a focus group was convened to elicit the views of PGR students. The PGR focus group expressed broad agreement that the actions from our 2015 Athena SWAN submission have improved the sense of community for PGR students in the School, but felt that more could still be done in this area (see sections 4.1(iv), 5.6(i)).

School Management Committee members were actively engaged in the development of our submission. The application has been reviewed by a University mock panel and by a critical friend from the University of Reading (Athena SWAN Silver department). The entire application, including Action Plan, has been endorsed by School Management Committee and University Executive.

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

Following 2018 submission, to ensure continuity we plan that the SAT chair will initially remain in place, with the intention to have a new chair in place in time to lead our next submission. SAT membership will evolve by bringing in new individuals annually, while maintaining representation of different groups across the School, to ensure an appropriate balance between continuity and new individuals with fresh ideas. In addition to existing PGR student representation, we will incorporate UG student representation. As of 2018, SAT has been given a dedicated budget of £2000 per annum to support new Equality & Diversity activities. SAT core group will continue to meet 6 times per year, to monitor implementation of our 2018 action plan and to develop new initiatives. Smaller working groups will be set up as required, with a particular focus to work on specific objectives. SAT activities have been communicated via the regular HoS email bulletin to all School staff; we will move to a dedicated bi-monthly email bulletin to all staff and students.

Action 1. Strengthen the role of SAT. A bi-monthly bulletin to be set up to improve communication around Athena SWAN issues, emailed to all School staff and students. SAT membership to be regularly rotated. UG student representation to be introduced. SAT chair to attend all School Management Committee meetings, with standing agenda item on Equality and Diversity.

[Section 3: 800 words]

4. A PICTURE OF THE DEPARTMENT

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

4.1 Student data

If courses in the categories below do not exist, please enter n/a.

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

n/a

- (ii) Numbers of undergraduate students by gender

Full- and part-time by programme. Provide data on course applications, offers, and acceptance rates, and degree attainment by gender.

We have taken a number of actions under our 2015 Action Plan to improve the attractiveness of MACS to UG applicants (2015 AP19).

- Audited/redesigned promotional materials to ensure appropriate gender representation; implemented annual review process.
- Visit days for prospective UG applicants always include talks from female students.
- Our 2015 submission identified a particular issue with CS UG female proportion. Taskforce formed (2015 AP1), leading to creation of “women@CS”, a forum for female CS students/staff, to improve the student experience and project a positive image to applicants.

Looking to the data (Table 5) to assess impact:

- AMS (Figure 4): proportion female rose from 37.3% to national benchmark figure (42%) and remains stable there.
- CS (Figure 5): proportion female now showing upward trend (7.7% in 2015-16 to 9.8% in 2017-18), but numbers remain very small (35 female students in 2017-18).
- Maths (Figure 6): proportion female shows some decline (46% in 2013-14 to 39% in 2015-18), while remaining above national benchmark (37%), in the context of steadily increasing UG numbers (309 in 2013-14 to 386 in 2017-18).

For AMS and Maths, currently in line with national benchmarks, our ambition is to improve beyond this towards 50% female representation.

Action 2. Increase female proportions of AMS and Maths UGs towards 50%. Continue to make use of gender positive and ethnically diverse imagery in the open spaces in the School. Ensure visible presence of female staff and students at Open Days. Continue to review promotional materials annually to ensure appropriate gender representation; extend annual review to include

ethnic diversity in imagery, as well as review of direct mailings to applicants to ensure gender-inclusive language is used. Put in place survey of UG applicants who decline our offer, to investigate reasons.

The Scottish Funding Council articulated in 2016 the ambition that by 2030, “no university subject will have a gender imbalance of greater than 75% of one gender.” Thus for CS, our target proportion female by 2030 must be at least 25%. We are currently far from this; our more immediate target is the national benchmark of 16%. Recent initiatives include:

- As part of Advance HE Attracting Diversity project, MSc student [REDACTED] developed an online tool to help users (girls in particular) identify their skills, and signpost them towards appropriate CS courses. The tool was used at recent (2018) Open Days, and we plan a wider roll-out.
- Members of women@CS group visibly involved in Open Days.
- Initiated research with UG/PGT dissertation students into (i) factors behind current low female proportion; (ii) effectiveness of different approaches to encouraging female participation.

Action 3. Increase female proportion of CS undergraduates to national benchmark figure. Continue to promote our women@CS group widely, including at Open Days, so that CS at Heriot-Watt is perceived as an environment that is supportive of women. Roll out, market and evaluate the online tool developed within the Attracting Diversity project. Carry out research with dissertation students to try to identify factors behind our low female proportion amongst CS undergraduates. Conduct research into different approaches to encouraging female students at universities across Scotland, to try to understand what methods are most effective. Continue to make use of gender positive and ethnically diverse imagery in the open spaces in the School. Continue to review promotional materials annually to ensure appropriate gender representation; extend annual review to include ethnic diversity in imagery, as well as review of direct mailings to applicants to ensure non-gendered language is used. Put in place survey of UG applicants who decline our offer, to investigate reasons.

LANDSCAPE PAGE




If you require a landscape page elsewhere in this document, please turn on SHOW/HIDE  and follow the instructions in red. This text will not print and is only visible while SHOW/HIDE is on. Please do not insert a new page or a page break as this will mean page numbers will not format correctly.

Table 5 Total Students (Headcounts) on Undergraduate Courses (National benchmarks shown in Figure 4, Figure 5, Figure 6)

Year	Gender	Main Subject			All
		Actuarial Mathematics & Statistics	Computer Science	Mathematics	
2013/14	Female	123	28	142	293
	Male	207	222	167	596
	Total	330	250	309	889
	% Female	37.3%	11.2%	46.0%	33.0%
2014/15	Female	142	23	149	314
	Male	204	236	194	634
	Total	346	259	343	948
	% Female	41.0%	8.9%	43.4%	33.1%
2015/16	Female	152	21	154	327
	Male	201	253	220	674
	Total	353	274	374	1001
	% Female	43.1%	7.7%	41.2%	32.7%
2016/17	Female	133	27	150	310
	Male	182	289	229	700
	Total	315	316	379	1010
	% Female	42.2%	8.5%	39.6%	30.7%
2017/18	Female	131	35	151	317
	Male	179	322	235	736
	Total	310	357	386	1053
	% Female	42.3%	9.8%	39.1%	30.1%

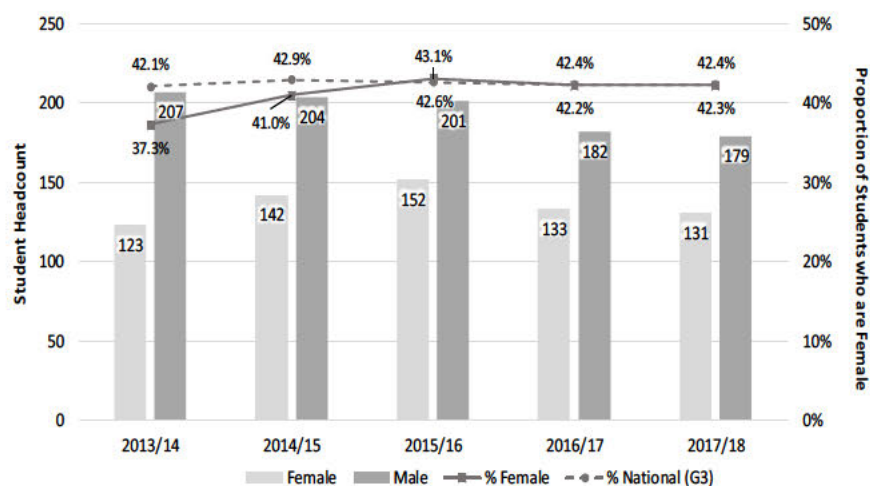


Figure 4 UG Student Numbers on Actuarial Mathematics & Statistics Programmes, and Proportions of Students who are Female

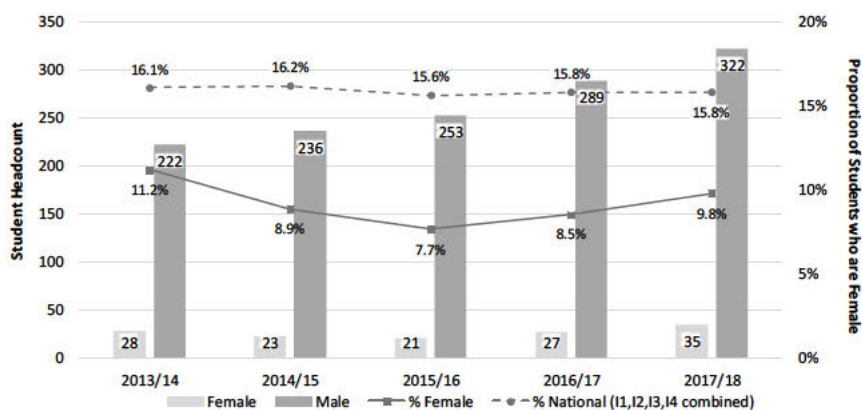


Figure 5 UG Student Numbers on Computer Science Programmes, and Proportions of Students who are Female.

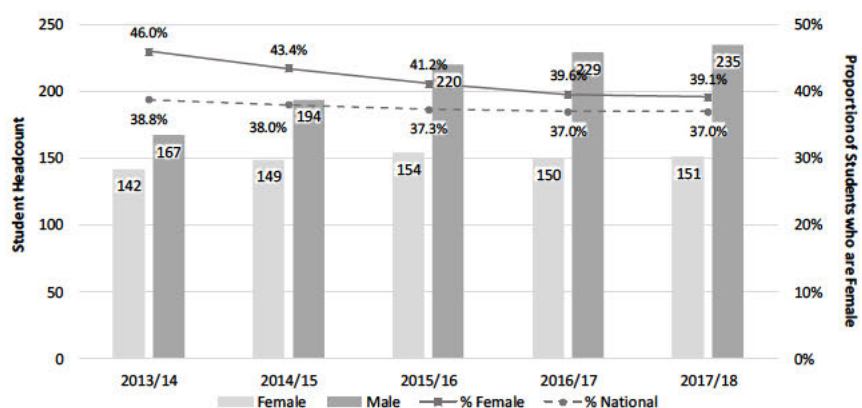


Figure 6 UG Student Numbers on Mathematics Programmes, and Proportions of Students who are Female

Part-time UG student numbers are very small (Table 6); we propose no action here.

Table 6 Total number of Full Time and Part Time Students on Undergraduate Courses

Year	Gender	Mode of Study		Total	Proportion Part Time
		Full Time	Part Time		
2013/14	Female	292	1	293	0.3%
	Male	591	5	596	0.8%
2014/15	Female	314	0	314	0.0%
	Male	631	3	634	0.5%
2015/16	Female	326	1	327	0.3%
	Male	671	3	674	0.4%
2016/17	Female	310	0	310	0.0%
	Male	696	4	700	0.6%
2017/18	Female	317	0	317	0.0%
	Male	731	5	736	0.7%

The only notable ethnicity effect (Figure 7) is that a higher proportion (23%) of female UGs than of males (11%) are Chinese. The bulk of our students of Chinese ethnicity are AMS students, entering via articulation arrangements from our partner universities in China.

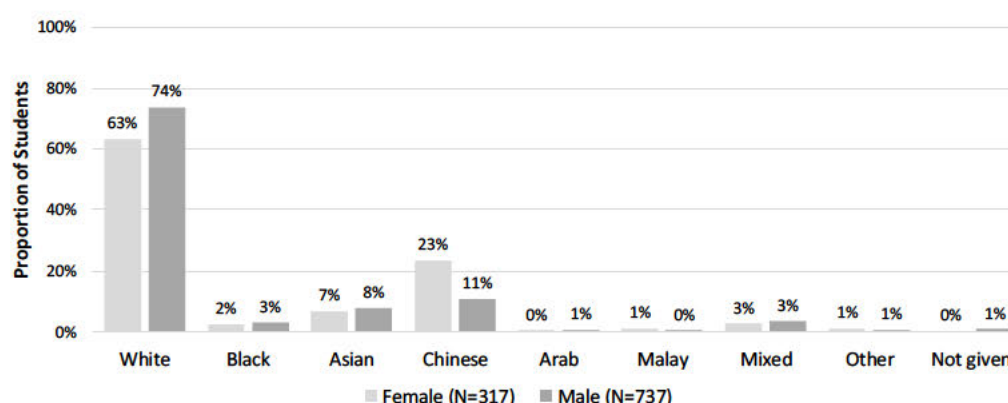


Figure 7 Ethnicities of UG Students by gender 2017/18

In applications, offers, and acceptances, for each department the three categories track each other quite closely (Figure 8, Figure 9, Figure 10). For AMS and CS, proportions female in applications gradually but steadily increased from 2013-14 to 2017-18, now standing at 43.1% (AMS, Table 7) and 14.3% (CS, Table 8). Proportions female in acceptances have shown more variability, while growing from 43.2% to 44.6% for AMS (Table 7) from 10.3% to 12.4% for CS (Table 8). In Maths the proportion female in applications declined before showing some recovery, now standing at 39.6% (Table 9); for acceptances, the Maths proportion female in 2017-18, at 42.2%, has essentially recovered to its 2013-14 level (Table 9).

Table 7 Applications, offers and acceptances for UG Actuarial Mathematics & Statistics Programmes

Year	Gender	Applications Received	Offers made	Offers Accepted
2013/14	Female	199	163	57
	Male	337	261	75
	% Female	37.1	38.4	43.2
2014/15	Female	224	183	60
	Male	318	252	73
	% Female	41.3	42.1	45.1
2015/16	Female	257	217	61
	Male	340	288	64
	% Female	43.0	43.0	48.8
2016/17	Female	188	169	56
	Male	253	220	61
	% Female	42.6	43.4	47.9
2017/18	Female	174	163	54
	Male	230	207	67
	% Female	43.1	44.1	44.6

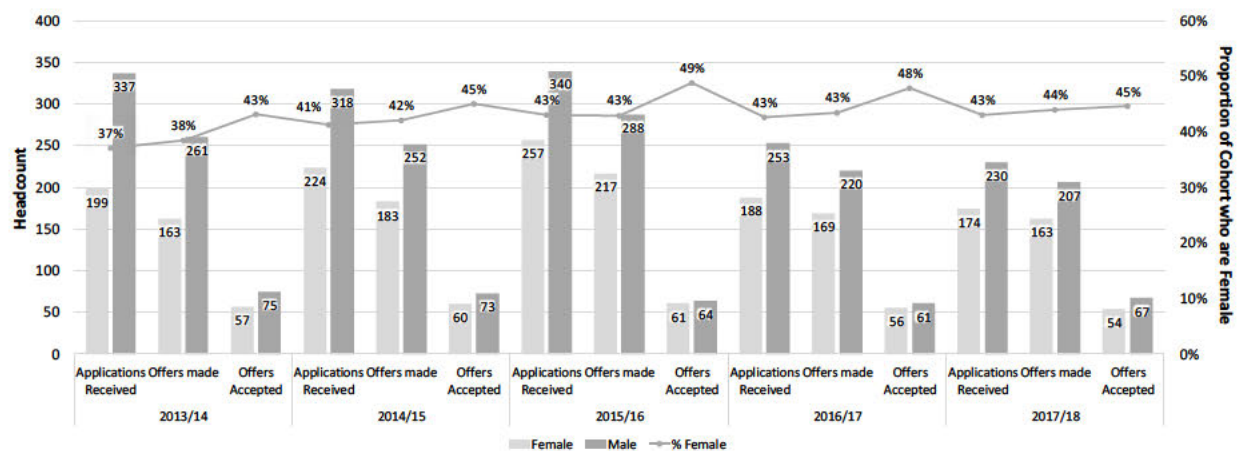


Figure 8 Applications, Offers and Acceptances for UG Actuarial Mathematics & Statistics Programmes and Proportions of Students who are Female at each stage

Table 8 Applications, offers and acceptances for UG Computer Science Programmes

Year	Gender	Applications Received	Offers made	Offers Accepted
2013/14	Female	66	39	9
	Male	583	298	78
	% Female	10.2	11.6	10.3
2014/15	Female	87	48	8
	Male	620	333	67
	% Female	12.3	12.6	10.7
2015/16	Female	111	54	7
	Male	741	387	67
	% Female	13.0	12.2	9.5
2016/17	Female	132	74	12
	Male	844	444	107
	% Female	13.5	14.3	10.1
2017/18	Female	137	73	14
	Male	821	491	99
	% Female	14.3	12.9	12.4

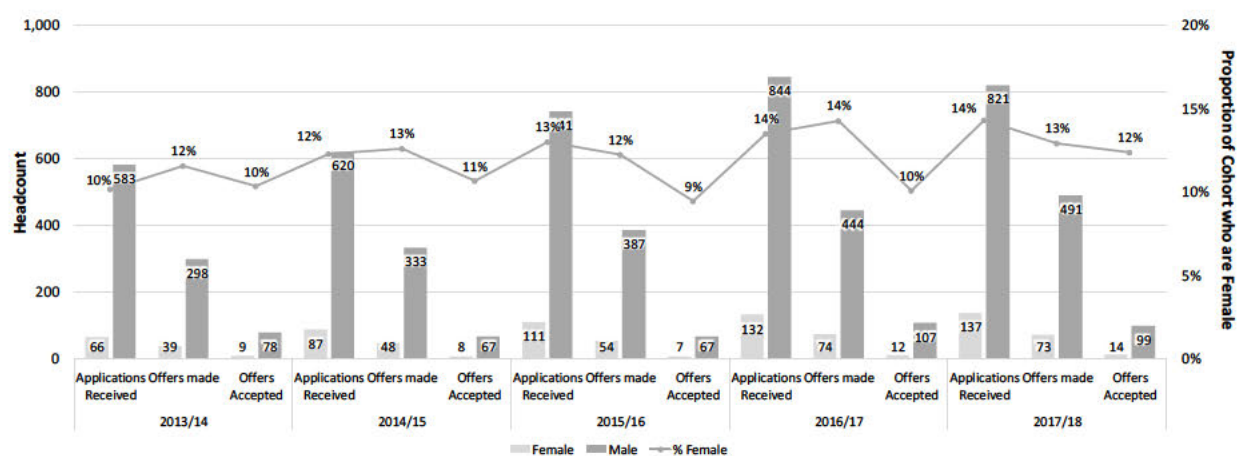


Figure 9 Applications, offers and acceptances for UG Computer Science Programmes and Proportions of Students who are Female at each stage

Table 9 Applications, offers and acceptances for UG Mathematics Programmes

Year	Gender	Applications Received	Offers made	Offers Accepted
2013/14	Female	264	217	36
	Male	363	268	48
	% Female	42.1	44.7	42.9
2014/15	Female	285	217	31
	Male	437	311	62
	% Female	39.5	41.1	33.3
2015/16	Female	271	222	31
	Male	445	328	50
	% Female	37.8	40.4	38.3
2016/17	Female	223	178	27
	Male	350	259	45
	% Female	38.9	40.7	37.5
2017/18	Female	211	175	35
	Male	322	256	48
	% Female	39.6	40.6	42.2

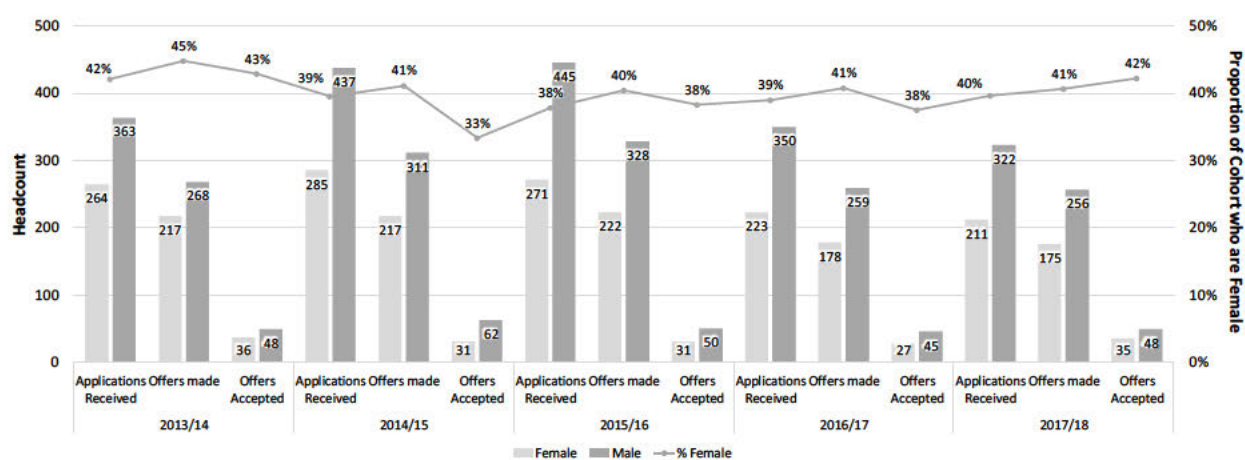


Figure 10 Applications, offers and acceptances for UG Mathematics Programmes and Proportions of Students who are Female at each stage

Our female UGs perform excellently academically, consistently outperforming their male counterparts in each department (Table 10, Table 11, Table 12). Between 2013-14 and 2017-18 the proportions of female students graduating with 1st class BSc degrees from AMS, CS, Maths were 53%, 42%, 40% respectively (Figure 11, Figure 12, Figure 13), compared with 42%, 23%, 31% for males. These figures highlight the need to focus on recruitment, to increase UG proportion female in all departments.

Table 10 Degree classification of those completing UG Actuarial Mathematics & Statistics Courses

Gender	Degree Class	2013/14	2014/15	2015/16	2016/17	2017/18	Overall
Female	First	16	15	27	24	22	104
	Upper second	13	7	13	14	14	61
	Lower second	2	2	5	13	6	28
	Third	0	0	1	1	1	3
	Ordinary	0	0	0	0	1	1
Female Total		31	24	46	52	44	197
Male	First	16	20	23	23	26	108
	Upper second	17	18	17	25	20	97
	Lower second	6	12	4	8	10	40
	Third	1	5	0	2	0	8
	Ordinary	0	1	0	0	3	4
Male Total		40	56	44	58	59	257

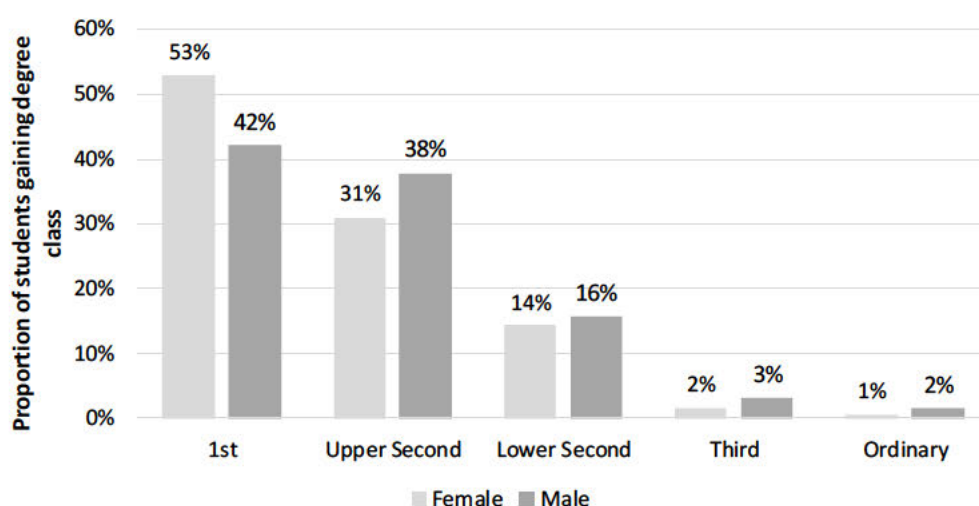


Figure 11 Distribution of women and men between degree classes for those completing UG Actuarial Mathematics & Statistics Courses 2013/14 to 2017/18

Table 11 Degree classification of those completing UG Bachelors Computer Science Courses

Gender	Degree Class	2013/14	2014/15	2015/16	2016/17	2017/18	Overall
Female	First	2	4	2	1	1	10
	Upper second	2	4	0	1	3	10
	Lower second	0	0	0	3	1	4
	Third	0	0	0	0	0	0
	Ordinary	0	0	0	0	0	0
Female Total		4	8	2	5	5	24
Male	First	6	7	10	15	9	47
	Upper second	17	20	16	18	15	86
	Lower second	10	5	8	14	8	45
	Third	4	0	2	3	0	9
	Ordinary	2	6	5	0	4	17
Male Total		39	38	41	50	36	204

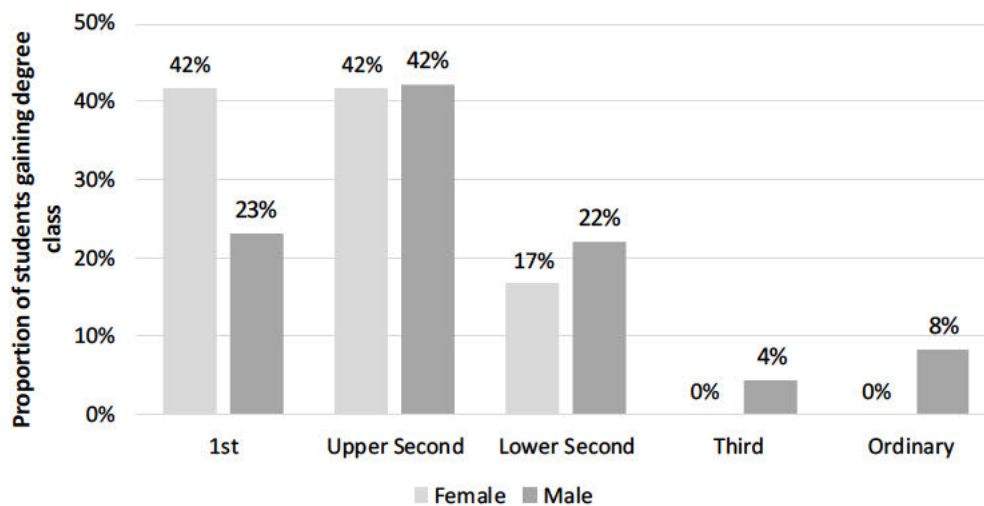
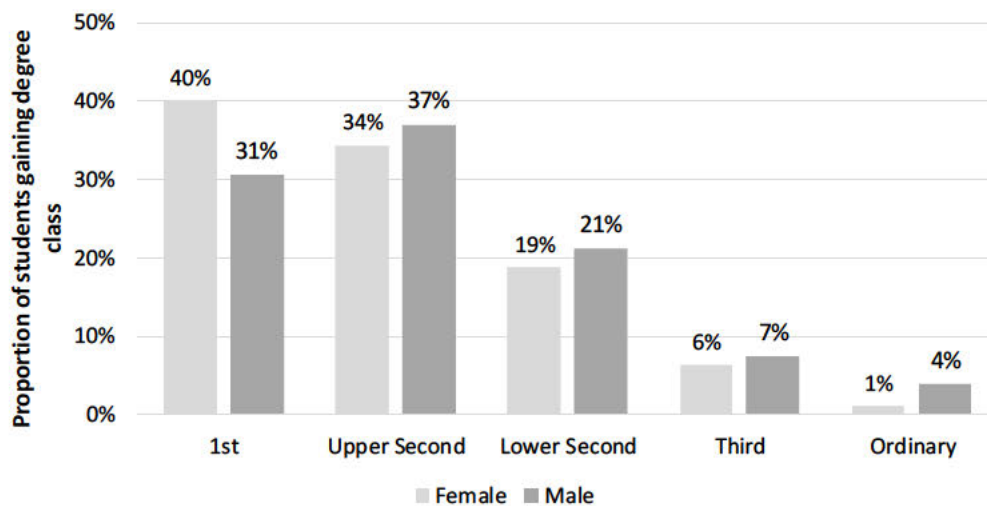


Figure 12 Distribution of women and men between degree classes for those completing UG Bachelors Computer Science Courses 2013/14 to 2017/18

Table 12 Degree classification of those completing UG Bachelors Mathematics Courses

Gender	Degree Class	2013/14	2014/15	2015/16	2016/17	2017/18	Overall
Female	First	21	12	17	11	16	77
	Upper second	14	9	15	8	20	66
	Lower second	5	4	10	7	10	36
	Third	2	1	3	3	3	12
	Ordinary	1	0	0	0	1	2
Female Total		43	26	45	29	50	193
Male	First	9	10	13	14	16	62
	Upper second	8	12	15	19	21	75
	Lower second	9	6	12	6	10	43
	Third	4	4	3	2	2	15
	Ordinary	5	1	1	0	1	8
Male Total		35	33	44	41	50	203

**Figure 13** Distribution of women and men between degree classes for those completing UG Bachelors Mathematics Courses 2011/12 to 2015/16

Numbers choosing to take enhanced degrees (MEng, MMath) in CS, Maths are very small (Table 13, Table 14), a feature of the Scottish system (4-year BSc, 5-year enhanced degree courses). AMS has no enhanced degrees.

Table 13 Students completing Enhanced First Degree and Bachelors in Computer Science

Gender	Degree Class	2013/14	2014/15	2015/16	2016/17	2017/18	Overall
Female	Enhanced First Degree	0	1	0	1	0	2
	Bachelors Degree	4	8	2	5	5	24
	Proportion on EFD	0%	11%	0%	17%	0%	8%
Male	Enhanced First Degree	6	5	5	6	8	30
	Bachelors Degree	39	38	41	50	36	204
	Proportion on EFD	13%	12%	11%	11%	18%	13%

Table 14 Students completing Enhanced First Degree and Bachelors in Mathematics

Gender	Degree Class	2013/14	2014/15	2015/16	2016/17	2017/18	Overall
Female	Enhanced First Degree	1	1	2	0	2	6
	Bachelors Degree	43	26	45	29	50	193
	Proportion on EFD	2%	4%	4%	0%	4%	3%
Male	Enhanced First Degree	0	3	1	4	3	11
	Bachelors Degree	35	33	44	41	50	203
	Proportion on EFD	0%	8%	2%	9%	6%	5%

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

Full- and part-time. Provide data on course application, offers and acceptance rates and degree completion rates by gender.

Across the School, PGT proportion female has remained stable around 39% over recent years (Table 15). AMS proportion female, currently 50.4%, has remained above national benchmark (47%) except for a dip in 2016/17 (Figure 14). For CS and Maths (Figure 15, Figure 16), PGT numbers are smaller, and proportions female more volatile, fluctuating around national benchmarks (27% CS, 35% Maths).

Our PGT scholarships (7F + 1M for 2017 entry) take into account ability and need, and tend to favour females from countries where they are particularly disadvantaged. A recent positive development is our two new 2-year MSc programmes in Artificial Intelligence and in Data Science, which (although numbers are small) have markedly higher female proportions (together 12F:10M) than corresponding 1-year programmes (4F:26M). Informal canvassing of student opinion suggests factors including: less confident female applicants attracted by the less steep learning curve; applicants who have been away from education for some years appreciate the “refresher” nature of the first year.

Action 4. Develop alternative PGT routes targeting women. We will monitor data on our 2-year MSc programmes to investigate the working hypothesis that this could be a better route into a higher degree for female students, and explore possibilities for developing more such 2-year MSc programmes.

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Table 15 Total Students (Headcounts) on PGT Courses (National benchmarks shown in Figure 14, Figure 15, Figure 16)

Year	Gender	Main Subject			All
		Actuarial Mathematics & Statistics	Computer Science	Mathematics	
2013/14	Female	46	17	14	77
	Male	66	38	16	120
	Total	112	55	30	197
	% Female	41.1%	30.9%	46.7%	39.1%
2014/15	Female	59	15	8	82
	Male	60	56	14	130
	Total	119	71	22	212
	% Female	49.6%	21.1%	36.4%	38.7%
2015/16	Female	60	18	10	88
	Male	55	45	34	134
	Total	115	63	44	222
	% Female	52.2%	28.6%	22.7%	39.6%
2016/17	Female	44	10	10	64
	Male	55	48	14	117
	Total	99	58	24	181
	% Female	44.4%	17.2%	41.7%	35.4%
2017/18	Female	64	18	11	93
	Male	63	58	26	147
	Total	127	76	37	240
	% Female	50.4%	23.7%	29.7%	38.8%

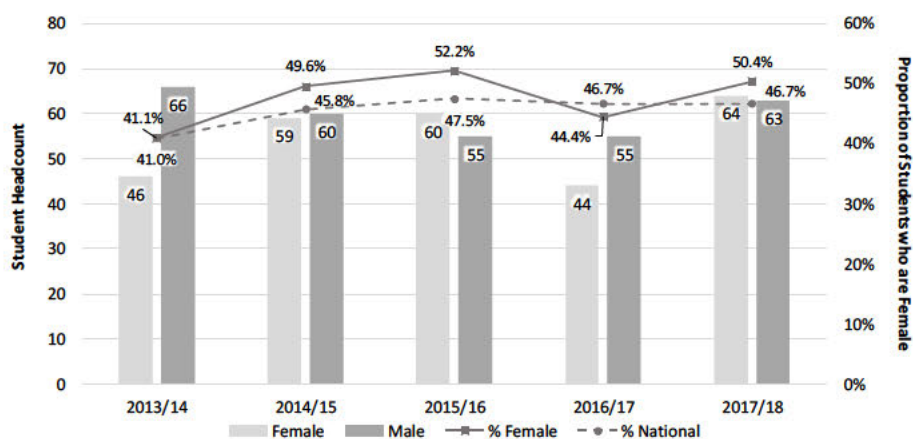


Figure 14 PGT Student Numbers on Actuarial Mathematics & Statistics Programmes, and Proportions of Students who are Female

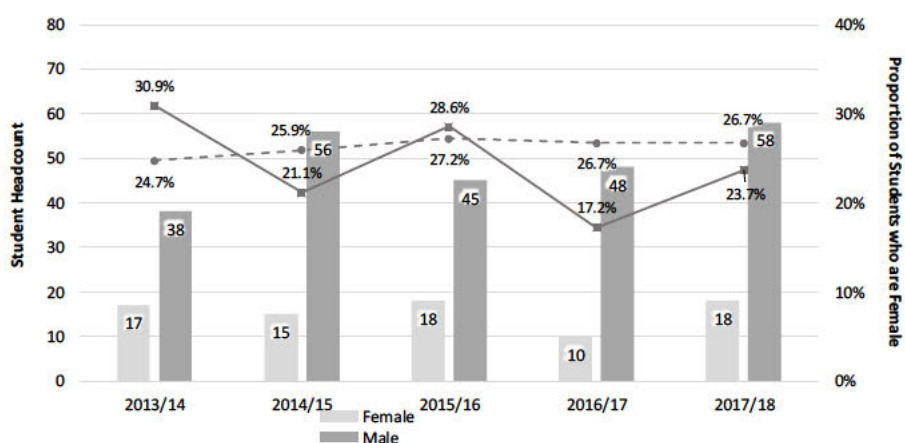


Figure 15 PGT Student Numbers on Computer Science Programmes, and Proportions of Students who are Female

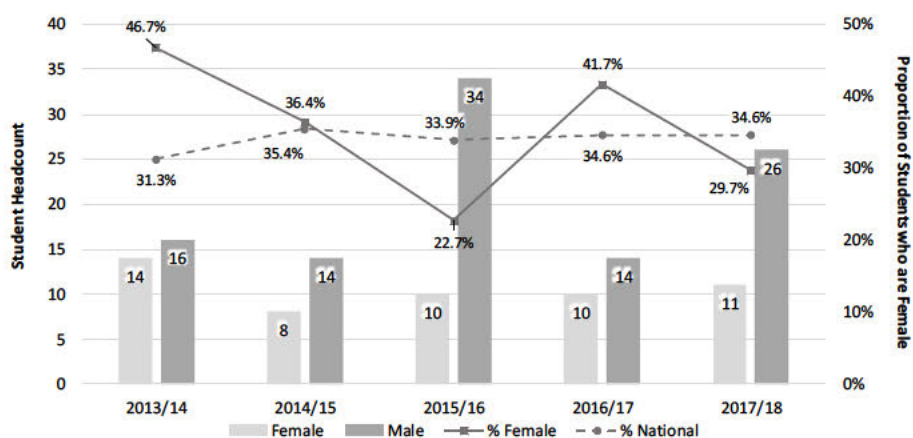


Figure 16 PGT Student Numbers on Mathematics Programmes, and Proportions of Students who are Female

Part-time PGT numbers are very small (Table 16); we propose no action here.

Table 16 Total number of Full Time and Part Time Students on PGT Courses

Year	Gender	Mode of Study		Total	Proportion Part Time
		Full Time	Part Time		
2013/14	Female	75	2	77	2.6%
	Male	113	7	120	5.8%
2014/15	Female	80	2	82	2.4%
	Male	120	10	130	7.7%
2015/16	Female	85	3	88	3.4%
	Male	128	6	134	4.5%
2016/17	Female	60	4	64	6.3%
	Male	111	6	117	5.1%
2017/18	Female	87	6	93	6.5%
	Male	138	9	147	6.1%

The only notable ethnicity effect is that, as for UG, a higher proportion of female PGTs (39%) than of males (33%) are Chinese (Figure 17).

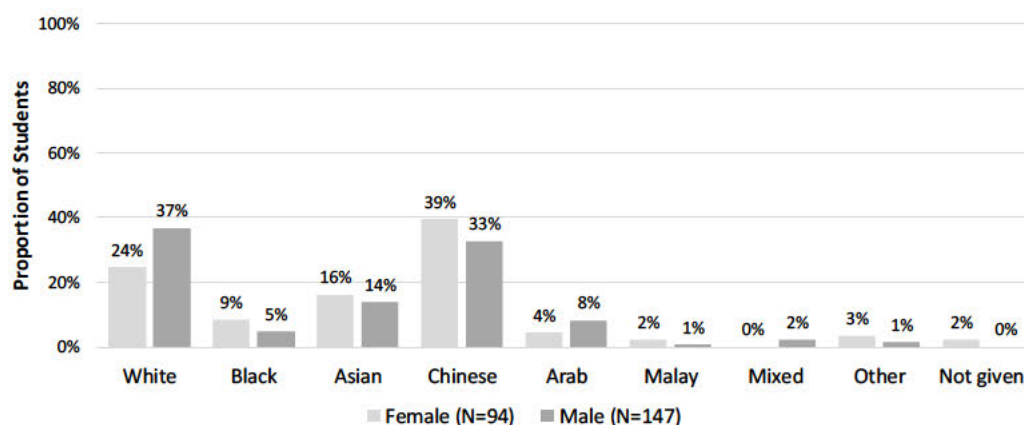


Figure 17 Ethnicities of PGT Students by gender 2017/18

In applications, offers, and acceptances, the three categories track each other quite closely across all 3 departments (Table 17, Figure 18, Table 18), with proportion female of acceptances consistently somewhat above that for offers (for 2017, 41.6% of acceptances compared to 38.2% of applications, Table 17).

Table 17 Applications, offers and acceptances for PGT Courses

Year	Gender	Applications Received	Offers made	Offers Accepted
2013/14	Female	323	223	105
	Male	671	394	179
	% Female	32.5	36.1	37.0
2014/15	Female	392	289	128
	Male	735	486	200
	% Female	34.8	37.3	39.0
2015/16	Female	650	459	190
	Male	930	619	242
	% Female	41.1	42.6	44.0
2016/17	Female	562	398	183
	Male	965	643	296
	% Female	36.8	38.2	38.2
2017/18	Female	571	444	252
	Male	922	678	354
	% Female	38.2	39.6	41.6

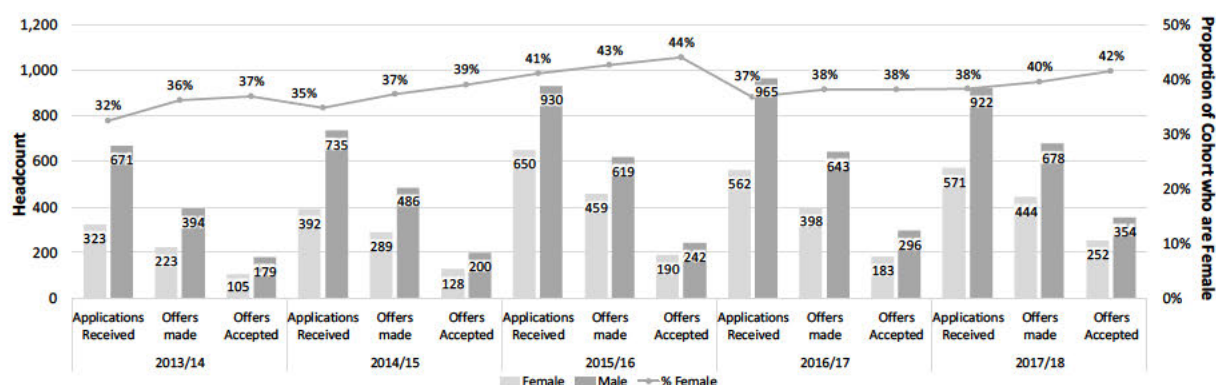


Figure 18 Applications, offers and acceptances for PGT Programmes and Proportions of Students who are Female at each stage

Table 18 Applications, offers and acceptances for PGT Courses by Department 2013/14 to 2017/18

Year	Gender	Applications Received	Offers made	Offers Accepted
Actuarial Mathematics & Statistics	Female	1569	1093	578
	Male	1846	1164	588
	% Female	45.9	48.4	49.6
Computer Science	Female	525	392	154
	Male	1610	1104	453
	% Female	24.6	26.2	25.4
Mathematics	Female	404	328	126
	Male	767	552	230
	% Female	34.5	37.3	35.4

Among students awarded MSc, proportion female is stable around 39% (Table 19), in line with PGT gender profile (Table 15). Numbers awarded PGCert/Dip are small, and proportion female correspondingly volatile. For those awarded Distinction, we have data only for 2015/16 and 2016/17, proportions female being 38%, 32%, respectively. There do not seem to be any clear gender differences in attainment.

Table 19 Completions of PGT Courses

Gender	Qualification	2013/14	2014/15	2015/16	2016/17	Overall
Female	Taught masters	47	46	69	55	217
	PGCert/Dip	4	0	9	4	17
Female Total		51	46	78	59	234
Male	Taught masters	84	69	103	90	346
	PGCert/Dip	12	15	18	6	51
Male Total		96	84	121	96	397
% Female Taught Masters		36%	40%	40%	38%	39%
% Female PGCert/Dip		25%	0%	33%	40%	25%

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

Full- and part-time. Provide data on course application, offers, acceptance and degree completion rates by gender.

We have implemented a number of actions under our 2015 Action Plan to improve the sense of community for PGR students (2015 AP12, AP13, AP14).

- Post of School Director of PGR created.
- PGR induction processes improved.
- All new PGR students allocated a peer mentor.
- Annual School PGR poster day and Christmas conference.

Our PGR focus group agreed that these actions have greatly improved sense of community, while feeling that more social events would be appreciated. In the most recent (2017) Postgraduate Research Experience Survey, 84% of MACS respondents (37/44) agreed that overall they were satisfied with the experience of their research degree programme.

Action 5. Further enhance sense of community of PGR students. Set up a School PGR Society to co-ordinate social events, with funding provided by the School. Review PGR intranet pages, and publicise them to students more actively. Encourage PGR students to add content to PGR intranet pages. Ensure that PGR-organised social events are included in the School's online events calendar.

MACS participates in 3 Centres for Doctoral Training (CDTs), managed separately from general PGR entry, each with its own Equality & Diversity policy. Our Director of PGR ensures good practice is shared across the School.

PGR numbers are small, and proportions female correspondingly volatile (Figure 19). For CS, Maths, proportions female currently stand at 28.6% (CS), 32.1% (Maths), both above corresponding benchmarks (26.1%, 26.7%, Table 20). AMS proportion female has remained below benchmark (Figure 19), and currently stands at 25.0% compared to benchmark 37.4% (Table 20), although student numbers are very small (3F + 9M).

Table 20 Total Students (Headcounts) on PGR Courses

(*Benchmarking: Actuarial Mathematics & Statistics G3; Computer Science, I1, I2, I3, I4 combined; Mathematics G1.)

Year	Gender	Main Subject			All
		Actuarial Mathematics & Statistics	Computer Science	Mathematics	
2013/14	Female	5	10	13	28
	Male	14	31	21	66
	Total	19	41	34	94
	% Female	26.3%	24.4%	38.2%	29.8%
	% Female (national)*	29.6%	24.5%	27.0%	
2014/15	Female	4	8	14	26
	Male	12	25	19	56
	Total	16	33	33	82
	% Female	25.0%	24.2%	42.4%	31.7%
	% Female (national)*	31.5%	24.5%	26.4%	
2015/16	Female	3	8	12	23
	Male	12	24	35	71
	Total	15	32	47	94
	% Female	20.0%	25.0%	25.5%	24.5%
	% Female (national)*	33.4%	25.2%	26.3%	
2016/17	Female	3	7	12	22
	Male	9	28	37	74
	Total	12	35	49	96
	% Female	25.0%	20.0%	24.5%	22.9%
	% Female (national)*	37.4%	26.1%	26.7%	
2017/18	Female	3	10	18	31
	Male	9	25	38	72
	Total	12	35	56	103
	% Female	25.0%	28.6%	32.1%	30.1%
	% Female (national)*	37.4%	26.1%	26.7%	

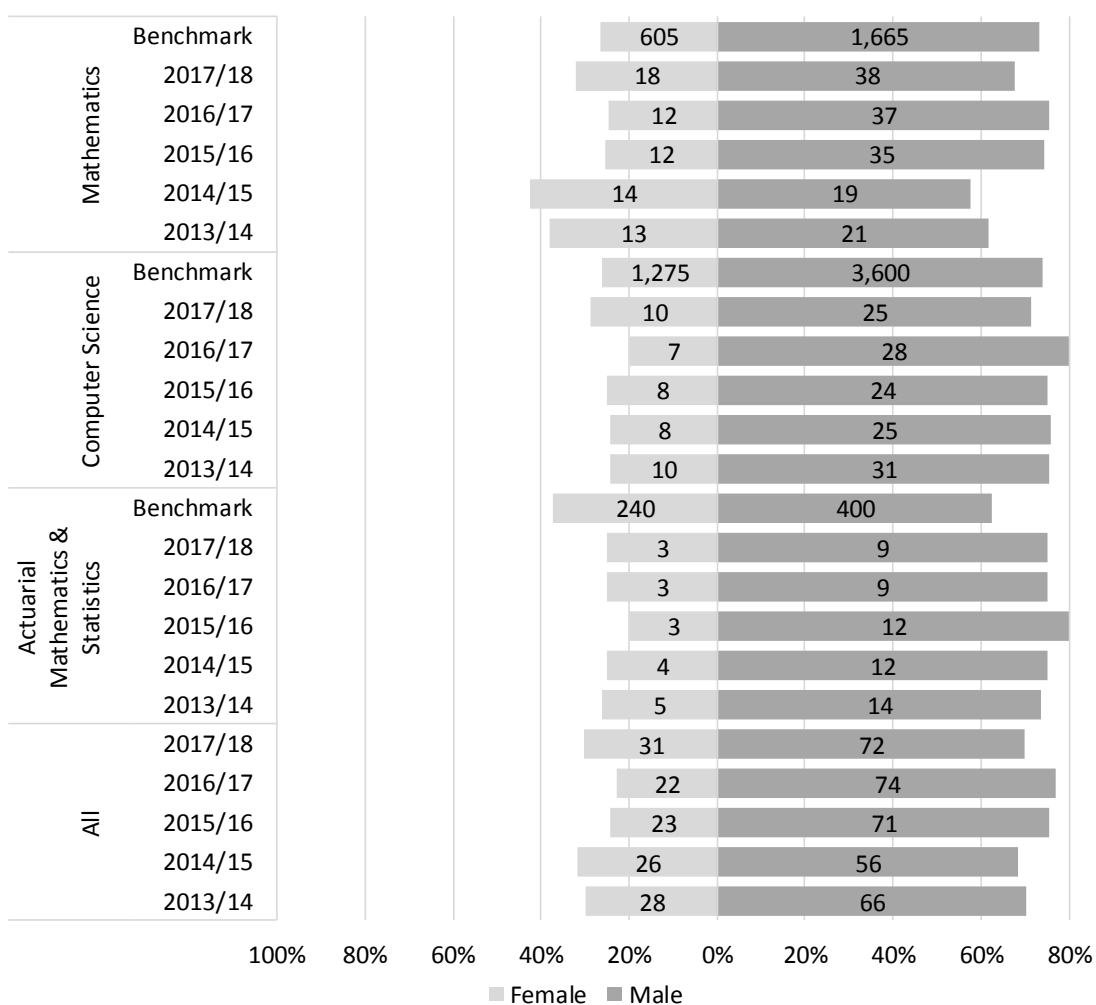


Figure 19 PGR Student Numbers by Department, and Proportions of Students who are Female and Male. Benchmarks use 2016/17 national data.

Part-time PGR numbers are very small (Table 21).

Table 21 Total number of Full Time and Part Time Students on PGR Courses

Year	Gender	Mode of Study		Total	Proportion Part Time
		Full Time	Part Time		
2013/14	Female	26	2	28	7.1%
	Male	62	4	66	6.1%
2014/15	Female	24	2	26	7.7%
	Male	51	5	56	8.9%
2015/16	Female	21	2	23	8.7%
	Male	64	7	71	9.9%
2017/18	Female	30	1	31	3.2%
	Male	69	3	72	4.2%
2016/17	Female	20	2	22	9.1%
	Male	69	5	74	6.8%

PGR ethnicities (Figure 20) do not show any clear gendered pattern.

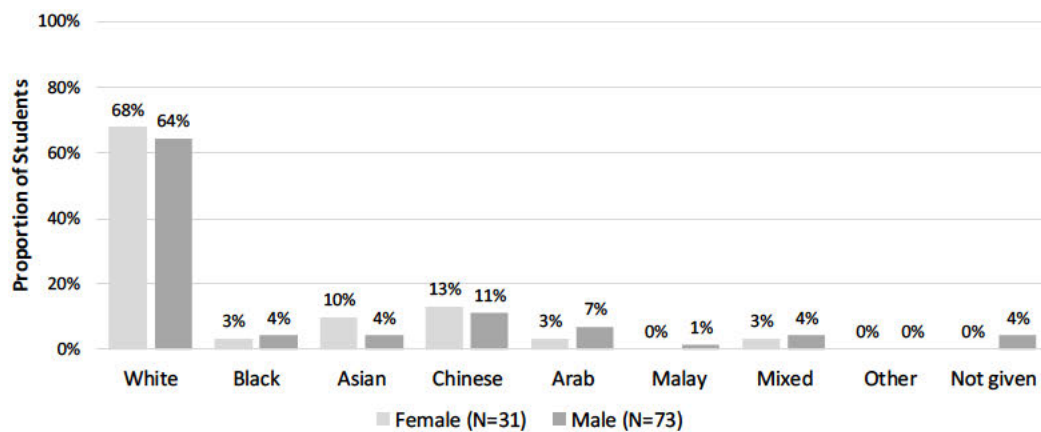


Figure 20 Ethnicities of PGR Students by gender 2017/18

In applications, offers, and acceptances, the three categories track each other reasonably closely (Figure 21), although subject to substantial volatility corresponding to small numbers (Table 22). Aggregating 5 years of data (Table 23), for CS and Maths, proportions female for acceptances (29.1%, 27.9%) are above those for applications (24.5%, 27.2%). AMS proportion female of acceptances (19%) is rather lower than for applications (32.4%) and offers (28.6%). This is some cause for concern, although numbers are small (4F + 17M acceptances). From 2018 entry, AMS/Maths PGR admissions have been unified within the Maxwell Institute Graduate School (MIGS). All shortlisted applicants are invited to a MIGS visit day at the Bayes Centre, a new building in central Edinburgh, where all Year 1 Maxwell Institute PGR students are based. Applicants meet both male and female staff, as well as current students. From 2018-19, we will ensure that all female applicants meet with female students.

Action 6. Improve PGR admissions process. Ensure that all female PGR applicants meet with female current PGR students, as well as female staff.

Table 22 Applications, offers and acceptances for PGR Courses

Year	Gender	Applications Received	Offers made	Offers Accepted
2013/14	Female	41	14	8
	Male	104	30	20
	% Female	28.3	31.8	28.6
2014/15	Female	47	10	8
	Male	159	26	16
	% Female	22.8	27.8	33.3
2015/16	Female	57	13	6
	Male	128	24	19
	% Female	30.8	35.1	24.0
2016/17	Female	50	10	5
	Male	148	29	23
	% Female	25.3	25.6	17.9
2017/18	Female	36	6	5
	Male	83	11	9
	Unknown	80	13	11
	% Female*	30.3	35.3	35.7

* Of those of known gender.

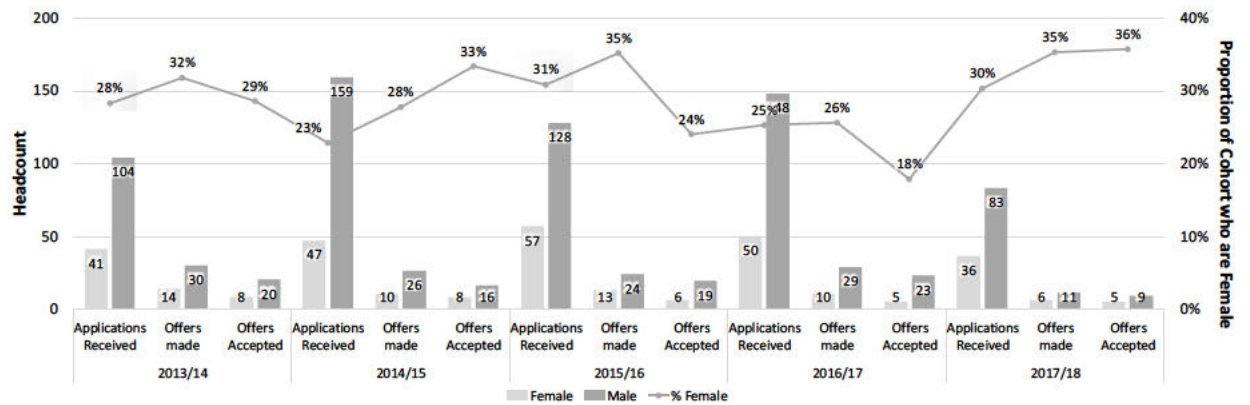


Figure 21 Applications, offers and acceptances for PGR Courses Programmes and Proportions of Students who are Female at each stage

Table 23 Applications, offers and acceptances for PGR Courses by Department 2013/14 to 2017/18

Department	Gender	Applications Received	Offers made	Offers Accepted
Actuarial Mathematics & Statistics	Female	57	8	4
	Male	119	20	17
	% Female	32.4	28.6	19.0
Computer Science	Female	89	26	16
	Male	275	60	39
	% Female	24.5	30.2	29.1
Mathematics	Female	85	19	12
	Male	228	40	31
	% Female	27.2	32.2	27.9

PGR outcomes show no notable gender differences (Table 24).

Table 24 Outcomes of PGR students (Note: 2017/18 partial year data.)

Gender	Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	Overall
Female	Completed	2	3	9	4	1	19
	Did not complete	-	2	1	1	2	6
Female Total		2	5	10	5	3	25
Proportion completed		-	60%	90%	80%	33%	76%
Male	Completed	8	10	13	12	0	43
	Did not complete	-	8	2	5	2	17
Male Total		8	18	15	17	2	60
Proportion completed		-	56%	87%	71%	0%	72%

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

Identify and comment on any issues in the pipeline between undergraduate and postgraduate degrees.

- AMS: PGT proportion female consistently higher than UG, but PGR proportion consistently lower than UG/PGT (Figure 22). Possible issue with PGR recruitment (although numbers are small). We hope that our newly unified MIGS admissions processes will help resolve any issue here.
- CS: Although we have an issue with UG recruitment, PGT/PGR proportions female are much healthier. PGR proportion stable around national benchmark of 26% (Figure 22, Table 20).

- Maths: Substantial volatility in PGT/PGR proportions female (Figure 22), corresponding to small numbers (Table 20). PGR proportion female, currently 32.1%, compares well with national benchmark (27%, Table 20).

Action 7. Encourage our UG/PGT students to consider PhD study. Organise annual presentations aimed at our UG/PGT students in each department on PGR opportunities (including CDTs).

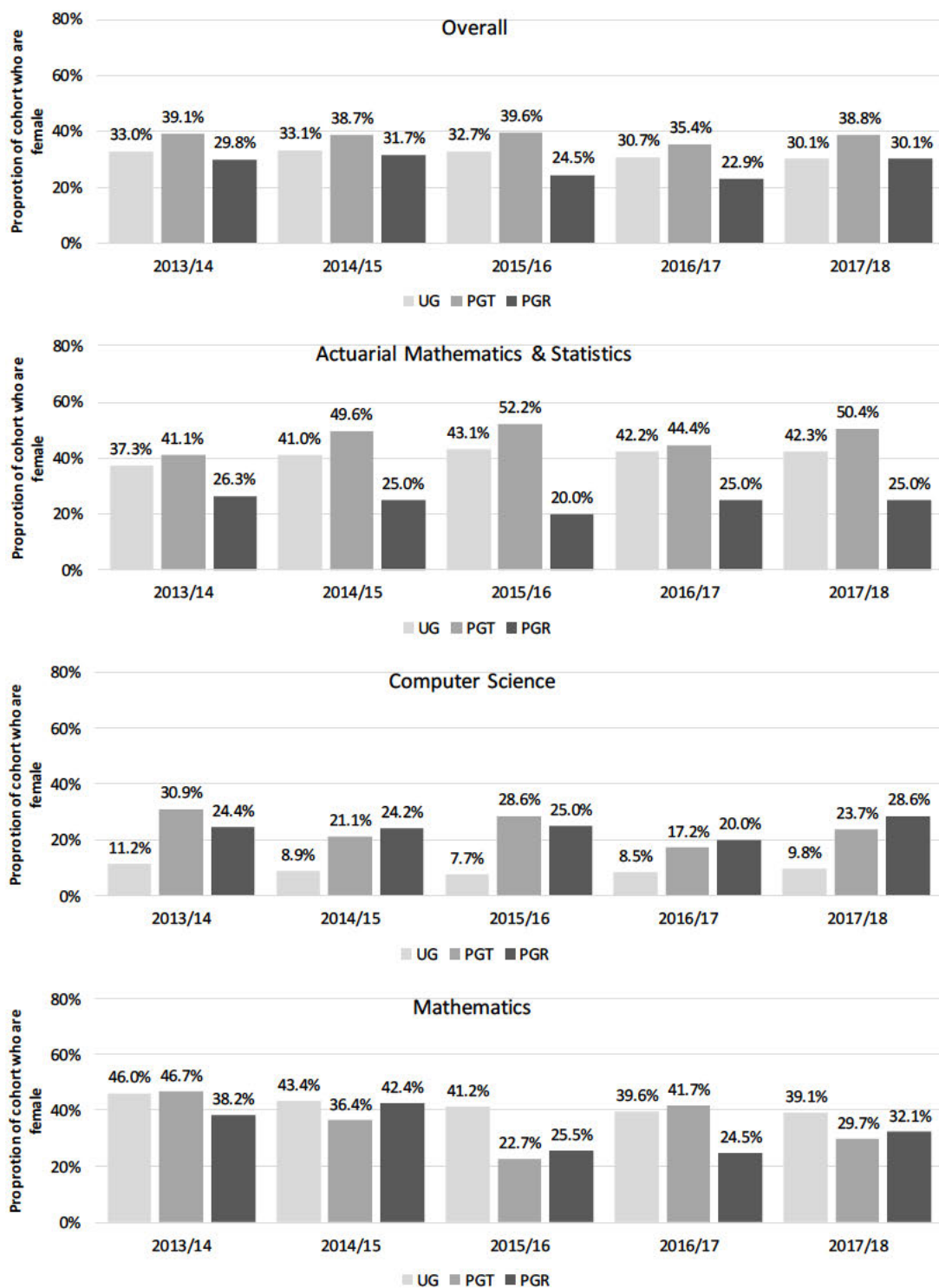


Figure 22 Student Pipelines: Proportions of Students who are Female Overall and for Individual Departments.

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4.2 Academic and research staff data

Table 25 Career Paths, Grades and Job Titles of Academic Staff at Heriot-Watt University

	Career Path		
	Research Only	Teaching & Research	Teaching & Scholarship
Grade 6	Research assistant	n/a	Teaching assistant
Grade 7	Research associate	Assistant professor	Assistant professor
Grade 8	Research fellow	Assistant professor	Assistant professor
Grade 9	Senior research fellow	Associate professor	Associate professor
Grade 10	Professorial fellow	Professor	Professor

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

Look at the career pipeline and comment on and explain any differences between men and women. Identify any gender issues in the pipeline at particular grades/job type/academic contract type.

We have implemented a number of measures under our 2015 Action Plan to attract female staff (2015 AP2, AP3, AP4).

- All job advertisements include a statement of our commitment to equality and diversity.
- All interview panels have both male and female representation.
- Mandatory unconscious bias training for appointments panel members.

Departments

At the time of our 2015 submission, female proportions for AMS and CS academic staff were at or above national benchmarks, but Maths well below, with only 1 female staff member. Since then we have had great success in recruitment, females now constituting 20% of Maths staff (7 staff, Table 28), compared to benchmark 22.6% (Table 26). The improvement, already under way, accelerated after the appointment of our first female Head of School, providing a role model in an exceptionally strategic position. 2017 AMS female proportion (15%, 4 of 26 staff, Table 28) is somewhat below national benchmark (22.6%, Table 26), although we have recently (2018) recruited 1 more female to AMS. CS proportion female, at 31% (Table 28), compares favourably with benchmark (24.2%, Table 26).

Table 26 National Staff Data by Cost Centre and Grade.

(Note: we use the “Mathematics” benchmark for both AMS and Maths, and the “Information technology and systems sciences” benchmark for CS)

	Role (HESA data mapped to Heriot-Watt job titles)	Proportion of Staff who are Female		
		2014/15	2015/16	2016/17
Mathematics	Professors	9.9%	10.3%	11.6%
	Associate Professors	19.7%	20.0%	20.5%
	Assistant Professors	29.4%	28.8%	28.5%
	All Academic Staff	22.6%	22.3%	22.6%
Information technology & systems	Professors	15.6%	15.6%	16.0%
	Associate Professors	20.4%	21.0%	20.2%
	Assistant Professors	27.3%	27.3%	27.4%
	All Academic Staff	23.9%	24.2%	24.2%

Grades

Note: Grade 6 staff are research assistants concurrently studying for PhD, and we have few such staff (currently 2, Table 27).

We have implemented several actions under our 2015 Action Plan to improve career progression and promotions processes (2015 AP5, AP8, AP9).

- PDR reviewers given explicit guidance to discuss long-term career development and priorities for promotion.
- Annual HoS promotions workshop and circulation of guidance for prospective candidates.
- All promotion candidates assigned a mentor through the process.
- All unsuccessful candidates given prompt written feedback.

From 2014 to 2017, proportions female at grades 8, 9 have grown slightly (from 24% to 28% and from 33% to 35%, Table 27, Figure 23), while proportion female at grade 10 has grown from 11% to 19%. Proportion female at grade 7 is considerably more volatile, reflecting that most grade 7 staff are postdoctoral researchers on fixed-term contracts. There is substantial variation between departments in gender grade profiles (Table 28, Figure 24).

Table 27 Academic Staff by Grade and Gender

Grade	Gender	2014	2015	2016	2017
Grade 6	Female	0	0	0	0
	Male	3	1	2	2
	% Female	0%	0%	0%	0%
Grade 7	Female	3	6	6	5
	Male	14	12	17	21
	% Female	18%	33%	26%	19%
Grade 8	Female	10	9	9	10
	Male	31	24	25	26
	% Female	24%	27%	26%	28%
Grade 9	Female	7	9	10	9
	Male	14	19	20	17
	% Female	33%	32%	33%	35%
Grade 10	Female	3	3	4	6
	Male	25	27	25	26
	% Female	11%	10%	14%	19%
Total	Female	23	27	29	30
	Male	87	83	89	92
	% Female	21%	25%	25%	25%

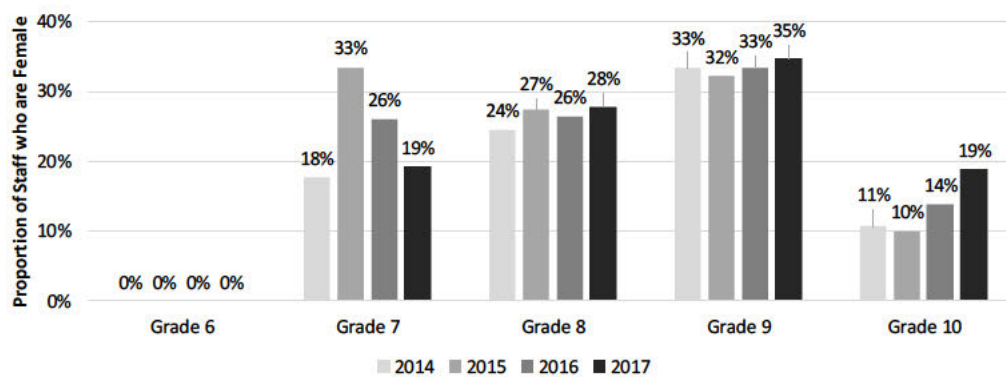
**Figure 23 Proportions of All Academic Staff who are Female by Grade**

Table 28 Staff by Department, Gender and Grade 2017

Grade	Gender	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Total
Actuarial Maths	Female	0	0	0	3	1	4
	Male	0	4	6	6	6	22
	% Female	N/A	0%	0%	33%	14%	15%
Computer Science	Female	0	4	7	4	4	19
	Male	2	15	15	2	8	42
	% Female	0%	21%	32%	67%	33%	31%
Mathematics	Female	0	1	3	2	1	7
	Male	0	2	5	9	12	28
	% Female	N/A	33%	38%	18%	8%	20%
Total	Female	0	5	10	9	6	30
	Male	2	21	26	17	26	92
	% Female	0%	19%	28%	35%	19%	25%

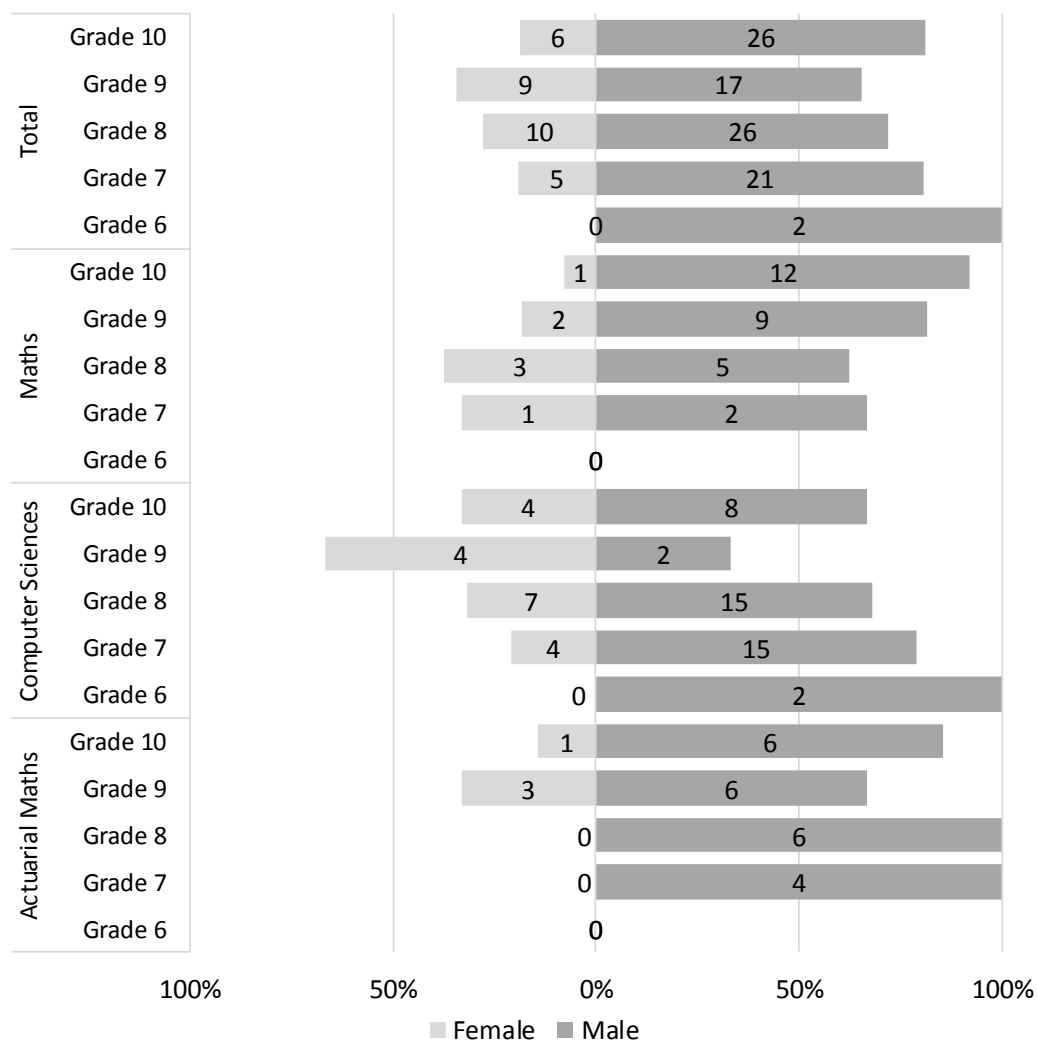


Figure 24 Staff Numbers by Department and Grade, and Proportions who are Female and Male 2017

Department/Grade

AMS: Female staff are all in the higher grades (3 grade 9, 1 grade 10, Figure 24), with percentages female at these grades (33%, 14%, Table 28) above national benchmarks (20.5%, 11.6%, Table 26).

CS: Our 2015 submission recognised a key attrition point in the CS pipeline from Grade 9 to Grade 10, percentage female at Grade 10 standing at 15% (2 staff) in 2013. By 2017 the corresponding figure had improved to 33% (4 staff, Table 28), compared to benchmark figure 16.0% (Table 26). 1 more female promotion to grade 10 during 2018 has improved matters further. Females are now well represented at grades 8, 9, 10 in CS, the percentages female at these grades (32%, 67%, 33%, Table 28) being well above benchmarks (27.4%, 20.2%, 16.0%, Table 26).

Maths: Grade profile reflects that as recently as 2014 Maths had only 1 female academic staff member. Our recent success in recruitment and promotion is yielding significant results – we now have 3 members of staff at grades 9 and 10, with percentages female at these grades (18%, 8%, Table 28) close to national benchmarks (20.5%, 11.6%, Table 26). 2018 has seen 1 further female appointment at grade 9, and 3 females promoted to grade 9.

Career path/Grade

Teaching & Research staff make up the bulk of our academic staff. Percentage female has grown from 19% (14/75 staff) in 2014 to 29% (23/80 staff) in 2017 (Table 29). Lecturing posts are generally advertised at grades 8/9, and we have only 1 (female) T&R staff member at grade 7 (Table 29). Proportions female at grades 8, 9 have remained approximately constant (33%, 35% in 2017, Figure 25); proportion female at grade 10 has grown from 11% (2014) to 19% (2017), reflecting recent success in CS promotions to professor (2 in 2017) as well as the external appointment of a female professor (Maths) as HoS. 1 further CS promotion to professor in 2018 improves matters further.

Table 29 Teaching & Research Staff by Grade and Gender

Grade	Gender	2014	2015	2016	2017
Grade 7	Female	0	1	1	1
	Male	2	0	0	0
	% Female	0%	100%	100%	100%
Grade 8	Female	6	8	9	9
	Male	22	15	16	18
	% Female	21%	35%	36%	33%
Grade 9	Female	5	7	8	7
	Male	12	15	15	13
	% Female	29%	32%	35%	35%
Grade 10	Female	3	3	4	6
	Male	25	27	25	26
	% Female	11%	10%	14%	19%
Total	Female	14	19	22	23
	Male	61	57	56	57
	% Female	19%	25%	28%	29%

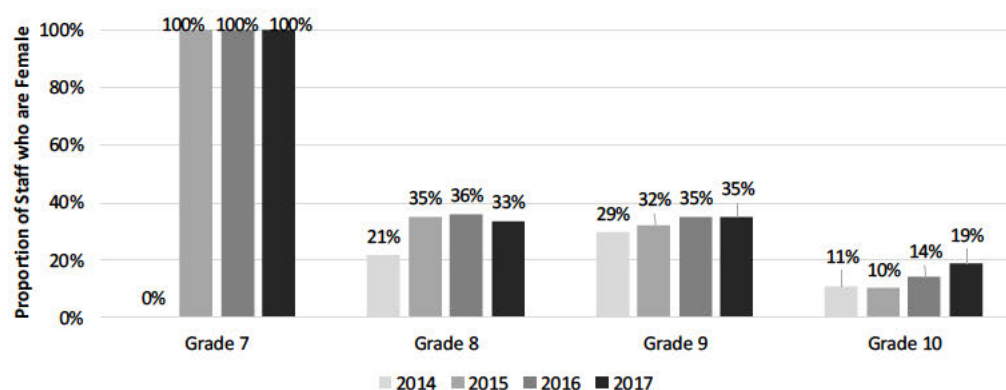


Figure 25 Proportions of Teaching & Research Staff who are Female by Grade

Teaching & Scholarship numbers are small (Table 30). Percentage female (currently 20%, 2 of 10 staff) is consequently volatile, currently below the corresponding percentage across all academic staff (25%, Table 27). Since T&S staff across the sector are predominantly female, this constitutes some redressing of the balance. In 2017, the 2 female staff are both at grade 9, whereas male staff are fairly evenly split between grades 8 and 9 (Table 30). We are actively mentoring our T&S staff to achieve promotion on the T&S pathway newly reinvigorated by the University, and our annual HoS promotions briefing highlights this.

Table 30 Teaching & Scholarship Staff by Grade and Gender

Grade	Gender	2014	2015	2016	2017
Grade 7	Female	0	0	0	0
	Male	0	0	0	1
	% Female	N/A	N/A	N/A	0%
Grade 8	Female	1	0	0	0
	Male	4	3	3	4
	% Female	20%	0%	0%	0%
Grade 9	Female	2	2	2	2
	Male	1	3	4	3
	% Female	67%	40%	33%	40%
Grade 10	Female	0	0	0	0
	Male	0	0	0	0
	% Female	N/A	N/A	N/A	N/A
Total	Female	3	2	2	2
	Male	5	6	7	8
	% Female	38%	25%	22%	20%

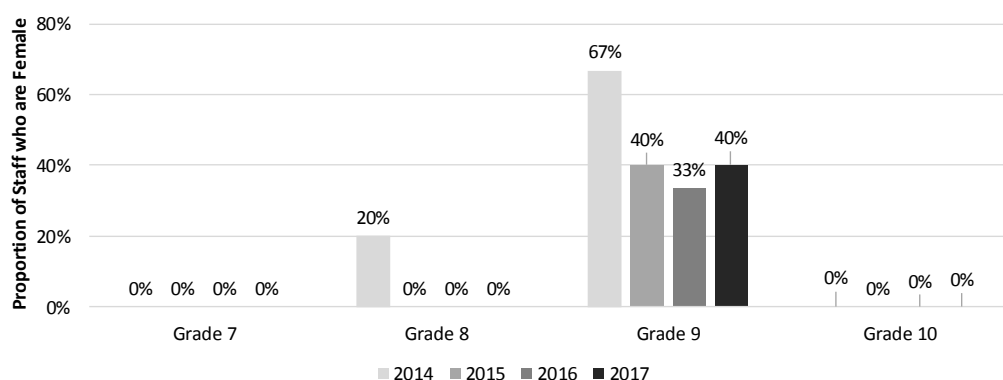


Figure 26 Proportions of Teaching & Scholarship Staff who are Female by Grade

Research Only numbers are again small (Table 31). Percentage female is consistently somewhat below the corresponding percentage across all academic staff. In 2017, there were 4 females at grade 7 and 1 at grade 8 (Table 31). These numbers are too small to draw any real conclusions. We note that research staff at grade 8 or higher are not the norm in our disciplines.

Table 31 Research Only Staff by Grade and Gender

Grade	Gender	2014	2015	2016	2017
Grade 6	Female	0	0	0	0
	Male	3	1	2	2
	% Female	0%	0%	0%	0%
Grade 7	Female	3	5	5	4
	Male	12	12	17	20
	% Female	20%	29%	23%	17%
Grade 8	Female	3	1	0	1
	Male	5	6	6	4
	% Female	38%	14%	0%	20%
Grade 9	Female	0	0	0	0
	Male	1	1	1	1
	% Female	0%	0%	0%	0%
Grade 10	Female	0	0	0	0
	Male	0	0	0	0
	% Female	N/A	N/A	N/A	N/A
Total	Female	6	6	5	5
	Male	21	20	26	27
	% Female	22%	23%	16%	16%

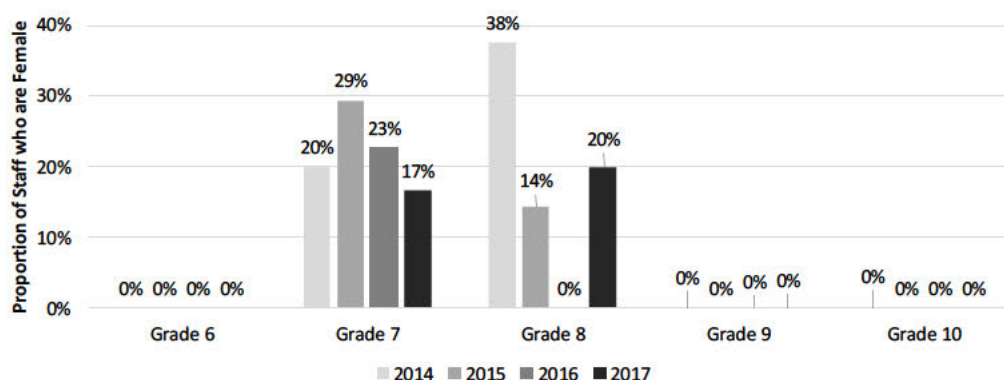


Figure 27 Proportions of Research Only Staff who are Female by Grade

Ethnicity

Numbers of BAME academic staff are small, 10%F, 8%M identifying as BAME (Table 32). National BAME benchmark figures for (UK domicile, Non-UK domicile) are (8.6%, 24.6%) for Mathematics, (12.5%, 37.5%) for IT, Systems Science and Computer Software Engineering.

Amongst PS staff, only 1 (male) of 33 staff identified as BAME.

Table 32 Ethnicities of academic staff (headcount and percentage) by gender and domicile (2017)

Ethnic Group	All Staff		UK domicile		Non-UK domicile	
	Female	Male	Female	Male	Female	Male
BAME	3 (10%)	7 (8%)	1 (9%)	2 (4%)	2 (11%)	5 (11%)
White	19 (63%)	61 (66%)	9 (82%)	35 (76%)	10 (53%)	26 (57%)
Information Refused	2 (7%)	11 (12%)	0 (0%)	4 (9%)	2 (11%)	7 (15%)
Not known	6 (20%)	13 (14%)	1 (9%)	5 (11%)	5 (26%)	8 (17%)

SILVER APPLICATIONS ONLY

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

MACS has few technical staff (3 male), all IT support, whose roles do not put them on a trajectory to an academic position.

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

Comment on the proportions of men and women on these contracts. Comment on what is being done to ensure continuity of employment and to address any other issues, including redeployment schemes.

Heriot-Watt University does not make use of zero-hour contracts.

Almost all our fixed-term staff are postdoctoral researchers, hence Research Only appointments (Table 33). For Research Only, the proportion of men on fixed-term contracts has remained stable since 2014 around 70% (Table 33); the proportion for women is more volatile, currently standing at 60% (3/5).

Fixed-term staff are largely at grade 7 (20/26, Table 34). Research staff at grade 8 or higher are unusual in our disciplines.

Staff with service greater than 35 months are automatically converted to open-ended contracts. Those with less service coming to the end of a fixed-term contract are prioritised for consideration for vacancies through a centrally co-ordinated redeployment scheme.

Table 33 Number of Staff on Fixed Term and Open Ended Contracts by Career Path

Year	Gender	Research Only			Teaching & Research			Teaching & Scholarship		
		Fixed Term	Open Ended	% Fixed Term	Fixed Term	Open Ended	% Fixed Term	Fixed Term	Open Ended	% Fixed Term
2014	Female	2	4	33%	0	14	0%	0	3	0%
	Male	15	6	71%	2	59	3%	0	5	0%
2015	Female	3	3	50%	0	19	0%	0	2	0%
	Male	14	6	70%	1	56	2%	0	6	0%
2016	Female	3	2	60%	0	22	0%	0	2	0%
	Male	19	7	73%	0	56	0%	0	7	0%
2017	Female	3	2	60%	0	23	0%	0	2	0%
	Male	21	6	78%	0	57	0%	2	6	25%

Table 34 Number of Staff on Fixed-Term and Open-Ended Contracts by Grade 2014 to 2017

Year	Grade	Female			Male		
		Fixed Term	Open Ended	% Fixed Term	Fixed Term	Open Ended	% Fixed Term
2014	Grade 6	0	0	N/A	3	0	100%
	Grade 7	1	2	33%	10	4	71%
	Grade 8	1	9	10%	3	28	10%
	Grade 9	0	7	0%	1	13	7%
	Grade 10	0	3	0%	0	25	0%
2015	Grade 6	0	0	N/A	1	0	100%
	Grade 7	3	3	50%	10	2	83%
	Grade 8	0	9	0%	3	21	13%
	Grade 9	0	9	0%	1	18	5%
	Grade 10	0	3	0%	0	27	0%
2016	Grade 6	0	0	N/A	2	0	100%
	Grade 7	3	3	50%	15	2	88%
	Grade 8	0	9	0%	2	23	8%
	Grade 9	0	10	0%	0	20	0%
	Grade 10	0	4	0%	0	25	0%
2017	Grade 6	0	0	N/A	2	0	100%
	Grade 7	2	3	40%	18	3	86%
	Grade 8	1	9	10%	3	23	12%
	Grade 9	0	9	0%	0	17	0%
	Grade 10	0	6	0%	0	26	0%

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

Comment on the reasons academic staff leave the department, any differences by gender and the mechanisms for collecting this data.

Aggregating across all grades, 43 staff left from 2015 to 2017, 14% female (6/43, Table 35), compared to female proportion 25% across all staff (Table 27). Leaving rates (Table 36) are low at all grades except 6, 7, explained by the typically fixed-term nature of grade 6, 7 contracts. There are no obvious differences between full/part-time staff on any career path (Table 37).

Table 35 Leavers and Leaving Rates for Staff by Gender

Gender		2015	2016	2017
Female	Staff	23	27	29
	Leavers	4	0	2
	Leaving Rate	17%	0%	7%
Male	Staff	87	83	89
	Leavers	11	12	14
	Leaving Rate	13%	14%	16%

Table 36 Leavers and Leaving Rates for Staff by Grade

Grade		2015	2016	2017
Grade 6	Staff	3	1	2
	Leavers	1	0	1
	Leaving Rate	33%	0%	50%
Grade 7	Staff	17	18	23
	Leavers	7	8	7
	Leaving Rate	41%	44%	30%
Grade 8	Staff	41	33	34
	Leavers	6	1	5
	Leaving Rate	15%	3%	15%
Grade 9	Staff	21	28	30
	Leavers	1	1	2
	Leaving Rate	5%	4%	7%
Grade 10	Staff	28	30	29
	Leavers	0	2	1
	Leaving Rate	0%	7%	3%

Table 37 Leavers and Leaving Rates for Staff by Career Path and Full/Part-Time

Career Path	Gender		2015	2016	2017
Research Only	Full Time	Staff	21	22	24
		Leavers	8	7	9
		Leaving Rate	38%	32%	38%
	Part Time	Staff	6	4	7
		Leavers	2	2	2
		Leaving Rate	33%	50%	29%
Teaching & Research	Full Time	Staff	66	66	71
		Leavers	3	1	3
		Leaving Rate	5%	2%	4%
	Part Time	Staff	9	10	7
		Leavers	1	2	1
		Leaving Rate	11%	20%	14%
Teaching & Scholarship	Full Time	Staff	4	5	6
		Leavers	0	0	0
		Leaving Rate	0%	0%	0%
	Part Time	Staff	4	3	3
		Leavers	1	0	1
		Leaving Rate	25%	0%	33%

It is University policy that leavers be offered the opportunity of an exit interview. DoA collates this information for annual presentation to Management Committee. Between 2015 and 2017, of 21 of 43 leavers selected “resignation” as their reason (Table 38). The majority of these (15/21) were on Research Only contracts. Those resigning from open-ended contracts since 2016 have predominantly been non-UK nationals citing Brexit.

Table 38 Reasons for Leaving 2015-17

Reason	Female	Male	Total
Better opportunity	0	1	1
End of fixed-term contract	2	8	10
Redundancy (involuntary)	0	4	4
Redundancy (voluntary)	0	4	4
Resignation	3	18	21
Retirement	1	2	3
Total	6	37	43

[Section 4.2: 1136 words, including 150 of 500 additional granted words]

[Section 4: 1391 + 1136 = 2527 words]

5. SUPPORTING AND ADVANCING WOMEN'S CAREERS

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

5.1 Key career transition points: academic staff

(i) Recruitment

Break down data by gender and grade for applications to academic posts including shortlisted candidates, offer and acceptance rates. Comment on how the department's recruitment processes ensure that women (and men where there is an underrepresentation in numbers) are encouraged to apply.

We have implemented a number of measures under our 2015 Action Plan to attract and recruit female staff (2015 AP3, AP4).

- All job advertisements / further particulars include a statement of our commitment to equality and diversity, explicitly state the possibility of flexible working arrangements, and emphasise our commitment to achieving a diverse and inclusive workforce, with reference to our Athena SWAN Bronze Award.
- Job openings advertised through appropriate women's networks (eg European Women in Mathematics).
- All shortlisting and interview panels have both male and female representation.
- Mandatory training for staff on appointments panels.

Our 2015 Action Plan included action to improve monitoring of job applications and successes (2015 AP2). This was addressed through the introduction of a new University-wide "iRecruit" system in 2015. Unfortunately, issues with implementation mean that not all data was correctly captured; in particular, shortlisting and offers data for 2015-16 is not available. While we can present application and appointment data for the last 3 years, we have shortlisting and offer data only for the last 2 years (Table 39). HoDs monitor application processes and in particular whether the proportion of women amongst shortlisted candidates differs substantially from the proportion of women amongst applicants, but we aim to make this process automatic.

Action 8. Automate monitoring of job applications processes and outcomes.
Reshape School PS support to ensure that centrally-collated data on iRecruit is made available to Management Committee and SAT annually.

Turning to the data (Table 39), we see that proportion female shortlisted closely reflects the pool of applicants (11% for 2016-17, 19% for 2017-18), while the proportion female appointed (6% for 2016-17, 11% for 2017-18) closely tracks that for offers. However, proportion female appointed (19% for 2017-18) stands somewhat below national

benchmarks for our disciplines (AMS/Maths 22.6%, CS 24.2%, Table 26), although numbers are small (6F + 40M appointments over the last 3 years).

Table 39 Applicants, Shortlisted and Appointed Candidates by Grade, Year, and Gender (Shortlisted/Offered data for 2015-16 not available. Lecturing appointments are normally advertised at “Grade 8 or 9”, so these grades cannot be separated at Applied/Shortlisted stages.)

		Applied			Shortlisted			Offered			Appointed		
		F	M	%F	F	M	%F	F	M	%F	F	M	%F
2015-16	6	1	1	50							1	1	50
	7	12	31	28							2	8	20
	8	0	0	N/A							0	0	N/A
	9										0	0	N/A
	10	0	0	N/A							0	0	N/A
	Total	13	32	29							3	9	25
2016-17	6	2	11	15	0	1	0	0	1	0	0	1	0
	7	8	49	14	1	19	5	0	11	0	0	11	0
	8	14	127	10	3	10	23	0	4	0	0	2	0
	9							1	0	100	1	0	100
	10	0	5	0	0	1	0	0	1	0	0	1	0
	Total	24	192	11	4	31	11	1	17	6	1	15	6
2017-18	6	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A
	7	35	143	20	9	34	21	2	15	12	2	13	13
	8	0	5	0	0	2	0	0	2	0	0	2	0
	9							0	0	N/A	0	0	N/A
	10	0	1	0	0	1	0	0	1	0	0	1	0
	Total	35	149	19	9	37	20	2	18	10	2	16	11

So far in 2018-19,

- In AMS, we have recruited 1 female (grade 8) through our first joint appointment with another School (Engineering & Physical Sciences).
-

In terms of encouraging female applicants, the appointment of our first female HoS provides a very visible role model, and the recent increase to 5 female professors in CS provides further visible role models. We will make use of seminar invitations to establish early contact with women who we will then encourage to apply for future positions.

Action 9. Increase pool of female applicants for academic posts. Encourage seminar organisers to invite Early Career women, including PGRs, as well as mid-career women. When posts become available, contact these individuals directly to encourage them either to apply themselves or help publicise the position via their academic contact networks.

The University's recruitment and selection training includes material on Unconscious Bias, and online Diversity in the Workplace training is available to all staff. In our 2018 survey, 41% of academic staff (63%F, 33%M) reported having undertaken online Diversity training in the last 3 years. In addition, a number of School staff have participated in Unconscious Bias workshops, both in-house (2015, 3 sessions, 8F + 11M participants) and well-attended LMS workshops at ICMS (2015 and 2017). To reinforce this, we will circulate Royal Society Unconscious Bias briefing to all appointment panels, and encourage staff to complete online Diversity training.

Action 10. Continue to address Unconscious Bias. All staff to be encouraged to complete online Diversity in the Workplace training. Appointment panel chairs to circulate Royal Society Unconscious Bias briefing document before each interview.

To ease the process of claiming expenses for candidates with caring responsibilities, we will introduce a financial label for caring expenses related to attending for interview.

Action 11. Reimbursement of caring expenses. We will introduce a financial label for reimbursement of caring expenses, for shortlisted applicants attending interview (as well as for members of staff attending conferences and other scientific events).

(ii) Induction

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

The University provides all new academic staff with a general induction. Our 2015 submission identified a lack of systematic School-level induction processes, and proposed action to address this (2015 AP10). School-level induction now includes:

- Comprehensive induction handbook, including School strategy and management structure, Athena SWAN, a guide to School professional services, sections tailored to individual departments, and information on staff development opportunities and PDR.

- Welcome event to introduce new staff to key persons in MACS.
- Informal welcome lunch with HoS, Director of Research, Director of Learning & Teaching.
- Mentor assigned to every new member of staff (previously only probationary staff).

HoDs ensure that all elements of the induction process are implemented for all academic appointments, as well as welcoming new staff on arrival and regularly checking on their progress.

From 2014 to 2018, the proportion of academic staff surveyed who agree that School induction made them feel welcome rose from 53% (43%F, 55%M) to 65% (83%F, 57%M). Numbers agreeing that induction helped them to understand how the School works rose from 37% (29%F, 36%M) to 60% (83%F, 50%M).

We give all new staff a reduced teaching load and reduced administration duties for the first full year of employment; for those new to lecturing, the load is increased more slowly and gradually. Non-professorial staff are offered a standard minimum start-up package; professors' packages are individually negotiated.

Action 12. Improved transparency around start-up packages. Data on individually negotiated start-up packages of professors will be made accessible.

(iii) Promotion

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

A key priority of our 2015 submission was to make promotion processes more transparent and supportive (2015 AP5, AP6, AP7, AP8, AP9). We have achieved substantial progress here.

- Each November, HoS holds an Academic Promotion Workshop, including reference to personal circumstances and part-time working. Slides of the presentation, together with a document detailing School promotions procedures, are circulated by email.
- In January, the annual Performance and Development Review (PDR) process takes place. Individuals who have potential are identified, and actively encouraged by PDR reviewers and HoDs to apply for promotion or other awards.

- Following PDR meeting, promotion candidates are assigned a mentor for the process, and work with mentor and HoD/HoS to review and refine their case.
- During March, individuals present promotion cases to School Promotions Review Panel, which makes recommendations to University Promotions Board. Individuals on maternity leave can make use of KIT days for this purpose. School Promotions Review Panel includes both male and female members, all of whom have undertaken Unconscious Bias training.
- Any individual can also make a personal case for promotion directly to the University Promotions Board (but we note than none was made in the period since 2015).
- Following decisions of University Promotions Board, all candidates receive a letter from the Chair of Promotions Board. HoS meets with each unsuccessful candidate within 10 working days, and all unsuccessful candidates are given written feedback (within 10 working days) detailing reasons for lack of success together with action suggestions.

A key element in the School's strategy for supporting promotion candidates is the PDR process, together with formal and informal one-to-one mentoring discussions. Under guidelines put in place in 2016, PDR includes discussion of long-term career objectives, readiness for promotion and actions to be taken to achieve it (for example, see Case Studies 1 and 2, section 6). This early promotion discussion allows HoDs to take into consideration needs of potential promotion candidates when assigning teaching and administration duties. We aim to identify opportunities to demonstrate leadership and ensure everyone has access to such opportunities ahead of promotion application.

The proportion of academic staff surveyed agreeing that their progress towards and preparation for promotion was discussed during PDR rose from 63% (50%F, 65%M) in 2015 to 73% (68%F, 75%M) in 2018. In our 2018 survey, 56% (62%F, 54%M) of staff said they had received encouragement and support to apply for promotion from their line manager; 52% (57%F, 50%M) from their PDR reviewer; 44% (57%F, 38%M) from other senior colleagues.

Since 2016, the percentage of the eligible population applying for promotion has been consistently higher amongst female staff than male (aggregating over all years and grades, 16%F, 13%M, Table 40); success rates of male and female promotion candidates have been comparable (aggregated figures 71%F, 76%M). Numbers are too small to comment on application and success rates by grade, though it is pleasing to note that we have seen 6 female promotions to Grades 9 and 10 in the last 2 years. This goes some way to improving gender profile at the professorial level, number of female professors in the School having increased from 3 to 7 over the period 2015-2018. Since 2015, 1 part-time member of staff (female) has applied for promotion (Table 41), and

was successful. We note that a number of our part-time staff are on reduced hours approaching retirement, and unlikely to seek promotion.

Action 13. Improve monitoring of promotion processes and outcomes. Data on promotion processes and outcomes (number of successful/unsuccessful candidates by grade and gender supported/non-supported by the School) to be collected at the end of each promotion round and reported to SAT. SAT to pass analysis to School Management Committee.

LANDSCAPE PAGE



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Table 40 Numbers of applications for promotion and numbers successful by Gender and Grade

Year	Gender	G6 to G7		G7& to G8		G8 to G9		G9 to G10		Overall				
		Applied (Eligible numbers, application rate)	Promoted (Success Rates)	Applied (Eligible numbers, application rate)	Promoted (Success Rates)	Applied (Eligible numbers, application rate)	Promoted (Success Rates)	Applied (Eligible numbers, application rate)	Promoted (Success Rates)	Eligible	Applied	Promoted	Application Rate	Success Rate
2015	F	0 (0, -)	0 (-)	0 (3, 0%)	0 (-)	1 (9, 11%)	1 (100%)	0 (7, 0%)	0 (-)	19	1	1	5%	100%
	M	1 (3, 33%)	1 (100%)	1 (14, 7%)	0 (0%)	8 (30, 27%)	6 (75%)	2 (16, 13%)	2 (100%)	63	12	9	19%	75%
2016	F	0 (0, -)	0 (-)	0 (5, 0%)	0 (-)	1 (9, 11%)	1 (100%)	0 (10, 0%)	0 (-)	24	1	1	4%	100%
	M	0 (1, 0%)	0 (-)	0 (12, 0%)	0 (-)	2 (26, 8%)	2 (100%)	0 (19, 0%)	0 (-)	58	2	2	3%	100%
2017	F	0 (0, -)	0 (-)	0 (5, 0%)	0 (-)	2 (9, 22%)	1 (50%)	3 (9, 33%)	2 (67%)	23	5	3	22%	60%
	M	1 (2, 50%)	1 (100%)	2 (18, 11%)	1 (50%)	2 (23, 9%)	2 (100%)	2 (19, 11%)	1 (50%)	62	7	5	11%	71%
2018	F	0 (0, -)	0 (-)	0 (5, 0%)	0 (-)	4 (9, 44%)	4 (100%)	3 (10, 30%)	1 (33%)	24	7	5	29%	71%
	M	1 (1, 100%)	1 (100%)	2 (22, 9%)	2 (100%)	6 (27, 22%)	5 (83%)	3 (19, 16%)	1 (33%)	69	12	9	17%	75%

Table 41 Numbers of applications for promotion and numbers successful by Gender and whether applicants are Full Time or Part Time

Year	Full Time/ Part Time	Gender	Applied	Eligible	Application rate	Promoted	Success Rate
2015	Full Time	Female	1	12	8%	1	100%
		Male	12	54	22%	9	75%
	Part Time	Female	0	7	0%	0	-
		Male	0	9	0%	0	-
2016	Full Time	Female	1	18	6%	1	100%
		Male	2	53	4%	2	100%
	Part Time	Female	0	6	0%	0	-
		Male	0	5	0%	0	-
2017	Full Time	Female	5	17	29%	3	60%
		Male	7	55	13%	5	71%
	Part Time	Female	0	6	0%	0	-
		Male	0	7	0%	0	-
2018	Full Time	Female	6	18	33%	4	67%
		Male	12	57	21%	9	75%
	Part Time	Female	1	6	17%	1	100%
		Male	0	12	0%	0	-

(iv) Department submissions to the Research Excellence Framework (REF)

Provide data on the staff, by gender, submitted to REF versus those that were eligible. Compare this to the data for the Research Assessment Exercise 2008. Comment on any gender imbalances identified.

Table 42 Eligible and submitted staff numbers to the RAE2008 and REF2014

	Eligible		Submitted			Submission rate	
	F	M	F	M	%F	F	M
RAE 2008	N/A	N/A	8	71	10	N/A	N/A
REF 2014	17	66	15	59	20	88%	89%

Table 42 shows no gender imbalance in staff submitted to REF2014. RAE2008 did not require data on proportions of eligible staff submitted. In terms of gender balance of submitted staff, the percentage female increased from 10% (2008) to 20% (2014). To some extent this reflects the increase in proportion female of School academic staff (Table 27). For REF2021, it is a requirement that all eligible staff be submitted, so there is no scope for gender bias in this respect. The element of selection is in choosing how many research outputs (1 to 5) are submitted for each staff member. All outputs will be subject to internal review, the process being overseen by two REF co-ordinators

(Professor Lynne Baillie and Professor Richard Szabo, corresponding to REF Units of Assessment 10 and 11). Both REF co-ordinators have undertaken Unconscious Bias training. The submission to Unit of Assessment 10 (Mathematical Sciences) will be as Maxwell Institute (as in 2008 and 2014). Internal review processes for AMS/Maths are correspondingly being carried out jointly with the University of Edinburgh.

[Section 5.1: 1508 words]

SILVER APPLICATIONS ONLY

5.2 Key career transition points: professional and support staff

(i) Induction

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

Each new member of staff (academic and PS) is invited to a University induction event and welcome lunch. At School level, new PS staff are introduced to their colleagues and work environment by their line manager and provided with the School induction handbook. Our 2018 survey included several questions on the effectiveness of induction, but PS respondents were too few for results to be made available.

Action 14. Implement uniform School-level induction for PS staff as for academic staff. Ensure School induction handbook contains information for PS staff as well as academic staff. Ensure that all elements of the School induction process (handbook, welcome event) are implemented for each new appointment. Develop an online source of induction information for newly employed or casual PS staff.

(ii) Promotion

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

Promotion for PS staff is typically by re-grading or change of role. Within MACS there have been examples of regrading to a higher level to reflect substantial changes of duties. Staff may choose to pursue promotion by applying for job openings across the University; communication about available positions is through an email circulated to all staff weekly. Whenever a member of PS staff leaves the School in this way, HoS informs all staff by email and expresses congratulations, providing encouragement to others to pursue such opportunities.

PS staff may be nominated by HoS or self-nominate to the University Contribution Pay Board for recurrent salary increments or one-off bonus payments in recognition of exceptional performance. Nominations arise via the PDR process.

Action 15. Annual reporting of Contribution Pay Board data to SAT. Data on Contribution Pay Board nominations and outcomes to be reported annually to SAT, for both academic and PS staff. Data to be monitored by gender and grade, and whether bonuses are University or School level. SAT to pass analysis to School Management Committee.

In our 2018 survey, only 14% of PS staff (3 of 22 respondents) agreed with the statement “I know what I have to do to be rewarded for my performance.” There is a mentor scheme for PS facilitated by central HR, but uptake is low. Greater use of mentors, in addition to providing support to identify opportunities for training and professional development, could help to ensure that staff are aware of the various ways in which their successes can be recognised.

Action 16. Increase awareness around mentoring and training for PS staff. The role of mentor to be clearly documented in guidance available from School intranet. Training opportunities (for example, those organised by Organisational Development) to be advertised and promoted within the School.

[Section 5.2: 297 words]

5.3 Career development: academic staff

(i) Training

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

A wide range of training opportunities are provided by our Centre for Academic Leadership and Development (ALD), who monitor participation and effectiveness, including analysing participant evaluation forms. DoA regularly forwards to staff all ALD training opportunities, as well as signposting online training schedule and booking system (2015 AP11). For lecturing staff, uptake shows a slightly higher proportion female (steady around 32%, Table 43) than the proportion female in the School (26%, combining T&R with T&S, Table 29, Table 30), while for research staff uptake is subject to more volatility (Table 44), but again with a consistently higher proportion female than that of our research-only staff (16%, Table 31).

Action 17. Support sharing of individual staff experiences of training and development. School staff (academic and PS) who have attended training courses provided by the University and mentoring schemes will be encouraged to upload their comments and experiences to the School intranet.

Table 43 Numbers of Academic Leadership and Development Courses Taken by Lecturing Staff, by Gender

	F	M	Unknown	%F
2015-16	37	73	10	34%
2016-17	24	52	0	32%
2017-18	12	25	0	32%

Table 44 Numbers of Academic Leadership and Development Courses Taken by Research Staff, by Gender

	F	M	Unknown	%F
2015-16	4	8	0	33%
2016-17	4	21	0	16%
2017-18	9	19	0	32%

(ii) **Appraisal/development review**

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

The University operates annual Performance and Development Review (PDR) for all staff. Reviewers are required to complete refresher training every three years. PDR covers all activities of the reviewee and includes progress on objectives agreed the previous year, a performance rating, goals to be achieved for promotion, and long-term career objectives. In our 2018 survey, 95% of academic staff (95%F, 95%M) agreed that their performance and development are regularly reviewed.

Our 2015 submission identified some issues with the operation of PDR in practice. There was felt to be lack of clarity in how the performance rating was determined, and that PDR operated too much on a year-to-year basis with little consideration of the longer term. A working group was formed (2015 AP7, AP8), resulting in the production of School-specific guidance for PDR reviewers, now circulated annually to all staff

(reviewees as well as reviewers). This guidance covers the need for PDR to include long-term career development and priorities for promotion, probationary targets, performance ratings, and the relationship between PDR and promotion processes.

In our 2018 survey, 72% of academic staff (67%F, 75%M) agreed that their most recent PDR covered long-term career development, the corresponding figure for research-only staff being 70% (7 of 10 respondents). 53% of academic staff (55%F, 53%M) agreed that they found the PDR process useful, and 65% that they found it supportive (68%F, 64%M). For research-only staff, the figures were 70% (7 of 10 respondents) in each case.

We feel that although PDR is now generally working well within the School, the University's standard PDR form could be improved.

Action 18. Improve PDR form. Work with HR to improve the University's standard PDR form to better reflect the key areas that should be covered during the meeting (research, administration, teaching innovation, outreach activities, readiness for promotion, long-term career objectives).

(iii) [Support given to academic staff for career progression](#)

Comment and reflect on support given to academic staff, especially postdoctoral researchers, to assist in their career progression.

Advice on career development is provided for all academic staff through Academic Leadership and Development workshops. All staff discuss their career progression and long-term goals with a senior colleague during PDR. In our 2018 survey, 65% of staff (64%F, 65%M) said that in the last 3 years they had been encouraged and supported by their manager to take up career development opportunities, the corresponding figure for research-only staff being 90% (9 of 10 respondents).

Since 2013, the University has participated in the Leadership Foundation for Higher Education's Aurora programme, which offers women-only leadership development training. Women within the School are encouraged to apply, and 5 staff (4 academic, 1 PS) have participated since 2014, with 2 academic staff () currently acting as Aurora role models. During 2018, Aurora alumni including School member [REDACTED] (PS) organised the inaugural Heriot-Watt Aurora Alumni event, on the theme "Putting Aurora into Practice", and following on from this set up an informal Heriot-Watt Aurora Alumni network.

The series of talks "How did you do that?" (Table 45), established in 2017, allows members of the School to share their experiences of achieving success in areas such as obtaining grant funding, creating and maintaining research impact, and collaborations with industry.

The Postdoc Forum, initiated in the School and developed into a University wide forum, provides information and advice on career development, as well as social/networking events. Events in 2018 include a barbeque (around 40 attendees) and a talk on career planning for research staff.

Since 2017, initiated by Dr Michela Ottobre, MACS Early Career Researcher meetings (including both Research Only and T&R staff) are organised twice yearly to discuss teaching, research and career development issues. The group formulates proposals and can make a case for funding to the Management Committee.

Action 19. Develop stronger sense of community for Early Career Researchers, including postdoctoral researchers. Add information about University Postdoc Forum to the School induction handbook. Strengthen the role of School Early Career Researchers group with a ring-fenced budget for events and new initiatives.

Action 20. Improve communication of career progression events. Regularly circulate a bulletin presenting a schedule of forthcoming events and reporting on recent events with a focus on career progression across the School (Early Career Researchers group, promotions workshops, distinguished lecture series, colloquia etc).

- (iv) Support given to students (at any level) for academic career progression
Comment and reflect on support given to students at any level to enable them to make informed decisions about their career (including the transition to a sustainable academic career).

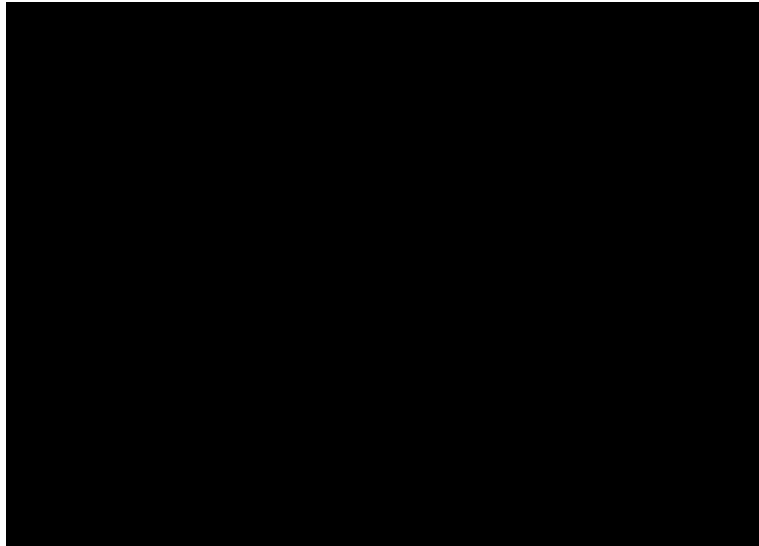
The University Careers Service provides advice to students at all levels, including help to apply for further study and to identify PhD opportunities. Careers oriented modules are embedded in our UG programmes, in year 1 for AMS and Maths, year 3 for CS and Maths. Careers Service staff provide tailored sessions for year 3 UG and PGT students in each department. Personal tutors provide advice on further study opportunities, as well as academic careers. PGT programme directors and PGR admissions officers make themselves available to discuss options for further study with students.

All departments arrange programmes of careers talks from external industry speakers. For instance, in Maths, we have so far had 2 speakers in 2018-19, both speaking about their career path and how they use mathematics, before meeting with students over an informal buffet.

Additionally, in AMS our very active Students' Actuarial Society arranges a programme of events including talks from external speakers and senior students. In CS, the

women@CS group has recently (2018) initiated a series of talks from senior women from industry.

We have participated in Equate Scotland's Careerwise programme through 12-week internships for female CS UGs, supported by funding from SICSA, designed to encourage students to consider research careers in computing.



Heriot-Watt's Women in STEM student society (started by CS student [REDACTED] together with an Engineering student) is affiliated with Equate Scotland and organises site visits to Science and Engineering companies, talks from women in STEM, workshops and social outings.

Action 7. Encourage our UG/PGT students to consider PhD study. Organise annual presentations aimed at our UG/PGT students in each department on PGR opportunities (including CDTs).

PGR students most directly obtain advice on academic career progression from their supervisors. In addition, since 2016 every new PGR student has been assigned a personal tutor, who provides general academic career advice. A wide variety of training courses and career development events are available to PGR students from our Centre for Academic Leadership and Development. Heriot-Watt University is a member of Vitae, an international programme for professional and career development of researchers; PGR students can access their online materials. AMS/Maths PGRs belong to the Maxwell Institute Graduate School (MIGS); the training programme provided within MIGS has been extensively revised and refreshed for 2018, to include training in interactions with industry, outreach activities, and teaching. CS PGRs are members of the Scottish Informatics and Computer Science Alliance (SICSA). SICSA hosts an annual DemoFest event for PGR students to showcase their work to delegates including

academics, industry and the public sector, and an annual PhD conference including industry keynotes, poster presentations, and career planning workshops.

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

Comment and reflect on support given to staff who apply for funding and what support is offered to those who are unsuccessful.

Individuals preparing grant applications are encouraged to share their draft within MACS with members of our College of Peer Review, who act as a “critical friend” to provide informal feedback. Advice and support is also available from HoDs and the School Director of Research. We make available on our intranet examples of successful grant applications, with the agreement of the Principal Investigator, and with the aim to include as broad a selection as possible. School PS staff assist in financial and administrative aspects of grant application preparation. All newly-appointed staff have a mentor; for staff whose duties include research, this is an experienced and research-active staff member, who provides support in applying for grants and in reflecting on outcomes, positive or negative.

At University level, Research & Enterprise Services provides early and ongoing support to all staff engaged in research, including highlighting research opportunities to new and early career staff, especially around fellowships. To ensure the highest chance of success for fellowship proposals, Heriot-Watt operates a Fellowship College. Research & Enterprise Services issues regular calls for internal and external fellowship candidates, outline proposals are discussed by a panel from across the University, and the most promising candidates are interviewed by the prospective host School. Candidates who are successful at this stage are allocated a mentor for the process, and support for costing and developing the proposal is provided by PS and academic staff. 16 fellowship proposals (6F, 10M) have been submitted in the School in the last 2 years, of which 3 (2F, 1M) were successful. Academics in the School have also supported 5 fellowship applications from external candidates, 2 successful (both female).

Congratulations to successful grant applicants are included within regular HoS emails to all School staff. Unsuccessful applicants are contacted and offered support from their mentor, HoD, or School Director of Research, in addition to support from Research & Enterprise Services as to how to interpret feedback from funders.

Since 2017, the Director of Research has organised a series of talks on research-related topics under the title “How did you do that?”, led by members of academic and PS staff (4F + 6M speakers in 2017-18, Table 45). Informal feedback so far indicates that staff, particularly early career staff, have found these very useful.

Table 45 “How Did You Do That?” Talks 2017-18

Date	Topic	Speaker	Gender
07-09-2017	Winning a Leverhulme fellowship	Prof Helen Hastie	F
21-09-2017	Setting up and running industrial collaborations	Prof David Corne	M
05-10-2017	Winning an EPSRC first grant	Dr Markus Schmuck	M
02-11-2017	Gaining funding from a specialised funder	Dr Fiona McNeill	F
16-11-2017	Winning a Marie Skłodowska-Curie fellowship	Dr Marcelo Pereyra	M
30-11-2017	Knowledge Transfer Partnerships	Dr Grant Sellar	M
31-05-2018	REF impact	Carolyn Brock	F
14-06-2018	Industry: collaborations, innovation and funding	Prof David Corne	M
21-06-2018	Preparing your proposal budget	Sandra McArthur	F
28-06-2018	Creating and maintaining research impact	Prof Andy White	M

[Section 5.3: 1460 words]

5.4 Career development: professional and support staff

(i) Training

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

The University’s Organisational Development team provides a wide range of training opportunities for PS staff. DoA regularly emails School staff highlighting such opportunities. PS staff are actively encouraged to take up training opportunities, but uptake is limited. In some cases training offered clashes with peak times of activity, hampering our ability to release staff to attend. In our 2018 survey, 18% of PS staff (4 of 22 respondents) said they had been supported to participate in University development programmes in the last 5 years.

Action 17. Support sharing of individual staff experiences of training and development. School staff (academic and PS) who have attended training courses provided by the University and mentoring schemes will be encouraged to upload their comments and experiences to the School intranet.

Action 21. Support PS staff to take up training opportunities. DoA will email all PS staff annually to remind them that they are welcome to discuss professional development opportunities and to request time for these. We will set up a schedule to identify times that PS staff are available to take up professional development activities and share this with Organisational Development.

Female PS staff are supported to undertake the Aurora programme of women-only leadership development training, and 1 member of School staff did so during 2016.

(ii) **Appraisal/development review**

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

The University operates annual PDR for all staff. DoA and 4 team leaders review MACS PS staff. All reviewers are required to undertake training for the task. Documented grading criteria are used, and reviewers have a triangulation meeting to ensure equity. DoA ensures that all PS staff receive PDR every year.

In our 2018 survey, 14% (3 of 22) of PS staff agreed that they found the PDR process useful; 24% (5 of 21) agreed that they found the PDR process supportive.

Action 22. Increase satisfaction of PS staff around PDR. Collect information through the PDR process of what underpins the perceptions of some PS staff of what they feel prevents them from progressing in their role or career, and make use of this to improve processes.

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

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

Following appointment of our Director of Administration (a new role) in 2015, we implemented a re-structuring of PS roles within MACS to give senior staff more managerial responsibilities, reflected in some changed job titles to clarify leadership roles. Since 2016, we have supported 3 staff (2F + 1M) to attend professional conferences (Association of Research Managers and Administrators, Institute of Travel Management, Association of University Administrators); we have supported 1 female staff member in taking ILM management qualifications. The University has a secondment policy allowing PS staff to acquire experience by temporarily taking on higher duties, and School staff are encouraged to do so, though uptake is low. During 2017, as part of the Erasmus+ exchange programme, we hosted a member of staff from the University of Siegen, Germany, who shared her experiences with staff in Edinburgh; in 2018 our DoA made a reciprocal visit to Siegen. Annual PDR includes discussion about opportunities for progression and long-term career goals, and managers offer advice and guidance to PS staff based on their ambitions.

[Section 5.4: 461 words]

5.5 Flexible working and managing career breaks

Note: Present professional and support staff and academic staff data separately

- (i) Cover and support for maternity and adoption leave: before leave
Explain what support the department offers to staff before they go on maternity and adoption leave.

MACS follows University policy on maternity and adoption leave. Once the member of staff notifies of their intentions, the manager invites them to discuss arrangements including any necessary workplace adjustments, plans for handover of work activities including supervision of PhD students, and preferred levels/method of contact for the leave period. For both academic and PS employees, salary savings are used to employ additional staff to provide cover with minimum impact on colleagues. Academics are asked how best their research can be supported in their absence. PDR discussion is brought forward to allow consideration of career development including promotion ahead of leave, although PDR can also be held during leave on request. The manager maintains contact prior to start of leave, allowing any additional necessary adjustments to the workplace to be made.

Arrangements involve a degree of informal agreement between manager and employee, and there has been some inconsistency in how policy is applied. The University has launched a series of Career Break Manager's Checklists covering maternity, paternity, shared parental leave and ill-health which offer good practice and consistency of approach. We will produce explicit School guidelines and institute a

formal recording process overseen by HoS/DoA, with explicit reminders and touch-points between School and employee before, during and after the leave period.

Action 23. Increase awareness of practices and expectations around maternity/adoption leave. As part of the ongoing review and update of the School intranet, we will review the information available around maternity/adoption leave to ensure a focus on practical needs and to include comprehensive School-specific information as well as case studies. For academics, we will produce and make available guidelines regarding teaching load expectations for staff on maternity/adoption leave (eg if the period of leave covers only one semester, and the individual's teaching load would normally be concentrated in the other semester). We will institute a process whereby a record of the individual's responsibilities and how these will be covered will be lodged by the manager with the DoA and HoS.

- (ii) **Cover and support for maternity and adoption leave: during leave**
Explain what support the department offers to staff during maternity and adoption leave.

The University provides up to ten paid Keeping-In-Touch (KIT) days for staff on maternity leave; all School staff who have taken leave since 2015 have made full use of these. Managers stay in touch as arranged, typically at regular intervals by email, and review return arrangements as necessary. Staff are notified by their manager of any promotions round falling during the leave period, and invited to Promotions workshops.

Although individuals may be considered for promotion while on leave (for instance, one 2017 promotion to professor during maternity leave), not all staff have been aware of this.

Action 24. Encourage promotion applications from individuals on maternity/paternity/shared parental leave. Promotions email from HoS and guidance to PDR reviewers will make explicit the existing policy that staff members may be considered for promotion while on leave.

- (iii) **Cover and support for maternity and adoption leave: returning to work**
Explain what support the department offers to staff on return from maternity or adoption leave. Comment on any funding provided to support returning staff.

On return, the member of staff meets with their manager. Appropriate re-induction arrangements are agreed, such as introductions to new employees and information on new/revised policies or procedures. An interim PDR meeting is held within one month of return, and a review meeting after three months to ensure staff feel supported and on track. The option to apply for flexible working can be considered at this time if not already arranged. PS staff often choose to reduce their hours on return; such requests are considered on a case-by-case basis, and 100% of cases have been supported since 2015 (Table 48). For academic staff, a practice of avoiding allocating any new teaching immediately following return is in place; additionally, academic staff can request a period of relief from teaching and admin duties. Since 2015 a dedicated breastfeeding/expressing facility has been available on campus. Parental coaching is available to new parents regardless of gender. The University operates a salary sacrifice Childcare Voucher scheme and has an on-campus nursery for children aged 3 months to 4 years.

The University has launched a new initiative to support T&R staff re-build their research careers on return to work, within which MACS will build a pump-prime fund for T&R staff returning from a career break.

Action 25. Enhance support for T&R staff on return to work. We will ensure that all T&R staff returning from a career break have at least one semester free of teaching to allow them to kickstart their research activity. We will establish a pump-prime fund to support T&R staff returning from a career break in reinstating their research careers following return (eg funding for additional research travel, visits of research collaborators, etc).

(iv) **Maternity return rate**

Provide data and comment on the maternity return rate in the department. Data of staff whose contracts are not renewed while on maternity leave should be included in the section along with commentary.

During 2015-17, 5 staff (3 academic, 2 PS, Table 46) took maternity leave. All staff who have completed their leave returned to work and remain in post.

Table 46 Maternity Leave and Return Rates

Year	Staff category	Number taking leave	Number still on leave	Number returned	Number still at HWU after:		
					6 months	12 months	18 months
2015	Research Only	0	0	0	-	-	-
	Teaching & Research	1	0	1	1	1	1
	Teaching & Scholarship	0	0	0	-	-	-

	Professional Services	0	0	0	-	-	-
2016	Research Only	1	0	1	1	1	1
	Teaching & Research	0	0	0	-	-	-
	Teaching & Scholarship	0	0	0	-	-	-
	Professional Services	1	0	1	1	1	1
2017	Research Only	0	0	0	-	-	-
	Teaching & Research	1	0	1*	1	1	-
	Teaching & Scholarship	0	0	0	-	-	-
	Professional Services	1	1	0	-	-	-

* Staff member returned within the last 18 months. Staff member took shared parental leave.

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

Provide data and comment on the uptake of these types of leave by gender and grade. Comment on what the department does to promote and encourage take-up of paternity leave and shared parental leave.

There was one instance (female) of shared parental leave in 2017 (Table 46), but no instances of other parental leave or adoption leave. During 2015-17, 5 members of staff took paternity leave (Table 47). Not all eligible staff choose to take paternity leave. There may be some lack of awareness of the University offer, which in addition to statutory leave includes paternity coaching, salary sacrifice Childcare Voucher Scheme, additional parental leave and flexible working options.

Action 26. Increase awareness of paternity leave offer. As part of the ongoing review and update of the School intranet, we will review the information available around paternity leave to ensure that University policies and School-specific information are readily available to all staff.

Table 47 Paternity Leave

Staff Category	2015	2016	2017
Research Only	0	1	0
Teaching & Research	1	1	2
Teaching & Scholarship	0	0	0
Professional Services	0	0	0
Total	1	2	2

(vi) **Flexible working**

Provide information on the flexible working arrangements available.

In our 2018 survey, 84% of academic staff (82%F, 85%M) and 68% of PS staff agreed that flexibility in working arrangements is available in an informal capacity. In addition, any member of staff can apply for formal flexible working arrangements. Options include reducing number of days, reducing working hours, and working from home.

During 2015-17 there were 8 such requests (4F, 4M) and all were approved (Table 48). The majority (5/8) were from PS staff, reflecting the greater informal flexibility enjoyed by academic staff. The data suggest an improving culture of flexible working, with requests increasing each year. However, in our survey only 26% (33%F, 24%M) of academic staff and 38% of PS staff agreed that the process for applying for formal flexible working is transparent.

Action 27. Increase awareness of flexible working options. As part of the ongoing review and update of the School intranet, we will review the information available around flexible working to ensure that University policies and School-specific information, as well as case studies, are readily available to all staff. The possibility of flexible working arrangements will be introduced as a standard item for discussion during PDR.

Table 48 Flexible working requests

Staff Category		2015		2016		2017	
		F	M	F	M	F	M
Research Only	Requested	0	0	0	0	0	0
	Approved	0	0	0	0	0	0
Research & Teaching	Requested	0	0	0	0	0	2
	Approved	0	0	0	0	0	2
Teaching & Scholarship	Requested	0	0	0	1	0	0
	Approved	0	0	0	1	0	0
Professional Services	Requested	0	0	1	0	3	1
	Approved	0	0	1	0	3	1
Total	Requested	0	0	1	1	3	3
	Approved	0	0	1	1	3	3

Female staff on part-time appointments are fully part of the School and supported as such, and the group as a whole has enjoyed recent success in promotions, grant income and external recognition (see, for example, Case Study 1, section 6).

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

Outline what policy and practice exists to support and enable staff who work part-time after a career break to transition back to full-time roles.

The School agreement with anybody taking a reduction in hours encourages them to come back when ready to ask for a return to full-time. While at the moment the institution does not guarantee that this will be possible, MACS policy is to give such requests priority over other financial requests. We have not yet had any examples of such requests.

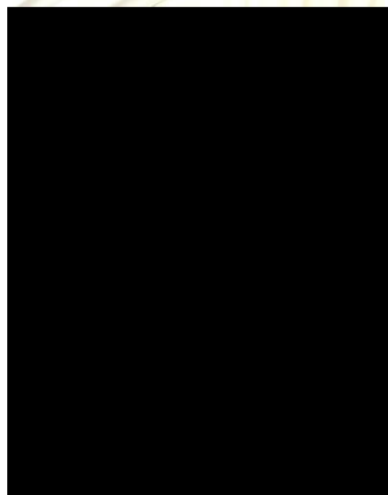
5.6 Organisation and culture

(i) Culture

Demonstrate how the department actively considers gender equality and inclusivity. Provide details of how the Athena SWAN Charter principles have been, and will continue to be, embedded into the culture and workings of the department.

MACS takes advantage of Ada Lovelace Day each year to celebrate achievements of women in STEM. In 2017 we highlighted a doubling in female professors in CS, from two to four, with an event during which these individuals discussed their experiences and career choices, and responded to questions. For 2018, videos were produced of Heriot-Watt women describing how they are changing lives, including [REDACTED] (CS UG, talking about her outreach involvement) and [REDACTED] (Maths PGR, describing her research).

Students are encouraged to undertake projects around Equality and Diversity. A UG group recently produced a poster “Notable Women in Mathematics”, now displayed in the School foyer. In 2018, MSc student [REDACTED] was awarded the University’s Alison Cawsey Memorial Prize for her project developing an online tool to signpost schoolgirls towards appropriate CS courses. The PhD project of SAT member [REDACTED] involves developing an automatic tool for gender categorisation of names, to help study gender issues in STEM.



*2018 MSc graduate and recipient of the Alison Cawsey Memorial Prize [REDACTED]
[REDACTED] (right) pictured with her supervisor [REDACTED]*

Our “women@CS” group, formed in 2016, organises regular social events throughout the year for female students and staff, as well as taking a leading role in CS outreach activities.

PGR students organise a weekly tea-and-biscuits for staff and PGR students, and an annual School Christmas Conference (2015 AP12). To improve sense of community, we regularly include internal speakers in our seminar programmes (2015 AP17). Since 2016-17, seminar chairs are asked to consider gender balance of speakers; this is monitored and the data circulated to chairs annually. We consider explicitly not holding meetings/lectures at Muslim prayer times.

Action 5. Further enhance sense of community for PGR students. Set up a School PGR Society to co-ordinate social events, with funding provided by the School. Review PGR intranet pages, and publicise them to students more actively. Encourage PGR students to add content to PGR intranet pages. Ensure that PGR-organised social events are included in the School’s online events calendar.

Achievements such as grant successes and promotions are celebrated in HoS email bulletins to all staff. In our 2018 survey, 83% of academic staff (91%F, 80%M) agree that staff successes and achievements are celebrated in the School; for PS staff the corresponding figure is 36%. In the last two years, the School nominated members of staff for internal awards such as the “Spirit of HW” award, and we will make this an explicit policy.

Action 28. Continue to encourage nominations for Spirit of Heriot-Watt Awards, in particular in the categories of “Valuing and Respecting Everyone” and “Pride and Belonging”. Ensure that the School nominates at least one individual for a Spirit of Heriot-Watt Award each year. Ensure that PS staff achievements are celebrated as fully as academic staff achievements.

Our 2015 submission identified “too much emailed information” as a problem, and proposed to introduce a well-structured, easily navigable intranet. Progress has been made, with the proportion of academic staff agreeing that the School communicates effectively internally having increased from 46% in 2014 to 73% in 2018. The School intranet is currently undergoing a comprehensive review.

The Maxwell Institute for Mathematical Sciences brings together AMS and Maths with the University of Edinburgh School of Mathematics. This collaboration has been strengthened with the 2018 opening of the new Bayes Centre building. The International Centre for Mathematical Sciences (ICMS) has re-located to the Bayes Centre; regular

joint colloquia are held there; and all Year 1 PGR students in mathematical sciences are now based there.

In our 2018 survey, 87% of academic staff (82%F, 89%M) and 76% of PS staff agree that people in the School are treated with respect irrespective of sex, while 89% of academic staff (91%F, 89%M) and 71% of PS staff agree that people in the School are treated with respect irrespective of ethnicity.

(ii) HR policies

Describe how the department monitors the consistency in application of HR policies for equality, dignity at work, bullying, harassment, grievance and disciplinary processes. Describe actions taken to address any identified differences between policy and practice. Comment on how the department ensures staff with management responsibilities are kept informed and updated on HR policies.

Implementation of HR policies is monitored at University level, and that information fed back to Schools through Professional Services Leadership Board, on which MACS Director of Administration sits. DoA reports back to Management Committee, and keeps all staff informed and updated on HR policies. A member of HR department sits on MACS Management Committee and SAT.

Since 2016, MACS Finance Office staff have produced a bi-annual newsletter detailing School and University finance policies and updates. A series of step-by-step “how to” guides to finance procedures, with School-specific actions highlighted, are available via School intranet.

The University has recently been developing the “Respect@hw” initiative, to provide support and guidance for staff and students, ensuring everyone has a voice and the confidence to speak up if they witness inappropriate behaviours. This includes the recent release of SafeZone, a free app providing a quick and easy way to contact SafeGuarding Services. MACS has actively promoted the app to staff and students, in particular when any issue of safety or specific stress has arisen in the last year, and will continue to do so.

(iii) Representation of men and women on committees

Provide data for all department committees broken down by gender and staff type. Identify the most influential committees. Explain how potential committee members are identified and comment on any consideration given to gender equality in the selection of representatives and what the department is doing to address any gender imbalances. Comment on how the issue of ‘committee overload’ is addressed where there are small numbers of women or men.

MACS Management Committee (Figure 2) is the central committee in the School. Appointment is for 3 years, other than for HoS, DoA, Finance Manager and HR representative. When roles become available, a role description is circulated and expressions of interest sought, with HoDs also speaking individually to staff members. A panel, comprising HoS and 2 other School members, interviews all who express interest. Selection takes into consideration ability, providing a development opportunity, and gender and departmental balance.

Management Committee currently has 50% female representation, up from 33% in 2015-16 (Table 49). There is female representation on all committees, and in general the gender balance on committees is more balanced than in the School as a whole (Table 49); in particular, Research Committee is 40% female and Learning & Teaching Committee 39% female. Our workload model takes into account committee service, and any perceived issue of committee overload is addressed through PDR.

In our 2018 survey, 87% of academic staff (85%F, 87%M) agreed that in assessing their workload, management & administration are taken into account.

There is PS representation on all committees, a total of 13 ex officio roles, currently 6 male, 7 female. There is student representation on Learning & Teaching committee and SAT.

Table 49 Academic and Professional Services Staff on School Committees

Committee	2015-16			2016-17			2017-18		
	F	M	%F	F	M	%F	F	M	%F
Management Committee	3	6	33	4	7	36	6	6	50
Learning & Teaching Committee	5	10	33	8	10	44	7	11	39
Research Committee	2	4	33	2	6	25	6	9	40
Athena SWAN SAT core group	6	3	67	7	3	70	7	3	70
AMS UG Studies Committee	2	5	29	3	5	38	2	4	33
CS UG Studies Committee	11	27	29	15	22	41	11	18	28
Maths UG Studies Committee	1	6	14	2	9	18	1	3	25
AMS & Maths PGT Studies Committee	1	7	13	1	8	11	1	7	13
CS PGT Studies Committee	5	6	45	2	7	22	2	8	20

(iv) Participation on influential external committees

How are staff encouraged to participate in other influential external committees and what procedures are in place to encourage women (or men if they are underrepresented) to participate in these committees?

Research Council calls for Peer Review College members are highlighted through emails from HoS and Director of Research to all academic staff. School staff currently include 17 members (4F, 13M) of EPSRC Full College and 8 members (2F, 6M) of EPSRC Associate College, reflecting our gender balance of research-active staff. CS women are encouraged by senior members of the department to become research theme leaders of the Scottish Informatics and Computer Science Alliance (SICSA). These positions provide a platform for networking both within Scotland and globally, with funding provided for workshops, networking events and invited speakers. SICSA currently has 7 research themes, of which 3 are led by Heriot-Watt women. We have supported, through strong letters of recommendation, two women to become members of the Royal Society of Edinburgh Young Academy of Scotland, one of whom (Dr Fiona McNeill) was a member of the working group for Tapping All Our Talents Review 2018, a progress review of women in STEM in Scotland. Dr Catherine Donnelly (AMS) represents UCU members on the USS Joint Negotiating Committee on Pensions and this commitment has been taken into account in allocation of internal duties. Prof Beatrice Pelloni (Maths) is on the Executive Committee of the European Mathematical Society and a member of the Strategic Advisory Team of EPSRC; both commitments are recognised in workload allocation.

Action 29. Ensure that contributions to institutional culture, visibility and reputation and to professional bodies, research councils & learned societies are encouraged and taken into account in workload. We will encourage all staff to disclose the extent of their external activities with an explicit questionnaire asking about such activities by category (conference organisation, journal editorial role, external public engagement activities, participation in influential external committees, etc.) prior to the yearly workload allocation. We will make use of PDR to encourage staff to consider taking on such roles.

(v) Workload model

Describe any workload allocation model in place and what it includes. Comment on ways in which the model is monitored for gender bias and whether it is taken into account at appraisal/development review and in promotion criteria. Comment on the rotation of responsibilities and if staff consider the model to be transparent and fair.

Each department determines workload allocation for its staff, with oversight by HoS to ensure balance between departments. Workload allocation takes into account teaching, pastoral care, administrative duties, research and scholarship, and outreach. Individual circumstances are considered (eg early career researchers, maternity leave returners). Workload is discussed during PDR. Successfully performing administrative roles and good citizenship are explicit criteria for promotion.

In our 2018 survey, 67% of academic staff (62%F, 69%M) agreed that workload is managed in a fair manner, while 53% (57%F, 51%M) agreed that workload is managed in a transparent manner. This compares with 54% of staff who agreed in our 2014 survey that workloads are managed in a fair and transparent manner.

In 2017, a University working group led by Prof Beatrice Pelloni (MACS HoS) proposed workload principles which, following Equality Impact Assessment, have been adopted across the institution. We are in the process of finalising implementation of these workload principles in a new School workload model that will be published on our intranet.

Action 30. Embed University workload principles in School workload model. Finalise implementation of workload principles in an updated MACS workload model that will be published on the School intranet.

In our 2018 survey, 65% of academic staff (71%F, 62%M) said that contributions to institutional culture, visibility and reputation were always or sometimes taken into account in their workload allocation, and 61% (65%F, 59%M) that contributions to professional bodies, research councils & learned societies were taken into account. These figures compare to 93% for teaching and 90% for research. We recognise that we need to improve the flow of information from PDR to the workload, which requires a delicate balance as PDR information is confidential. However, it is not always known what an individual does outside the School – unless the individual states it clearly.

Action 29. Ensure that contributions to institutional culture, visibility and reputation and to professional bodies, research councils & learned societies are encouraged and taken into account in workload. We will encourage all staff to disclose the extent of their external activities with an explicit questionnaire asking about such activities by category (conference organisation, journal editorial role, external public engagement activities, participation in influential external committees, etc.) prior to the yearly workload allocation. We will make use of PDR to encourage staff to consider taking on such roles.

(vi) **Timing of departmental meetings and social gatherings**

Describe the consideration given to those with caring responsibilities and part-time staff around the timing of departmental meetings and social gatherings.

We aim to organise meetings and seminars to start and finish within the hours 10:00-16:00 when possible. Some meetings must take place outwith these hours, as they are held jointly with staff in Dubai and/or Malaysia; we routinely offer UK-based staff the opportunity to participate in such meetings via Skype. The University has core teaching hours 09:15-18:15. Research seminars are generally scheduled for early afternoon slots, with some exceptions, typically for specialised seminars when the research group agree to meet later to avoid conflict with other commitments. Since 2017, DoA has maintained a flexible working register to record non-standard working hours and days (2015 AP20), to assist with work allocation and to allow teaching and meetings to be scheduled appropriately. In surveys, from 2014 to 2018 the proportion of academic staff agreeing that the School arranges meetings, seminars and social gatherings at times that make it possible for them to attend rose from 63% to 79% (71%F, 82%M).

(vii) **Visibility of role models**

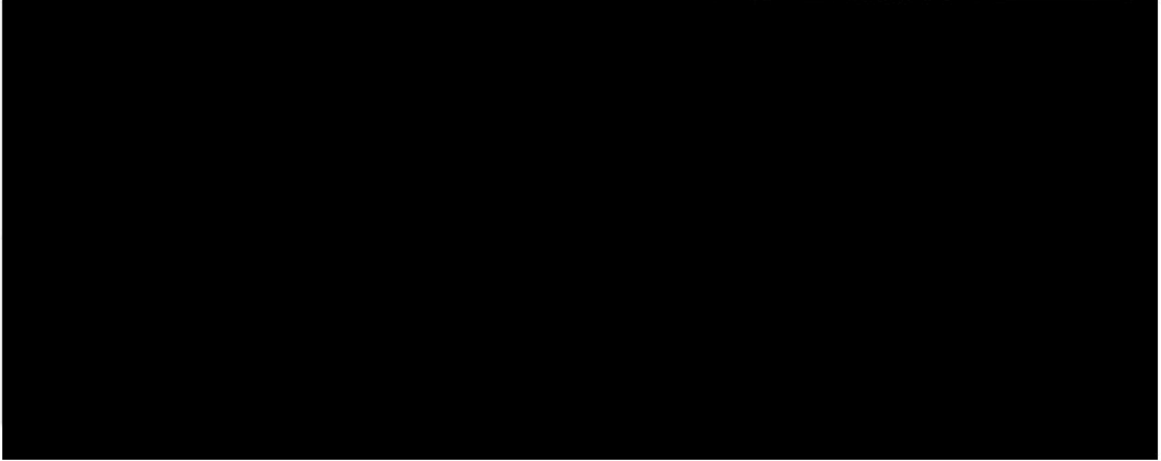
Describe how the institution builds gender equality into organisation of events. Comment on the gender balance of speakers and chairpersons in seminars, workshops and other relevant activities. Comment on publicity materials, including the department's website and images used.

AMS and CS each run a single departmental seminar series; Maths has four research group series. Series chairs are currently 3 male, 3 female (Table 50). We have since 2016-17 been monitoring gender balance of speakers. This information is circulated annually to chairs, who are asked to reflect on the data. Across all seminars, percentage of speakers female increased from 10.7% in 2016-17 to 20.5% in 2017-18 (Table 50).

Table 50 Seminar Speakers and Chairs by Gender

	Chair	Speakers 2016-17			Speakers 2017-18		
		M	F	%F	M	F	%F
AMS	M	14	0	0.0	16	7	30.4
CS	M	18	2	10.0	9	4	30.8
Maths	1M+3F	60	9	13.0	64	12	15.8
Total	3M+3F	92	11	10.7	89	23	20.5

Since November 2017, DoA convenes an annual meeting of staff involved in UG/PGT admissions to review our website and marketing brochures to ensure that they are attractive to both genders (2015 AP19).



2015 AP21 was to make available via the intranet case studies on staff of flexible working and career break. MACS website now includes four such case studies, linked from our Athena SWAN webpage.

In 2016, Ann Budge, Chairwoman and CEO of Heart of Midlothian FC, was awarded an honorary doctorate in recognition of her achievements in the field of information technology and as a role model and advocate for the advancement of women in STEMM. In 2019, an honorary doctorate will be awarded to Professor María Esteban, an eminent Basque-French mathematician with long-standing links with the School.

Action 31. Increase number of female honorary graduates. Encourage nominations of female candidates for honorary degrees which symbolise the achievement of women specifically in our discipline areas. Ensure that the School nominates at least one honorary graduate each year, and that 50% of such nominees are female.

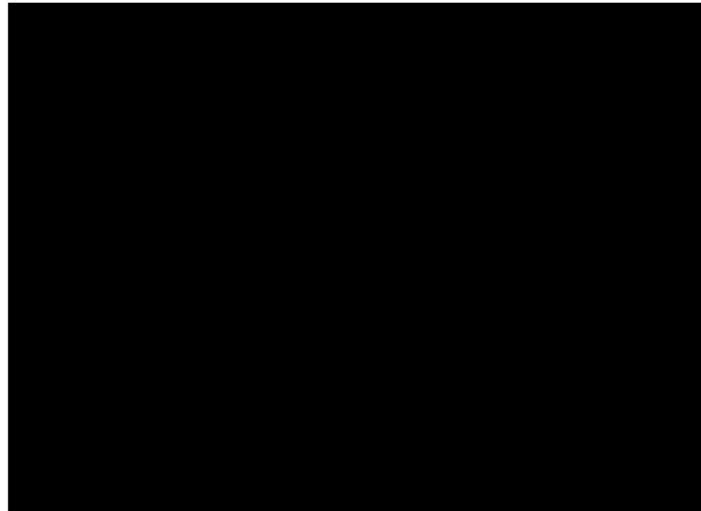
(viii) **Outreach activities**

Provide data on the staff and students from the department involved in outreach and engagement activities by gender and grade. How is staff and student contribution to outreach and engagement activities formally recognised? Comment on the participant uptake of these activities by gender.

Outreach activities have increased significantly in volume and scope since 2015. In 2017-18, a total of 19 staff (9F, 10M, 47% female) and 21 students (7F, 14M, 33% female) participated.

For AMS and Maths, Director of Outreach for Mathematical Sciences Dr Lotte Hollands co-ordinates. During 2018 we contributed to:

- Royal Institution Maths Masterclasses, joint with University of Edinburgh and Napier University (6 sessions per year; 2 most recent events involved 160 school pupils, 50% female, 2F+1M staff, 5F+3M student helpers).
- Maths Week Scotland event (approximately 100 secondary school pupils).
- “Why not Maths?”, sponsored by LMS, to encourage female participation in mathematics (65 female participants, talks given by female academics).
- Scottish Mathematical Council Mathematical Challenge, a competition for secondary school and upper primary school pupils.



CS outreach event, 2017

CS outreach activities are co-ordinated by CS Outreach team (Dr Jenny Coady, Dr Patricia Vargas, Dr Fiona McNeill), with many other staff involved, and regularly include events specifically targeting female secondary and primary school pupils. Student members of our women@CS group have been heavily involved. Recent events include:

- Afternoon hosted on campus within Skills Development Scotland’s event “Girls into a Digital World” (36 female participants, March 2016)
- “50th Anniversary of Computer Science Open Day for Girls”, hosted on campus, technology demonstrations, a campus tour, an app inventor session and a robot selfie competition (February 2017, pupils from 6 high schools attended).
- Brownies and Guides event. Participants visited campus and worked in groups on a robotic challenge with dancing robots, meeting staff and students to learn about current research (March 2017)
- Robotic Petting Zoo at Carfest, allowing children to interact with robots including MiRo, a companion dog-bot (two events, July and August 2017, 1F staff, 2F+1M student helpers).

- Afternoon hosted on campus for students from the Scottish Wider Access to Physical Sciences programme, tour of the Robotarium and talk about CS (November 2018, 33 participants, 1F staff, 1M student helper).

“Computing in the Classroom”, a course available to Year 4 UG students, provides an opportunity for students to act as ambassadors for their disciplines via placements in local schools (4F+14M students since 2016-17, taught by Dr Fiona McNeill and Dr Tessa Berg).

[Section 5.6: 2094 words, including in section (viii) 50 of 500 additional granted words]

[Section 5: $1508 + 297 + 1460 + 461 + 882 + 2094 = 6702$ words]

SILVER APPLICATIONS ONLY

6 CASE STUDIES: IMPACT ON INDIVIDUALS

Recommended word count: Silver 1000 words

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

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

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

[Section 6: 971 words]

7 FURTHER INFORMATION

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

Please comment here on any other elements that are relevant to the application.

- [REDACTED] (Maths) appears on the front cover of the Royal Society's booklet "Parent Carer Scientist", which features profiles of 150 scientists.
- [REDACTED] (CS) featured on Robohub's annual "25 women in robotics you need to know about" list for 2016.
- Profiles of [REDACTED] (CS) and [REDACTED] (CS) feature in the Royal Society of Edinburgh Young Academy of Scotland 2016 booklet "Academic Women Now: experiences of mid-career academic women in Scotland".
- [REDACTED] (CS) attended the 2018 STEM Equality Congress in Amsterdam, with funding from the School and from Engendering STEM, a pan-European collaborative development project for which she sits on the expert panel.
- In both 2017 and 2018, teams of students from our CS department have been the only UK team to reach the final of the Amazon Alexa Prize challenge. Our 2018 team is led by PhD student [REDACTED]

[Section 7: 150 words]

[Total: 512 + 631 + 800 + 2527 + 6702 + 971 + 150 = 12293 words]

8 ACTION PLAN

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

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

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

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

PRIORITY AREA

No.	Application Section	Objective	Rationale	Planned actions	Sub-actions and Measures of Success	Start-Finish	Person Responsible
1.	The Self-Assessment Process (iii) Plans for the future of the SAT	Strengthen the role of the SAT	Supports mainstreaming Athena SWAN activity and ensures leadership and forward momentum	A bi-monthly bulletin to be set up to improve communication around Athena SWAN issues, emailed to all School staff and students.	Bulletin in place	Within Q1 2019	SAT Chair
				SAT membership to be regularly rotated.	First SAT membership rotation complete	Within Q4 2019	
				UG student representation to be introduced.	UG member of SAT in place		

				SAT chair to attend all School Management Committee meetings, with standing agenda item on Equality and Diversity.	SAT Chair attends first 3 School Management Committees	Q1 2019 – Q2 2019	
2.	Student Data (ii) Numbers of UG students by gender	Increase female proportions of AMS and Maths UGs towards 50%	AMS and Maths are currently in line with national average, we want to do even better	Continue to make use of gender positive and ethnically diverse imagery in the open spaces in the School.	Before and after audit of imagery in open spaces shows appropriate gender representation and BAME representation.	Q4 2019 – Q2 2020	DoA / UG admissions staff
				Ensure visible presence of female staff and students at Open Days.	Annual monitoring initiated and results shared with SAT.	Q3 2019 – Q1 2021	
				Continue to review promotional materials annually to ensure appropriate gender representation; extend annual review to include ethnic diversity in imagery, as well as review of direct mailings to applicants to ensure gender-inclusive language is used.	Annual review embedded - 2019 and 2020 reviews occur and reported to SAT	Q4 2019 – Q4 2020	
				Put in place survey of UG applicants who decline our offer, to investigate reasons.	Survey developed and issued. Results analysed and reported to SAT. Measures	Q2 2019 – Q4 2020	

					taken to effect increase %F towards 50%.		
3.	Student Data (ii) Numbers of UG students by gender	Increase female proportion of CS undergraduates to national benchmark figure	UG CS percentage female is persistently below national average	Continue to promote our women@CS group widely, including at Open Days, so that CS at Heriot-Watt is perceived as an environment that is supportive of women.	women@CS invited to 2019 Open Days CS UG female proportion meets national average (16%)	Q1 2019 – Q3 2019 Q4 2021 – Q4 2022	CS Board of Studies/ DoA
				Continue to use the online tool developed within the Attracting Diversity project.	Roll out, marketing and evaluation of the tool complete	Q2 2019 – Q4 2021	
				Carry out research with dissertation students to try to identify factors behind our low female proportion amongst CS undergraduates.	First project identified and allocated, dissertation submitted and findings reported to SAT	Q3 2019 – Q2 2020	
				Carry out research with dissertation students into different approaches to encouraging female students at universities across Scotland, to try to understand what methods are most effective.	First project identified and allocated, dissertation submitted and findings reported to SAT	Q3 2019 – Q2 2020	
				Continue to make use of gender positive and ethnically diverse imagery in the open spaces in the	Annual review embedded - 2019 and 2020 reviews occur and reported to SAT	Q4 2019 – Q4 2020	

				School. Continue to review promotional materials annually to ensure appropriate gender representation; extend annual review to include ethnic diversity in imagery, as well as review of direct mailings to applicants to ensure gender-inclusive language is used.			
				Put in place survey of UG applicants who decline our offer, to investigate reasons.	Survey developed and issued. Results analysed and reported to SAT. Measures taken to effect increase %F towards 50%.	Q2 2019 – Q4 2020	
4.	Student Data (iii) Numbers of men and women on PGT degrees	Develop alternative PGT routes targeting women	We want to increase the number of women at PGT level. We have a working hypothesis that 2 yr MSc programmes support this aim	We will monitor data on our 2-year MSc programmes to investigate the working hypothesis that this could be a better route into a higher degree for female students, and explore possibilities for developing more such 2-year MSc programmes.	Annual monitoring in place. Increase in PGT female proportions in CS and Maths to be consistently above national benchmarks (27% CS, 35% Maths)	Within Q4 2019 Q4 2021 – Q4 2022	AMS/ Maths and CS PGT Boards of Studies
5.	Student Data (iv) Numbers of men and women on PGR degrees	Further enhance sense of community for PGR students	Our focus groups showed that recent activities had improved the PGR sense of	Set up a School PGR Society to co-ordinate social events, with funding provided by the School.	PGR Society established and funded	Q3 2020 – Q4 2020	Director of PGR

	Organisation and Culture (i) Culture		community across the School and we want to continue that trend		Postgraduate Research Experience Survey shows increase in satisfaction rating to 90%	Q2 2021	
				Review PGR intranet pages, and publicise them to students more actively. Encourage PGR students to add content to PGR intranet pages.	Review includes stakeholder participation. Enhancements are delivered.	Q3 2020 – Q1 2021	
				Ensure that PGR-organised social events are included in the School's online events calendar.	Owner and mechanism for updates established	Q3 2020 – Q4 2020	
6.	Student Data (iv) Numbers of men and women on PGR degrees	Improve PGR admissions process	We have in place Open Day visit processes for applicants. We want to make sure we highlight our diverse community	Ensure that all female PGR applicants meet with female current PGR students, as well as female staff.	Establish default participation of Female PGR students in Open Days. Increase in PGR female proportions to be consistently above national benchmarks (AMS 37%, CS 25%, and Maths 27%)	Within Q3 2019 Q4 2021 – Q4 2022	Director of PGR
7.	Student Data (v) Progression pipeline between	Encourage our UG/PGT students	In AMS and Maths our PGR proportion female is lower than for UG. We want to see an	Organise annual presentations aimed at our UG/PGT students in each department on PGR	First annual presentation occurs.	Q3 2019	Director of PGR

	UG and PG student levels	to consider PhD study	increase of women in PGR.	opportunities (including CDTs).	Increase in PGR female proportions to be consistently above national benchmarks (AMS 37%, CS 25%, and Maths 27%)	Q4 2021 – Q4 2022	
8.	Key Career Transitions: Academic Staff (i) Recruitment	Automate monitoring of job applications processes and outcomes	We need to make sure our processes are working effectively and that information is effectively shared	Reshape School PS support to ensure that centrally-collated data on iRecruit is made available to Management Committee and SAT annually.	Annual reporting of iRecruit data to School Management Committee and SAT is in place.	Q1 2020 – Q2 2021	DoA
9.	Key Career Transitions: Academic Staff (i) Recruitment	Increase pool of female applicants for academic posts	We need to do more to attract women to come and work with us. One way to broaden our pool is to make and maintain contact with women through seminars and other events.	Encourage seminar organisers to invite Early Career women, including PGRs, as well as mid-career women. When posts become available, contact these individuals directly to encourage them either to apply themselves or help publicise the position via their academic contact networks.	Seminar organisers receive call to action. Annual monitoring established and demonstrates increase in numbers of early career and female seminar speakers Increase in proportion female amongst academic job applicants to at least national benchmarks (AMS 23%, CS 24%, and Maths 23%)	Within Q1 2019 Within Q1 2020 Q4 2021 – Q4 2022	SAT chair
10.	Key Career Transitions:	Continue to address Unconscious Bias	Less than 50% of our staff have undertaken	All staff to be encouraged to complete online Diversity in the Workplace training.	Staff receive call to action.	Within Q1 2019	HoS

	Academic Staff (i) Recruitment		the online training over the last 3 years.		Next staff survey demonstrates increase in proportion of staff having taken online training, to at least 80% of those surveyed.	Q4 2021 – Q4 2022	
				Appointment panel chairs to circulate Royal Society Unconscious Bias briefing document before each interview.	Staff receive call to action. New requirement included in local instructions re appointment process.	Within Q1 2019 Within Q2 2019	
11.	Key Career Transitions: Academic Staff Key Career Transitions: Academic Staff (i) Recruitment	Reimbursement of caring expenses	We want to make sure that people are able to claim easily for caring support to remove any barriers for potential new staff and existing colleagues.	We will introduce a financial label for reimbursement of caring expenses, for shortlisted applicants attending interview (as well as for members of staff attending conferences and other scientific events).	New policy implemented and communicated	Q3 2019 – Q1 2020	Finance Manager
12.	Key Career Transitions: Academic Staff (ii) Induction	Improved transparency around start-up packages	There is a lack of transparency around professorial start-up packages, and we want to ensure consistency	Data on individually negotiated start-up packages of professors will be made accessible.	Data made accessible to relevant parties Self-assessment review demonstrates consistency of professorial start-up packages across genders	Q3 2019 – Q4 2019 Q4 2021 – Q4 2022	HoS

13.	Key Career Transitions: Academic Staff (iii) Promotion	Improve monitoring of promotion processes and outcomes	SAT is looking to take a proactive role in monitoring promotion processes and outcomes to ensure no gender bias at School level	Data on promotion processes and outcomes (number of successful/unsuccessful candidates by grade and gender supported/non-supported by the School) to be collected at the end of each promotion round and reported to SAT. SAT to pass analysis to School Management Committee.	New annual process initiated. Data meets specification required.	Within Q3 2019	DoA
14.	Key Career Transitions: Professional and Support Staff (i) Induction	Implement uniform School-level induction for PS as well as academic staff	When new people join our School we want to make sure they have an induction that is fit for purpose and meets their needs as well as providing consistency across our staff groups.	<p>Ensure School induction handbook contains information for PS staff as well as academic staff.</p> <p>Ensure that all elements of the School induction process (handbook, welcome event) are implemented for each new appointment.</p> <p>Develop an online source of induction information for newly employed or casual PS staff.</p>	<p>School induction handbook amended and online materials made available</p> <p>Monitoring process to ensure induction completed in place</p>	<p>Q2 2019 – Q2 2020</p> <p>Q2 2019 – Q3 2019</p> <p>Q2 2019 – Q2 2020</p>	DoA
15.	Key Career Transitions: Professional and	Annual reporting of Contribution Pay Board data to SAT	SAT is looking to take a proactive role in better understanding and	Data on Contribution Pay Board nominations and outcomes to be reported	New annual process initiated. Data meets specification required.	Within Q3 2019	DoA/SAT

	Support Staff (ii) Promotion		diagnosing School level issues re Contribution Pay Boards and putting in place action to improve success rates	annually to SAT, for both academic and PS staff. Data to be monitored by gender and grade, and whether bonuses are University or School level. SAT to pass analysis to School Management Committee.			
16.	Key Career Transitions: Professional and Support Staff (ii) Promotion	Increase awareness of mentoring and training for PS staff	In our survey, a low proportion of PS staff (14%) agreed that they know what they have to do to be rewarded for their performance. To date uptake of training and mentor schemes by PS staff has been low.	The role of mentor to be clearly documented in guidance available from School intranet. Training opportunities (for example, those organised by Organisational Development) to be advertised and promoted within the School.	Intranet updated Next staff survey demonstrates increase in proportion of PS staff agreeing that they know what they have to do to be rewarded to match the figure for academic staff (55%)	Q3 2019 Q4 2021 – Q4 2022	DoA
17.	Career Development: Academic Staff (i) Training Career Development: Professional and Support Staff (i) Training	Support sharing of individual staff experiences of training and development.	We want our staff to learn and benefit from each other, sharing best practice and innovation through knowledge exchange	School staff (academic and PS) who have attended training courses provided by the University and mentoring schemes will be encouraged to upload their comments and experiences to the School intranet.	Call to action received by staff and actioned, and individual comments available on intranet Self-assessment demonstrates increase in uptake of training opportunities across all staff groups	Within Q4 2019 Q4 2021 – Q4 2022	HoS/ DoA/ Line managers

18.	Career Development: Academic Staff (ii) Appraisal/development review	Improve PDR form	We feel that although PDR is generally working well within the School, the University's standard PDR form could be improved.	Work with HR to improve the University's standard PDR form to better reflect the key areas that should be covered during the meeting (research, administration, teaching innovation, outreach activities, readiness for promotion, long-term career objectives).	Meeting to initiate in diary. Introduction of improved form Next staff survey demonstrates increase in proportions of staff agreeing that each area has been covered in their most recent PDR to at least 80%.	Q2 2019 Q2 2020 Q4 2021 – Q4 2022	HoS
19.	Career Development: Academic Staff (iii) Support given to academic staff for career progression	Develop stronger sense of community for Early Career Researchers, including postdoctoral researchers	We want to assist in providing peer support to create strong working relationships and a supportive community across the School	Add information about University Postdoc Forum to the School induction handbook. Strengthen the role of School Early Career Researchers group with a ring-fenced budget for events and new initiatives.	Induction Handbook updated Ring-fenced budget for School ECR group in place	Within Q3 2019 Q2 2020	HoS/DoA
20.	Career Development: Academic Staff (iii) Support given to academic staff for career progression	Improve communication of career progression events	While there are a range of events available at University and School level, there is a need to improve awareness of what is on offer	Regularly circulate a bulletin presenting a schedule of forthcoming events and reporting on recent events with a focus on career progression across the School (Early Career Researchers group, promotions workshops,	Circulation of bulletin initiated	Within Q3 2019	DoA

				distinguished lecture series, colloquia etc.).			
21.	Career Development: Professional and Support Staff (i) Training	Support PS staff to take up training opportunities	In our survey, a low proportion of PS staff (18%) agreed that they had been supported to participate in University development programmes in the last 5 years.	DoA will email all PS staff annually to remind them that they are welcome to discuss professional development opportunities and to request time for these. We will set up a schedule to identify times that PS staff are available to take up professional development activities and share this with Organisational Development.	Email issue initiated and first year's schedule received by Organisational Development. Next staff survey demonstrates increase in proportion of PS staff agreeing that they had been supported to participate in University development programmes in the last 5 years to at least 50%	Q1 2019 – Q2 2019 Q4 2021 – Q4 2022	DoA
22.	Career Development: Professional & Support Staff (ii) Appraisal / development review	Increase satisfaction of PS staff around PDR	Our survey showed we need to do more with our PDR process to engage and support PS staff	Collect information through the PDR process of what underpins the perceptions of some PS staff of what they feel prevents them from progressing in their role or career, and make use of this to improve processes.	Information collected and reported to SAT and action plan developed to address barriers. Next survey demonstrates increase in proportion of PS staff surveyed who found the PDR process (i) useful and (ii) supportive, to	Q1 2019 – Q3 2019 Q4 2021 – Q4 2022	HoS/Line Managers

					match figures for academic staff (53%, 65% respectively)		
23.	Flexible working and managing career breaks (i) Cover and support for maternity and adoption leave: before leave	Increase awareness of practices and expectations around maternity/adoption leave.	Arrangements involve a degree of informal agreement between manager and employee, and there has been some inconsistency in how policy is applied	<p>As part of the ongoing review and update of the School intranet, we will review the information available around maternity/adoption leave to ensure a focus on practical needs and to include comprehensive School-specific information as well as case studies.</p> <p>For academics, we will produce and make available guidelines regarding teaching load expectations for staff on maternity/adoption leave (e.g. if the period of leave covers only one semester, and the individual's teaching load would normally be concentrated in the other semester). We will institute a process whereby a record of the individual's responsibilities and how these will be covered will be lodged by the manager with the DoA and HoS.</p>	<p>Information available online.</p> <p>Guidelines developed and formal recording process in place.</p>	Q3 2019 – Q3 2020	DoA/ HoS/ Line managers

24.	Flexible working and career breaks (ii) Cover and support for maternity and adoption leave: during leave	Encourage promotion applications from individuals on maternity/paternity/shared parental leave	We want to make sure that all staff are aware of eligibility for promotion and progression while on leave	Promotions email from HoS and guidance to PDR reviewers will make explicit the existing policy that staff members may be considered for promotion while on leave.	Standard correspondence issued is updated	Within Q4 2019	HoS/Line managers
25.	Flexible working and career breaks (iii) Cover and support for maternity and adoption leave: returning to work	Enhance support for T&R staff on return to work	To address concerns around retaining an active research career after a career break.	We will ensure that all T&R staff returning from a career break have at least one semester free of teaching to allow them to kick-start their research activity.	HoS informs staff of policy	Q1 2019	HoS
				We will establish a pump-prime fund to support T&R staff returning from a career break in reinstating their research careers following return (e.g. funding for additional research travel, visits of research collaborators, etc.).	Pump-prime fund in place Staff survey demonstrates increase in proportion of T&R staff agreeing that on return to work they received the support needed from the School to get their career back on track to at least 80%	Q2 2019 Q4 2021 – Q4 2022	

26.	Flexible working and career breaks (v) Paternity, shared parental, adoption and parental leave uptake	Increase awareness of paternity leave offer	We're aware that not all staff take up their paternity and/or shared leave entitlement and we want to change that.	As part of the ongoing review and update of the School intranet, we will review the information available around paternity leave to ensure that University policies and School-specific information are readily available to all staff.	Information made available on intranet	Within Q4 2020	HoS/ Line managers
27.	Flexible working and career breaks (vi) Flexible working	Increase awareness of flexible working options	While we have an increase in uptake of flexible working there are issues across our staff groups about the transparency of the process. We want to do more to combat this	As part of the ongoing review and update of the School intranet, we will review the information available around flexible working to ensure that University policies and School-specific information, as well as case studies, are readily available to all staff. The possibility of flexible working arrangements will be introduced as a standard item for discussion during PDR.	Information available via School intranet about flexible working Next staff survey demonstrates increase in proportion of staff across all groups agreeing that the process of applying for flexible working is transparent, to at least 80%	Q4 2019 – Q3 2020 Q4 2021 – Q4 2022	HoS/Line Manager
28.	Organisation and Culture (i) Culture	Continue to encourage nominations for Spirit of Heriot-Watt Awards, in	We want to see our staff recognised and rewarded for the work they do. We also want to be a working	Ensure that the School nominates at least one individual for a Spirit of	First Spirit of Heriot-Watt Award nomination submitted.	Within Q2 2019	HoS/DoA

		particular in the categories of "Valuing and Respecting Everyone" and "Pride and Belonging"	environment that has valuing and respecting everyone and pride and belonging as central values	Heriot-Watt Award each year. Ensure that PS staff achievements are celebrated as fully as academic staff achievements.	Staff survey demonstrates increase the proportion of PS staff who agree in survey that staff successes and achievements are celebrated in the School, to match the figure for academic staff (83%)	Q4 2021 – Q4 2022	
29.	Organisation and Culture (iv) Participation on influential external committees Organisation and Culture (v) Workload model	Ensure that contributions to institutional culture, visibility and reputation and to professional bodies, research councils & learned societies are encouraged and taken into account in workload	We want to continue to encourage such activities. Our survey suggests that staff feel these activities are not always fully recognised in workload allocation	We will encourage all staff to disclose the extent of their external activities with an explicit questionnaire asking about such activities by category (conference organisation, journal editorial role, external public engagement activities, participation in influential external committees, etc.) prior to the yearly workload allocation. We will make use of PDR to encourage staff to consider taking on such roles.	Questionnaire developed and implemented Increase in proportion of staff agreeing in survey that contributions to institutional culture, visibility and reputation, as well as to professional bodies, research councils & learned societies, are recognised in workload to at least 80%	Q1 2020 Q4 2021 – Q4 2022	HoS/DoA
30.	Organisation and Culture (v) Workload model	Embed University workload principles in School workload model.	In 2017, a University working group proposed new workload principles. We are in the process of embedding these in	Finalise implementation of workload principles in an updated MACS workload model that will be published on the School intranet.	Workload model available on intranet Staff survey demonstrates increase in proportion of	Q1 2019 Q4 2021 – Q4 2022	HoS

			the MACS workload model		academic staff agreeing that workload is managed in (i) a fair manner and (ii) a transparent manner, to at least 80%		
31.	Organisation and Culture (vii) Visibly of role models	Increase number of female honorary graduates.	Celebrating success and acknowledging women's achievement needs to be more embedded in our work	Encourage nominations of female candidates for honorary degrees which symbolise the achievement of women specifically in our discipline areas. Ensure that the School nominates at least one honorary graduate each year, and that 50% of such nominees are female.	First female nomination submitted Self-assessment demonstrates we have increased number of female honorary graduates successfully nominated from MACS to at least 1 every 2 years	Q4 2019 Q4 2021 – Q4 2022	HoS



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