



# Department Application Athena SWAN Award

## Application Information

<b>Name of Institution</b>	University of Bath
<b>Department</b>	Department of Mechanical Engineering
<b>Focus of Department</b>	STEMM
<b>Date of application</b>	November 2017
<b>Date of Department Bronze Award</b>	November 2014
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<b>Total</b>		<b>11953</b>	<b>12000</b>

## Glossary of Terms

DSAT	Department Self-Assessment Team
EDaTE	Equality Diversity and Transparency Executive
USAT	University Self-Assessment Team
SSLC	Staff Student Liaison Committee
RSWG	Research Staff Working Group
MEEC	Mechanical Engineering Executive Committee
REF	Research Excellent Framework
HoD	Head of Department
DHoD	Deputy Head of Department
HoG	Head of Group
UG	Undergraduate
PGR	Postgraduate Research Student
PGT	Taught Postgraduate Student
PDRA	Post-Doctoral Research Associate
ECR	Early Career Researcher
SDPR	Staff Development and Performance Review
TBR	Team Bath Racing
TBRE	Team Bath Racing Electric
FTE	Full Time Equivalent
SOP	Standard Operating Procedure
BME	Black and Minority Ethnicity
PI	Principal Investigator
Co-I	Co-Investigator
<b>BAP</b>	<b>Bronze Action Plan, note <b>BAn=Bronze Action, n=action number</b></b>
<b>SAP</b>	<b>Silver Action Plan, note <b>SAn=Silver Action, n=action number</b></b>
<b>F</b>	Female
<b>M</b>	Male
<b>O</b>	Other

NB: Actions are referenced throughout the document as either Bronze Actions by **BAn**, or Silver Actions by **SAn**, where **n** is the action number.

## 1 LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT



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### **Endorsement of Application for Athena SWAN Silver Department Award**

It is with great enthusiasm that I write to support our application for an Athena SWAN Silver Award. The Athena SWAN process ignited the Department and we now have a culture where gender inequality is being addressed. We actively seek opportunities for improving equality and there are embedded procedures to ensure further, progressive action. I am proud to have been involved instrumentally in the creation, implementation and continued support of our Bronze Action Plan (AP), which is palpably improving the culture in Mechanical Engineering for the benefit of all.

The two principal ambitions for our Department are to generate world-class research and produce graduates of the highest quality in order to provide a bright, global future. We require the full diversity of talent to achieve these ambitions and fundamental changes have started in our Department.

We are committed to increasing the number of females in mechanical engineering: into undergraduate courses using outreach now built into the fabric of the Department; into postgraduate degrees through increased awareness of opportunities and role models; into post-doctoral research through support for fellowships and mentoring; into academic staff positions through fairer recruitment procedures; to promoted, senior positions using improved staff performance reviews and transparent processes. Notable achievements since 2014 include the following: (i) 83% of our female undergraduates have undertaken industrial placements between 2014-17, compared to 67% of male undergraduates [c.f. 78% females, 60% males between 2010-13]; (ii) an increase in female academic staff from seven (15% of total) to 12 (20%); (iii) the first female professor in 50 years of Mechanical Engineering at Bath; (iv) the abolition of all-male short-listing and interview panels; (v) female chairs of prominent committees; and (vi) a lauded staff development and performance review (SDPR) process which explicitly addresses career management and progression of all staff.

At the core of our success is the absolute commitment of the Departmental management team with my full support to instigate cultural change and embed the Athena SWAN charter into departmental discussions and decision-making at all levels. In my roles as Deputy, and now Head, of Department I have driven good practice by creating, and chairing, an Equality Diversity and Transparency Executive (EDaTE) to support the self-assessment team. As a group, we meet weekly to discuss and achieve the

implementation of our Athena SWAN actions and wider issues of inclusivity. Our Department should be fully inclusive, but this is an area of concern consistently highlighted in our staff surveys. Nevertheless there has been a steady improvement: in 2014 30% of academics felt the Department was not inclusive and this has reduced to 14% by 2017. While I recognise there is much to be accomplished, sustaining and improving our good practice and culture is key to our success. Communication and transparency is vital, with EDaTE members prominent on all important committees in the Department.

Our application for a Silver Award describes a programme which is focused on attracting, promoting, and retaining an increased proportion of women in Mechanical Engineering at all stages of the career pipeline. The execution of our Bronze AP has resulted in good practice formalised through the SDPR mechanisms and committees, and a positive change in culture to the benefit of all. Our new actions are focused on further improving this culture with specific, targeted initiatives to reduce gender inequality.

Finally, I confirm that the information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the Department.

Yours Faithfully

A handwritten signature in black ink, appearing to be 'GD Lock', written in a cursive style.

Prof GD Lock  
Head of Department and Professor of Aerospace Engineering

**(Section 1 Word Count: 574)**

## 2 DESCRIPTION OF THE DEPARTMENT

Mechanical Engineering at Bath is consistently amongst the top five in UK subject league tables and ranks highly for student satisfaction. We are one of the largest Mechanical Engineering departments in the country. The Department is one of four within the Faculty of Engineering and Design. The Department has strong teaching (TEF Gold Award) and research cultures, with 89% of our research rated as either world leading or internationally excellent in REF 2014.

The Department is housed in two adjoining buildings, one built in 1966 and the other in 2004. The newer building has two lounge areas for the use of staff; we have created a new social/collaboration space linking the two buildings.

The Department is organised into four teaching groups, each with a Head responsible for line management of academic staff and their workload (Figure 1). Prior to engaging with Athena SWAN, Heads of Group were appointed directly by the HoD; now they are appointed after consultation with and consensus of members and roles are reviewed on a three-year basis.

The Department performs research on a wide range of topics, coordinated within research centres and units (Figure 1); academic staff are associated with at least one centre or unit. The Department has 114 (18% female) academic, teaching and research staff (Table 1, Figure 2) line managed at Department level, with 44 (18%) Professional and Support staff line managed at Faculty level. The University grade structure and progression routes are given in Figure 3.

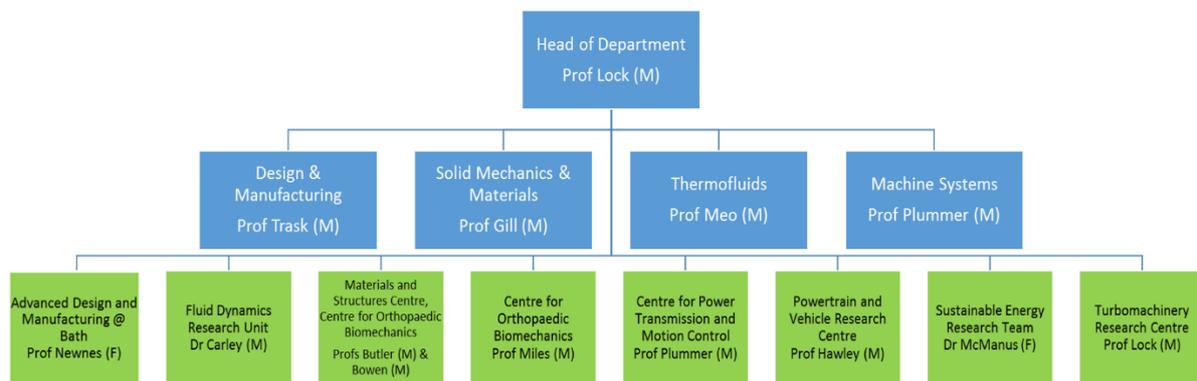


Figure 1: Organisational structure of the Department of Mechanical Engineering, teaching groups in blue showing Heads of Group, research centres and units in green showing lead academics. (M=male, F=female)

We have a thriving undergraduate and postgraduate population with positive role models for aspiring female engineers provided within the Department, e.g. Professor Linda Newnes (Chair of USAT and member of MEEC) and Dr McManus (Chair of SSLC and member of the MEEC). The Department has 963 (11% female) undergraduates; most are enrolled full-time on a four-year Master of Engineering (MEng) programme that was reaccredited by the IMechE, IED, IET and RAeS. Our standard offer is A\*AA or equivalent.

In the 2016/17 National Student Survey, Mechanical Engineering scored 93% for overall student satisfaction. The Department has 49 PGT (24% female) and 94 PGR (9% female) students.

Table 1. Members of the Department by position, October 2017

Position in the Department	Female	Male	% Female
Academic Staff (Research & Teaching)	12	47	20
Academic Staff (Teaching)	0	3	0
Administrative Staff	4	0	100
Technical Staff	4	36	10
Research Staff	8	44	15
Postgraduate Students	20	123	14
Undergraduate Students	106	857	11

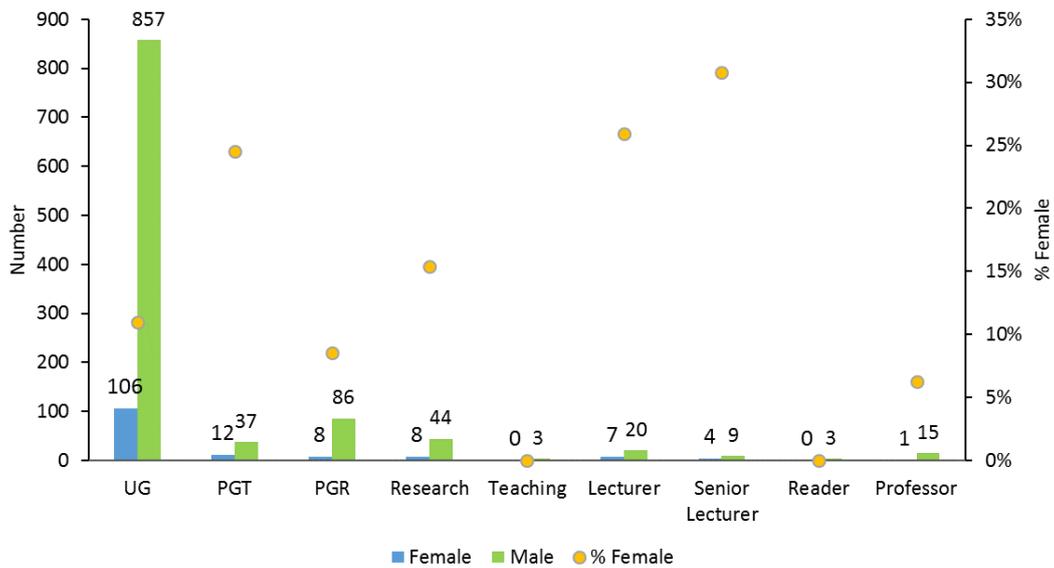


Figure 2: Total number of academic and research staff, and students by gender in the Department; staff numbers are as of end October 2017 and student numbers from HESA 2015/16 year end July 31st.

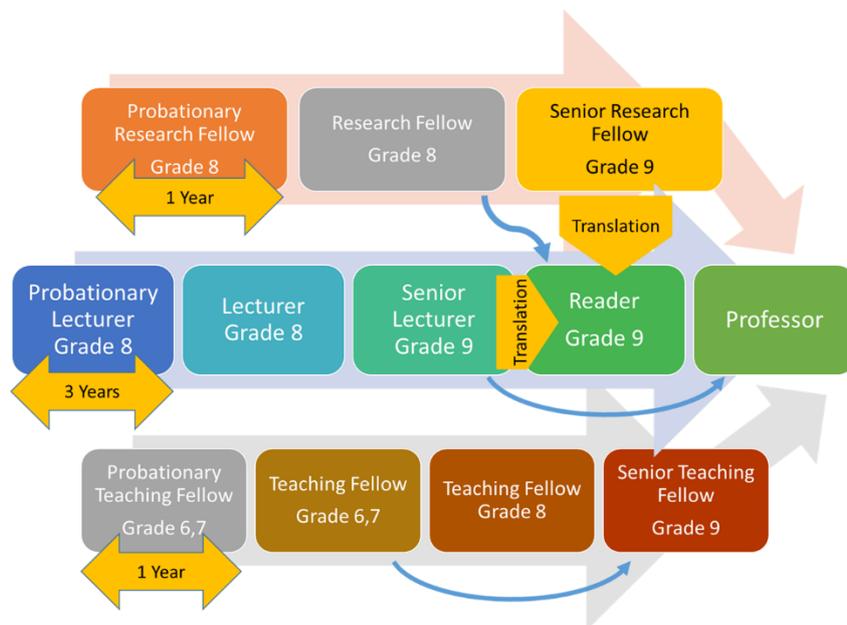


Figure 3: University grade structure and progression routes for teaching and research staff

The University 2016 Culture Survey data shows the Department has a collegiate environment, with 97%+ of the Department's staff agreeing the University respects people irrespective of their sexual orientation or transgender status. Qualitative comments from our Departmental 2017 culture survey highlighted how initiatives resulting from our **BAP**, such as the student Women in Engineering Society (WESBath, **BA1.5**), has helped to create a supportive environment for undergraduates. The survey revealed that 88% F and 64% M of staff and 65% F and 65% M of undergraduates agreed or strongly agreed that the Department is inclusive and supportive, which was a significant increase from the 52.5% in 2013 (**BA4.1**).

BRONZE ACTION PLAN ACHIEVEMENT **BA1.5**: Women in Engineering Society (WESBath) has helped create a supportive environment for undergraduates.

BRONZE ACTION PLAN ACHIEVEMENT **BA4.1-4.8**: 2017 survey showed that 75% F and 72% M staff agree or strongly agree that the Head of Department and senior academic staff lead and champion good practice for women and under-represented groups, and are committed to positive change

An important issue for the Department is the low proportion of staff and students who are female. Encouraging more women into Mechanical Engineering and supporting them at all stages of the career trajectory is a key driver for our Athena SWAN work. Our priorities over the next four years are to increase the rate of impact of our SWAN Actions to address gender imbalance.

*"Especially meeting female engineers and creating a supportive group to encourage and learn from each other! We share the 'struggle' of being a female (and person of colour) in engineering and help each other through deadlines and difficult situations."*

A response to our department undergraduate survey 2017 in answer to the question: "What is the most enjoyable aspect of the degree course in this department?"

(Section 2 Word Count: 585)

### 3 THE SELF-ASSESSMENT PROCESS

#### 3. (i) A description of the department

The Department created the Self-Assessment Team in February 2013, with representation from academics, professional and support staff, post-doctoral researchers and postgraduate students. To ensure that actions were completed in a timely manner the Department created the EDaTE in 2016 (Equality Diversity and Transparency Executive) Committee, which is focused on implementation of the strategy set by the DSAT. EDaTE meets weekly and is chaired by the HoD; the other members are the Deputy HoD and DSAT chair, the equality and diversity officer, an early career academic and the Department Coordinator. The DSAT, members and roles detailed in Table 2, with the EDaTE members highlighted in grey.

of office are three years for DSAT members, at which point membership is reviewed. The Chair circulated a request for new volunteers to join DSAT, and the members were carefully chosen to ensure a good balance of job grade, age, and work-life balance, however we identified the gender balance requires improving as well as having UG representation. We will increase male membership of DSAT, and add UG representatives (SA1d)

### 3. (ii) An account of the self-assessment process

The role of the DSAT is to set the philosophy and agenda, monitor the effectiveness of actions, and communicate with the Departmental Executive Committee (MEEC) and other departmental self-assessment teams across the University. The role of the EDaTE is to implement the action plan set by the DSAT (Figure 4). This reporting structure has been carefully designed to ensure Department and University management are aware of and consulted on the status of the action plan, ensuring appropriate strategic alignment.

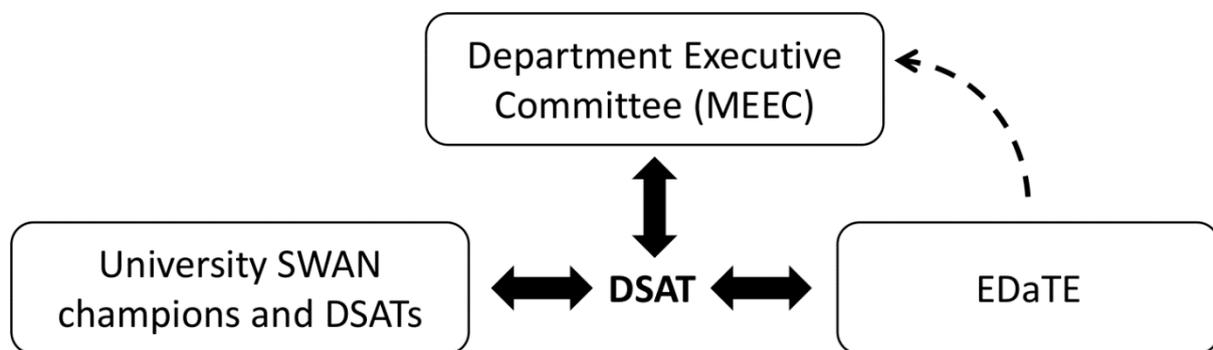


Figure 4. Reporting structure for the self-assessment team

The EDaTE meets weekly and the DSAT meet bi-monthly. The agendas and minutes from each EDaTE and DSAT meeting are stored on a shared drive for all members of the Department to access and add comment. At each DSAT meeting the action plan is reviewed; tasks are prioritised and assigned, and all members invited to feedback on any gender issues.

DSAT organises a bi-annual survey (last run in April 2017: 82% response rate, respondents 16% F, 80% M, 4% Other) to assess the impact of the action plan on gender equality within the department. Initially focused on academic staff, the survey was extended to all levels of the Department (undergraduate, post-doctoral, academic). Due to the small numbers of professional and support staff of different types (e.g. administrative or technical) focus groups (held May 2017) were used as an alternative to gain insight into their working environment. The results of all surveys and focus groups are circulated to DSAT for interpretation and discussion in light of the action plan.

Athena SWAN is a standing item on the monthly Mechanical Engineering Executive Committee and at all the Department statutory committees. At the end of each semester all staff are invited to a Department meeting, at which the Athena SWAN activities are a standing item. This provides a forum to update the staff on the achievements and challenges being addressed by the action plan, key themes from Department surveys, as well as providing the opportunity for an open discussion of the strategy and gathering feedback.

The current self-assessment team and reporting structure has been effective in implementing the action plan, and has resulted in a significant improvement in perception of inclusivity within the Department.

**BRONZE ACTION PLAN ACHIEVEMENT BA4.1, BA2.6** : Increase in academic staff agreeing or strongly agreeing that the Department is inclusive and supportive (Staff survey results: 52.5% in 2013; 65% in 2017).

The submission document was created by the DSAT members and the final version was produced by a core group. The overall self-assessment process is shown in Figure 5. This was an iterative process, where members of the Department fed into the action planning process and provided their views on priorities for the Department. Each update was then disseminated to demonstrate the changes based on staff input. The finalised submission was approved by the MEEC before submission.

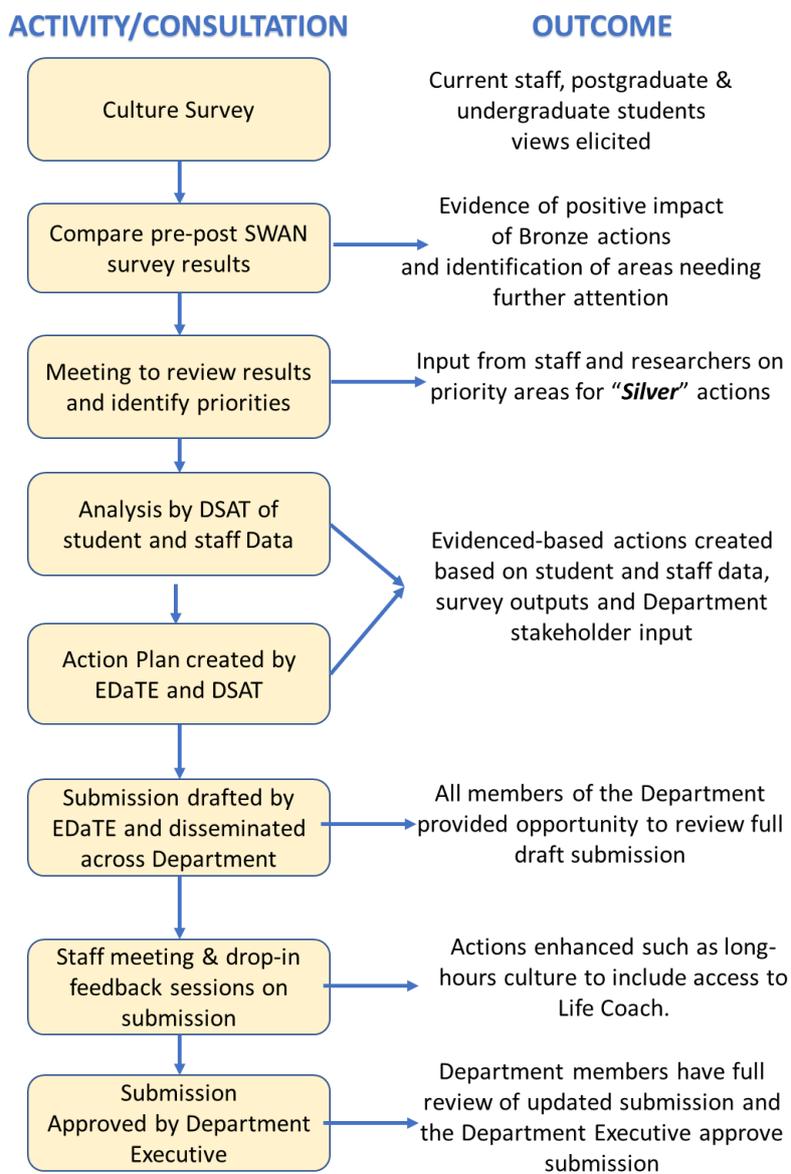


Figure 5: Self-Assessment Process

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

Despite clear improvements in attitudes, there is still work to be done to engage a minority of sceptical staff. One of the key priorities is to continue to increase the positive perception of the Athena SWAN activities within the Department (**SA1**). Communication is paramount for further progressive change.

**SILVER ACTION 1: Increase staff participation in and support for the Athena SWAN Charter**

The current system and reporting channels are working effectively, and so will be maintained through key committees and staff meetings. The DSAT will continue to meet bi-monthly, and the EDaTE to meet at least monthly with regular communication between the two groups. Currently undergraduates are kept informed by Dr Marcelle McManus, who is the Academic Co-Chair of the Staff-Student Liaison Committee; an additional undergraduate representative will be added to the DSAT to further improve representation of undergraduate students within the department. The membership of DSAT will be reviewed in January 2018. The importance of engaging men at all levels is recognised within the Department and having more male members of DSAT will aid this engagement. Visibility of the Silver AP will be maintained by Athena SWAN events for students and staff, posters, a dedicated webpage, and through social media. The Department will establish an annual Athena SWAN lecture (open to all staff and students) (**SA13c**), and continue to hold seminars where staff (academic, research and professional) can discuss their careers and the barriers they have had to overcome and the support available to assist staff. We are also planning coffee and cake events for themed discussions based around the **SAP**.

**(Section 3 Word Count: 933)**

## 4 A PICTURE OF THE DEPARTMENT

### 4.1 Student Data

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

N/A

#### 4.1 (ii) Numbers of undergraduate students by gender

*Data were obtained from the Higher Education Statistics Agency (HESA) via the Higher Education Information Database for Institutions (HEIDI) and presented as “academic year” headcount, year ending July 31st. Benchmarking data is provided for staff and students assigned to “Mechanical, Aero and Production Engineering” cost centre as Full Time Equivalent HESA returns, rounded to nearest 5.*

There were 963 (11% female) undergraduates in 2015/16 (Figure 6); the percentage of female undergraduates has remained at 11 to 12%, versus the sector average of 14% (Figure 7, Table 3). It is our priority to investigate and understand this difference (**SA2a**). The numbers of undergraduates has shown a steady 5% increase over the past three years. We have a single entry point into our four year MEng degrees with an option to finish with a three-year BEng. One or two students per year select to be part time. The first two years are common; students then opt to specialise into Aerospace, Mechanical Engineering with Advanced Design and Innovation, Mechanical with Automotive Engineering, Mechanical Engineering with Manufacturing and Management or Mechanical Engineering. Table 4 shows numbers graduating from each degree by year. Mechanical Engineering averages 52% of cohort and Aerospace Engineering 19%. There are no clear gendered patterns. Most students undertake a year-long industrial placement after year two. In 2016/17 90% of females and 73% of males went on placement (Figure 8); employers working with the Department are eager to take on female students and the Placement Team organises female-focused events.

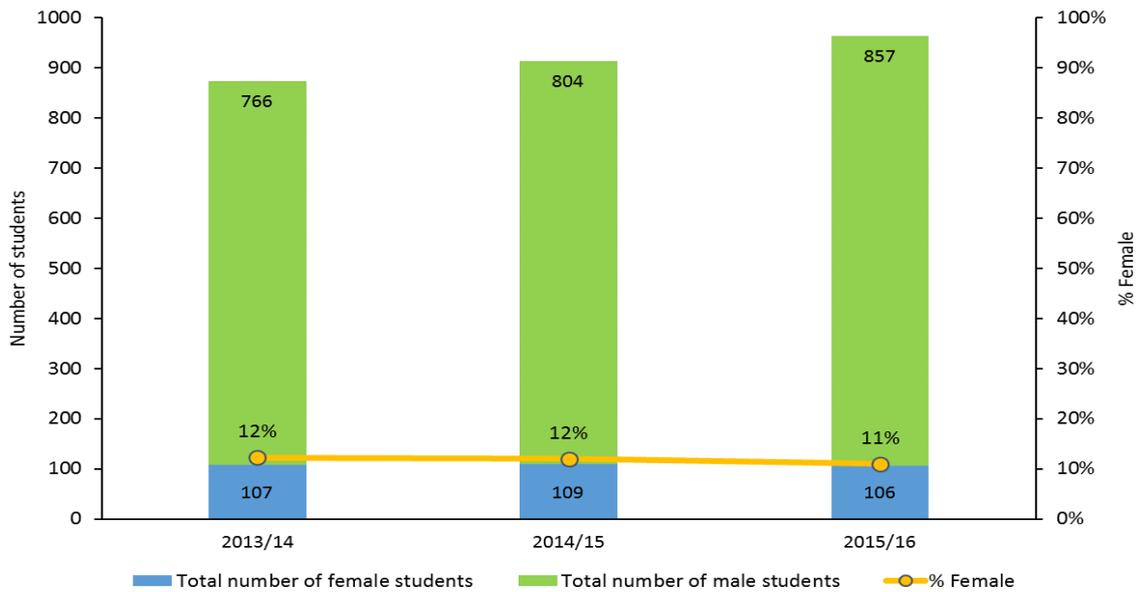


Figure 6: Number of students by gender per year for Mechanical Engineering (ME).

*“Placement was the steepest learning curve of my university career so far but also a really enjoyable year. So pleased I had the opportunity to get a year’s work experience on the CV and start engineering practically away from problem sheets and lectures.”*

A female response to our department undergraduate survey 2017 in answer to the question: “What is the most enjoyable aspect of the degree course in this department?”

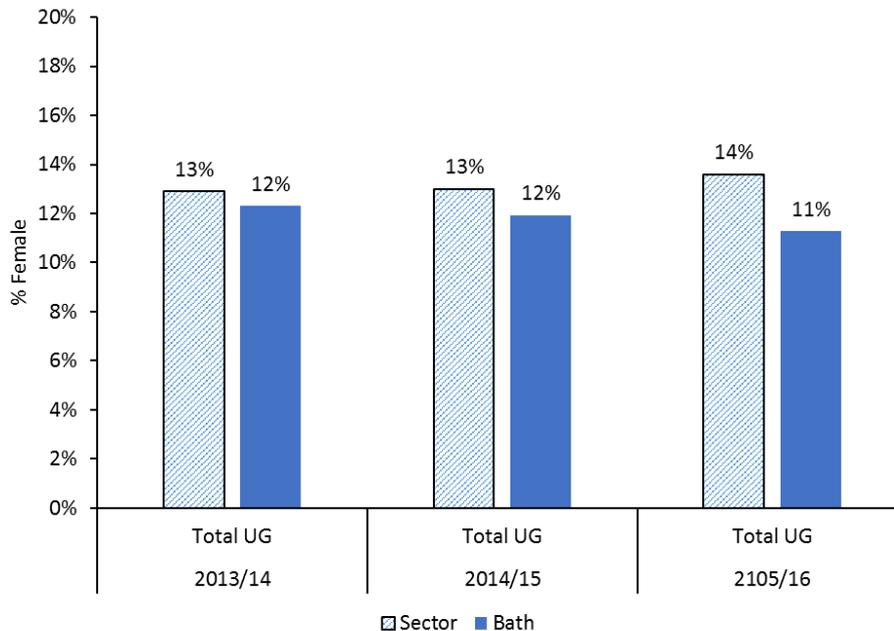


Figure 7: Comparison of undergraduate female percentage to sector average by year. Note this chart is of the HESA full-time equivalent data for modules which assumes full time equivalent, and will not exactly match our internal data course data shown in Figure 6

Table 3: Benchmarking data for undergraduate students at the University of Bath and across all HEIs with a Mechanical, Aero and Production Engineering return.

HESA Cost Centre: Mechanical, Aero and Production Eng.		University of Bath				All HEIs			
		Total	Full time	Part time	Other	Total	Full time	Part time	Other
2013/14	Female	120	120	0	-	4235	4135	105	-
	Male	855	855	0	-	28570	27210	1360	-
	Other	0	0	0	-	5	5	0	-
	Total	975	975	0	-	32815	31,345	1465	-
	%F	12%	12%	-	-	13%	13%	7%	-
	%M	88%	88%	-	-	87%	87%	93%	-
2014/15	Female	120	120	0	0	4450	4365	85	0
	Male	885	855	0	0	29775	28460	1315	0
	Other	0	0	-	0	5	5	-	0
	Total	1005	1005	0	0	34235	32835	1400	0
	%F	12%	12%	-	-	13%	13%	6%	-
	%M	88%	85%	-	-	87%	87%	94%	-
2015/16	Female	115	115	0	0	4815	4725	90	0
	Male	905	905	0	0	30600	29345	1255	0
	Other	0	0	-	0	10	10	-	0
	Total	1020	1020	0	0	35420	34075	1345	0
	%F	11%	11%	-	-	14%	14%	7%	-
	%M	89%	89%	-	-	86%	86%	93%	-

Table 4: Numbers of students graduating from each degree by year and gender.

Degree		2013/14			2014/15			2015/16		
		F	M	%F	F	M	%F	F	M	%F
BEng (hons) Aerospace Engineering		0	3	0%	1	2	33%	1	2	33%
BEng (hons) Automotive Engineering		1	1	50%	0	0	0	0	0	0
BEng (hons) Mechanical Engineering		2	6	25%	2	5	29%	2	11	15%
BEng (hons) Mechanical Engineering with Advanced Design and Innovation		0	0	0%	0	0	0	0	1	0
BEng (hons) Mechanical Engineering with Manufacturing and Management		0	1	0%	0	0	0	1	3	0
MEng (hons) Aerospace Engineering		5	29	15%	3	22	12%	4	34	11%
MEng (hons) Automotive Engineering		0	13	0%	0	13	0%	0	13	0%
MEng (hons) Mechanical Engineering		7	85	8%	9	91	9%	10	68	13%
MEng (hons) Mechanical Engineering with Advanced Design and Innovation		1	6	14%	2	9	18%	1	14	7%
MEng (hons) Mechanical Engineering with Manufacturing and Management		1	4	20%	4	9	31%	3	15	17%
<b>Totals</b>		<b>17</b>	<b>148</b>	<b>10%</b>	<b>21</b>	<b>151</b>	<b>12%</b>	<b>22</b>	<b>161</b>	<b>12%</b>

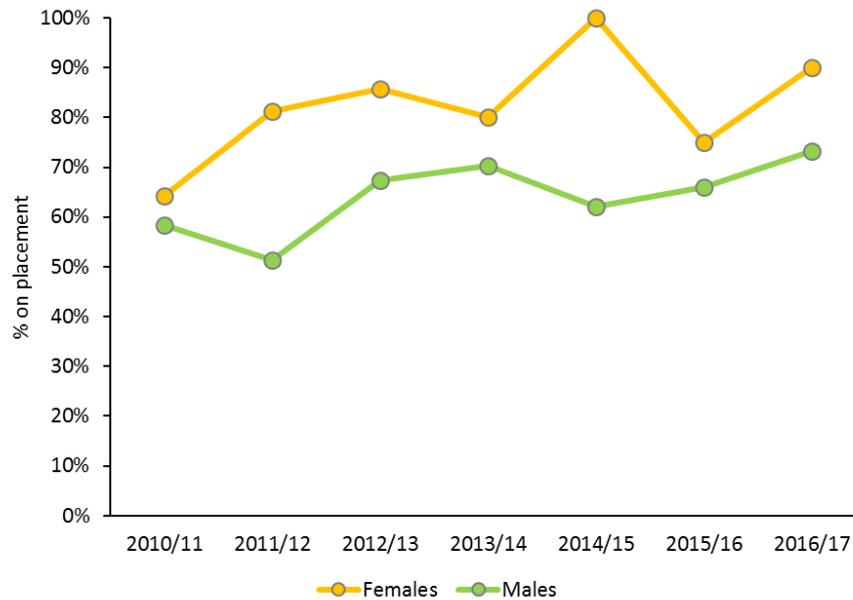


Figure 8: Percentage of students per cohort who go on placement by year and gender.

Applications to our Mechanical Engineering (ME) MEng degree programme have remained steady, with the ratio of accepts to applications typically around 10% (Table 5) An important driver has been to increase applications from females (**BA1.3, BA1.4**), principally through escalated outreach to primary and secondary schools; we understand that this is a long-term process and are committed to continued outreach (**SA2**). We have proactively raised the visibility of females by increasing the number of female PGR students giving UCAS tours (increasing from 30% in 2013/14 to 100% in 2016/17, Figure 9) and Open Days, as well as widening participation summer schools (Section 5.6(viii)). Specific Women in Engineering information is provided on our website. We will increase the visibility of these resources (**SA2b**). Success has been demonstrated through an increase in female applications from 307 in 2014 to 382 in 2016; this has been accompanied by an increase in male applications, however the overall percentage of female applications is greater. The offers to female students have also increased as a percentage. The female applications have a higher percentage of offers compared to males, however the accepts to offers are lower for females. We have observed a small decrease in female accept percentages. After discussion and analysis planned changes to our admission procedures are proposed. We will increase the number of females working in the Admissions Team, emphasise the societal benefits and impact of engineering in our course information and at UCAS/OPEN Days, encourage female applicants to visit at similar times and provide more information regarding the support available and networking opportunities for women in engineering at Bath. We will also introduce a system to contact female applicants once offers have been made in order to answer any questions (**SA2 a-d**).

BRONZE ACTION PLAN ACHIEVEMENT **BA1.3, BA1.4, BA1.8**: Increased female applications from 215 in 2013 to 382 in 2016.

SILVER ACTION 2: Increase number of female students on undergraduate programmes

Table 5: Application, offers and acceptances by gender and year.

Year	Gender	Applications			Offers			Accepts		
		Applications	Offers	Accepts	Offers/App.s	Accepts/Offers	Accepts/App.s			
2014/15	Female	307	219	25	71%	11%	8%			
	Male	2,112	1,296	213	61%	16%	10%			
	% F	13%	14%	11%						
2015/16	Female	304	205	24	67%	12%	8%			
	Male	2,093	1,352	235	65%	17%	11%			
	% F	13%	13%	9%						
2016/17	Female	382	260	33	68%	13%	9%			
	Male	2,291	1,356	253	59%	19%	11%			
	% F	14%	16%	12%						

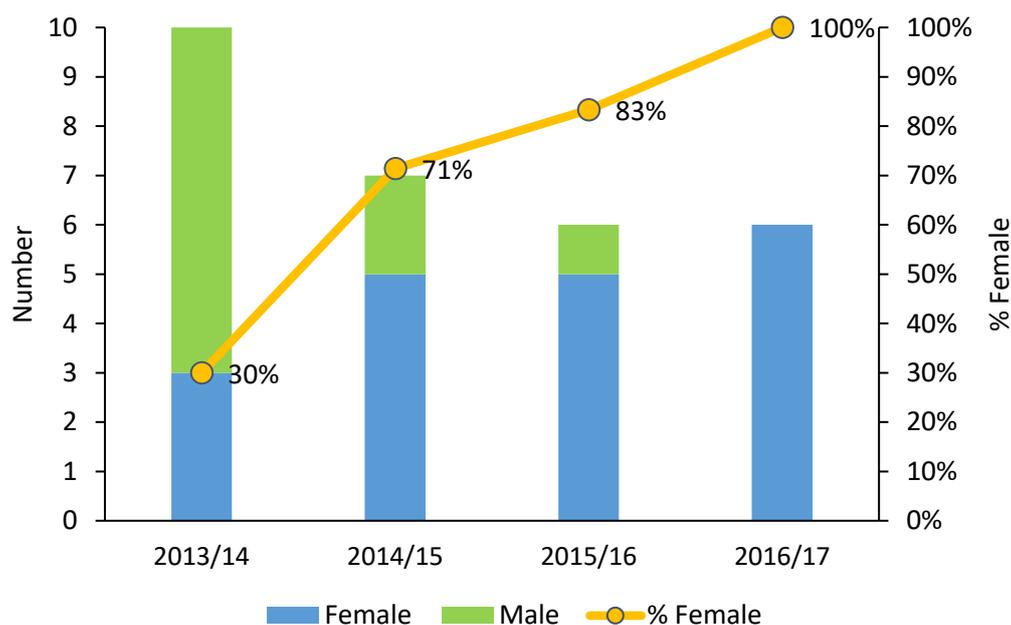


Figure 9: PGR students involved in UCAS days, giving tours to applicants, by year.

Our data indicate that there is no gender difference in terms of degree attained, with approximately 30% of students achieving a first-class degree and approximately 50% achieving an upper second-class (Figure 10). There is no gender difference in the percentage of students employed six months after completion, with 89% in employment (2013/14, 2014/15 and 2015/16 data combined). The employment sector data for 2014/15 (Table 6) shows that the majority of graduates (87% females, 68% males) went on to work in engineering. The proportion working in engineering had dropped in 2015/16 (37% females, 55% males), though these data were influenced by the large percentage providing no information. There was an increase in the percentage of women undertaking

postgraduate studies from 13% in 2014/15 to 21% 2015/16; this indicates **BA1.7** and **BA1.9** were effective. A higher portion of students who had undertaken a placement went onto engineering jobs in 2014/15 and 2015/16 (Table 7). A higher percentage of overseas students went on to postgraduate studies in both years (Table 8).

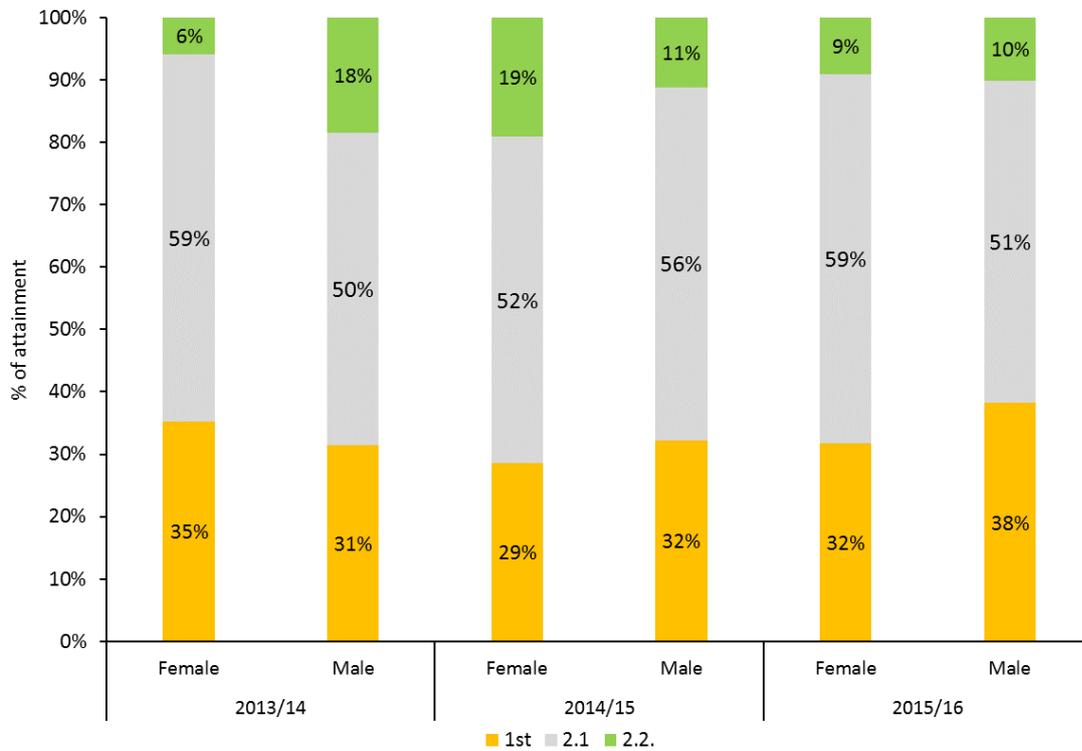


Figure 10: Undergraduate degree attainment by year.

Table 6: UG destination data by year & gender.

		Year							
		2014/15				2015/16			
		Female		Male		Female		Male	
		Number	%	Number	%	Number	%	Number	%
Employment	Unemployed	0	0%	7	6%	1	5%	6	4%
	PG Study	2	13%	10	8%	4	21%	8	5%
	Engineering	13	87%	80	68%	7	37%	85	55%
	Non-engineering	0	0%	17	14%	2	11%	26	17%
	Other	0	0%	4	3%	1	5%	7	5%
	Refused/No data	0	0%	0	0%	4	21%	22	14%

Table 7: UG destination data by year & placement (Yes/No).

Employment		Year									
		2014/15 Placement					2015/16 Placement				
		No		Yes		No		Yes			
	Number	%	Number	%	Number	%	Number	%			
Unemployed	2	7%	5	5%	5	11%	2	2%			
PG Study	6	22%	6	6%	4	9%	8	6%			
Engineering	12	44%	81	76%	17	36%	75	60%			
Non-engineering	6	22%	11	10%	14	30%	14	11%			
Other	1	4%	3	3%	3	6%	5	4%			
Refused/No data	0	0%	0	0%	4	9%	22	17%			

Table 8: UG destination data by year & domicile.

Employment		Year											
		2014/15 Domicile						2015/16 Domicile					
		Home		EU		Overseas		Home		EU		Overseas	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Unemployed	6	5%	1	8%	0	0%	7	5%	0	0%	0	0%	
PG Study	6	5%	2	15%	4	44%	7	5%	2	8%	3	23%	
Engineering	80	72%	9	69%	4	44%	80	59%	6	24%	6	46%	
Non-engineering	15	14%	1	8%	1	11%	24	18%	0	0%	4	31%	
Other	4	4%	0	0%	0	0%	6	4%	2	8%	0	0%	
Refused/No data	0	0%	0	0%	0	0%	11	8%	15	60%	0	0%	

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

We offer one-year, full-time MSc courses in Automotive Engineering, Engineering Design, and Innovation and Technology Management. There are a relatively few PGTs (Figure 11); in 2015/16 there were 49 and the percentage of females rose to 24% (sector average 19%) (Figure 12).

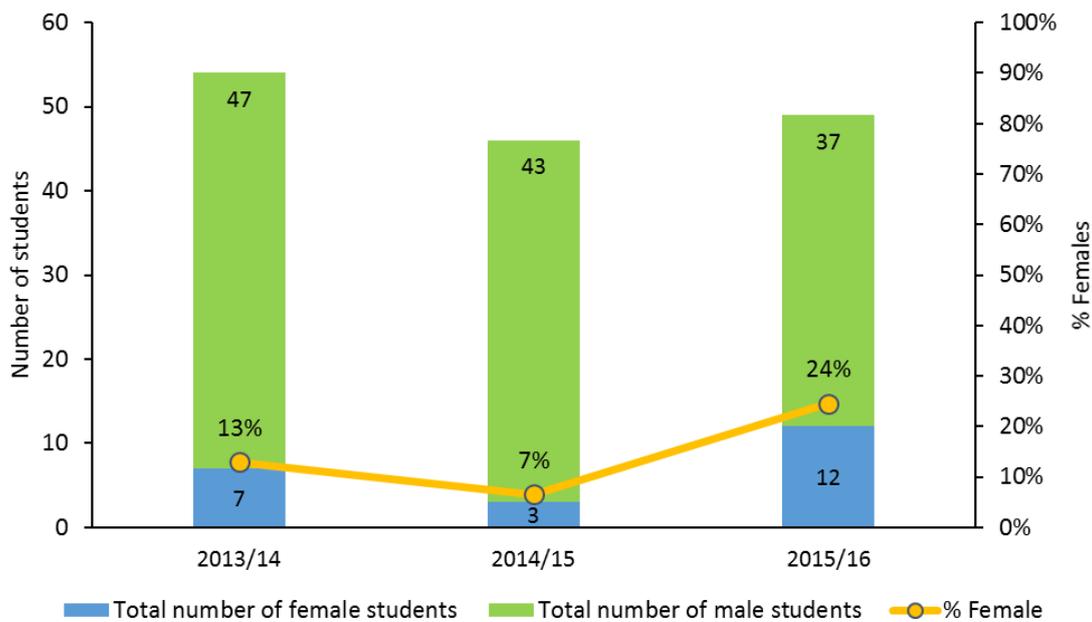


Figure 11: Number of PGT students by gender and year

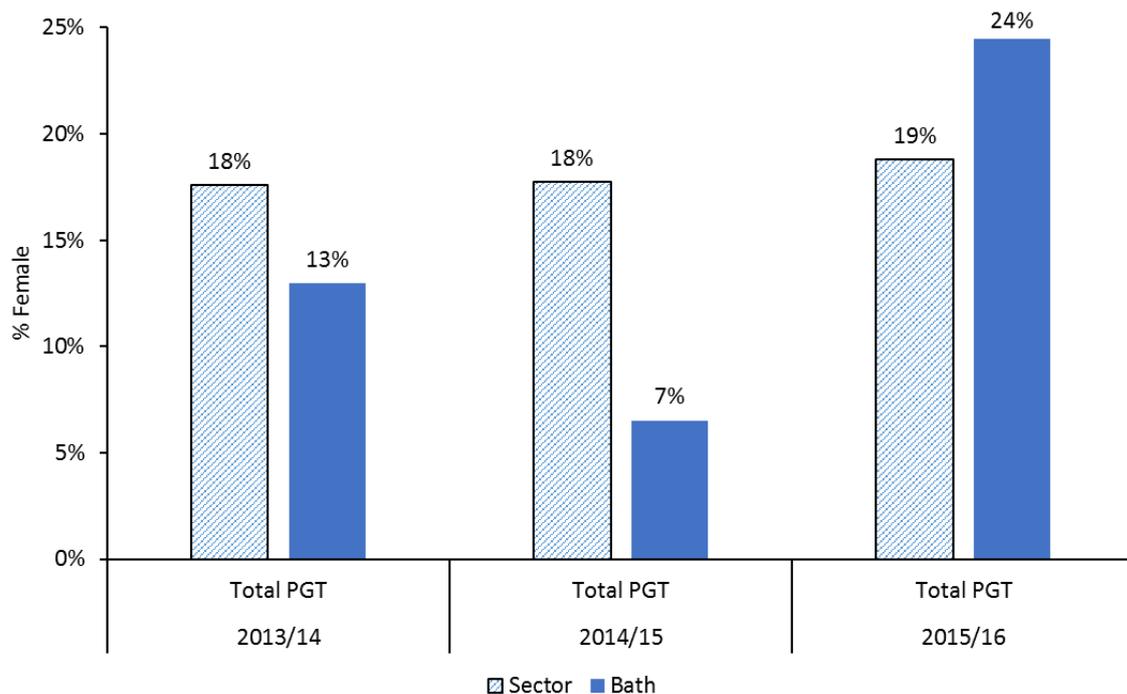


Figure 12: Comparison of PGT female percentage to sector average by year.

Due to the small numbers, applications for PGT degrees have a large fluctuation in gender balance and the data do not show a clear trend (Table 9). The number of female applicants has historically been low, but we managed to increase our female percentage for 2015/16 by targeted advertising; we will continually review PGT promotional materials and strategies with the aim of increasing applications. Figure 13 shows that while there are no significant differences in gender in terms of attaining a merit, no females are receiving distinctions in their postgraduate taught studies. This is a concern and will be addressed (SA3b).

Table 9: Applications, offers and accepts by gender and year for postgraduate taught degrees.

Year	Gender	Applications	Offers	Accepts	Offers/App.s	Accepts/Offers	Accepts/App.s
2013/14	Female	52	21	5	40%	24%	10%
	Male	475	242	55	51%	23%	12%
	% F	10%	8%	8%			
2014/15	Female	66	40	6	61%	15%	9%
	Male	147	188	52	128%	28%	35%
	% F	31%	18%	10%			
2015/16	Female	55	40	15	73%	38%	27%
	Male	310	174	40	56%	23%	13%
	% F	15%	19%	27%			

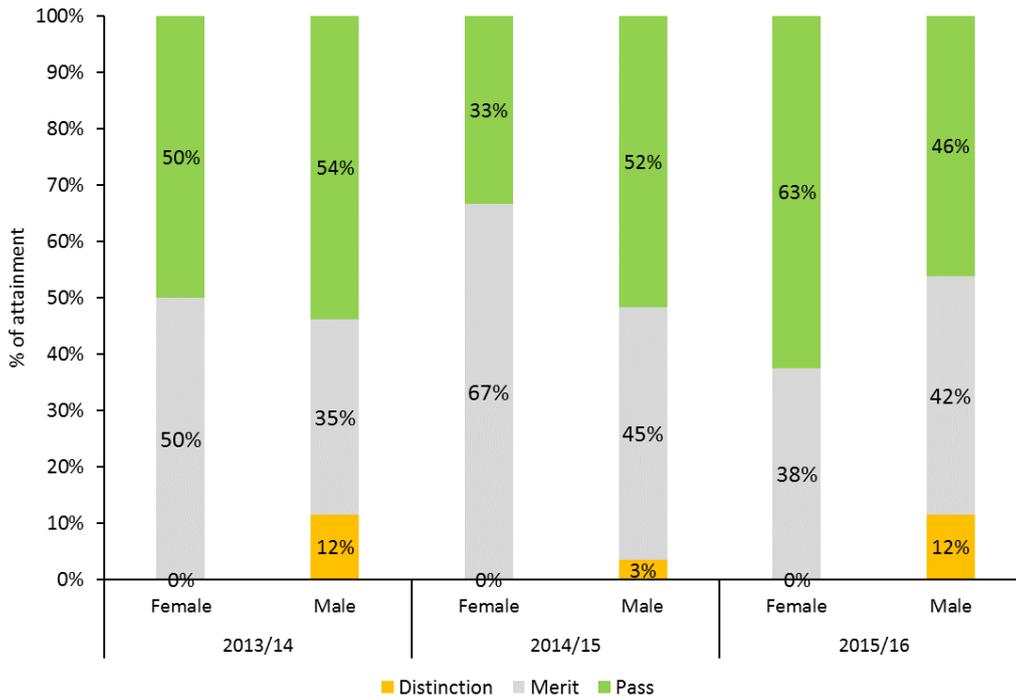


Figure 13: Postgraduate taught degree attainment by year.

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

In 2015/16 there were 94 PGR students in the Department (Figure 14). The percentage of females is consistently below the sector average (Figure 14, Table 10) and has declined from 14% in 2013/14 to 9% in 2015/16. The progression to research degrees is a vital stage in an academic career and increasing the number of females into postgraduate programmes will be addressed through more specific and targeted activities (SA3).

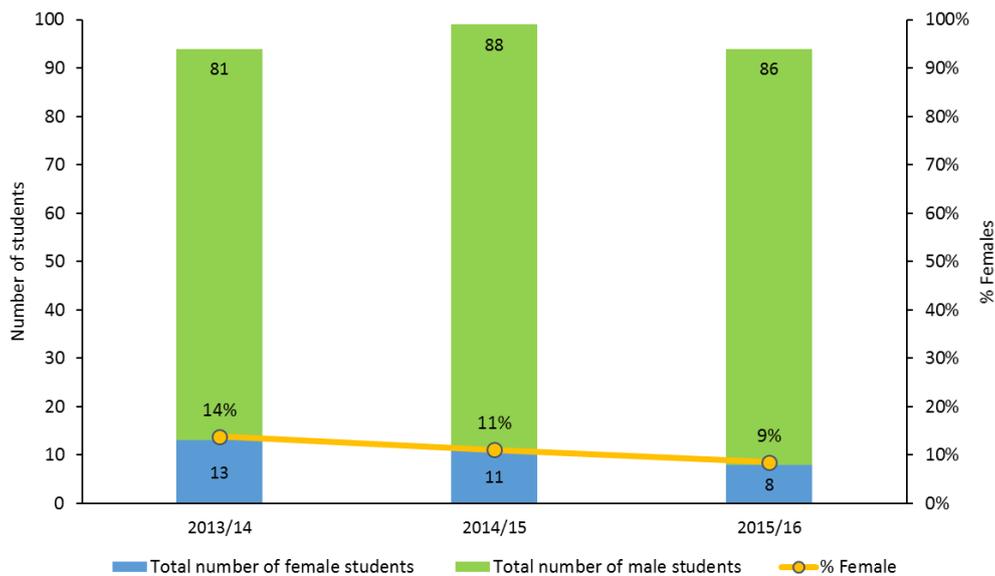


Figure 14: Number of PGR students by gender and year.

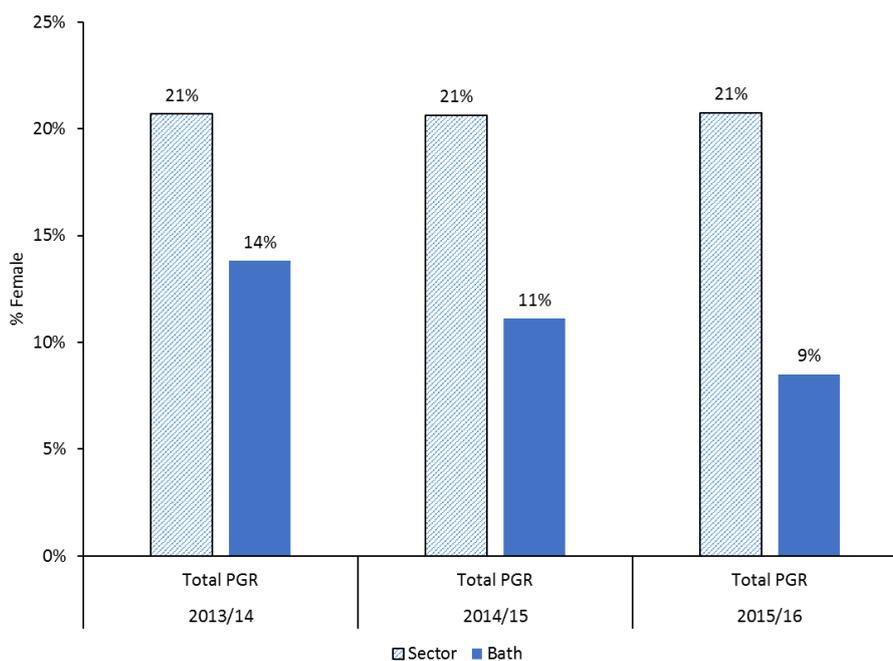


Figure 15: Comparison of PGR female percentage to sector average by year.

Table 10: Benchmarking data for PGR students at the University of Bath and across all HEIs with a Mechanical, Aero and Production Engineering return.

HESA Cost Centre: Mechanical, Aero and Production Eng.		University of Bath				All HEIs			
		Total	Full time	Part time	Other	Total	Full time	Part time	Other
2013/14	Female	15	10	0	0	675	565	45	60
	Male	70	55	10	5	2585	2140	190	255
	Other	-	-	-	-	-	-	-	-
	Total	85	65	10	5	3260	2075	235	320
	% Female	18%	15%	0%	0%	21%	27%	19%	19%
	% Male	82%	85%	100%	100%	79%	103%	81%	80%
2014/15	Female	15	10	0	5	770	655	55	60
	Male	75	60	10	10	2960	2440	240	280
	Other	0	-	-	-	0	0	-	-
	Total	90	70	10	15	3730	3095	295	340
	% Female	17%	14%	0%	33%	21%	21%	19%	18%
	% Male	83%	86%	100%	67%	79%	79%	81%	82%
2015/16	Female	10	10	0	0	855	705	50	100
	Male	80	60	10	10	3260	2640	260	360
	Other	0	0	-	-	0	0	-	-
	Total	90	70	10	15	4120	3345	310	465
	% Female	11%	14%	0%	0%	21%	21%	16%	22%
	% Male	89%	86%	100%	67%	79%	79%	84%	77%

Table 11 shows the number of female applicants for PGR degrees has remained relatively stable over the past three years. However the number of male applicants has dropped. More significantly the percentage of offers/applications for the males has decreased from approximately 50% in 2013/14 and 2014/15 to 23% in 2015/16. The decrease in total applications requires further analysis and is likely to be influenced by changes in PhD funding by the research councils. In 2015/16 and 2016/17

the proportion of offers to female relative to male applicants increased. This difference in offers will be further investigated (SA3d).

Table 11: Applications, offers and accepts by gender and year for postgraduate research degrees.

Year	Gender	Applications			Offers		
		Applications	Offers	Accepts	Offers/App.s	Accepts/Offers	Accepts/App.s
2014/15	Female	22	10	9	45%	90%	41%
	Male	131	62	38	47%	61%	29%
	% F	14%	14%	19%			
2015/16	Female	14	10	3	71%	30%	21%
	Male	117	60	43	51%	72%	37%
	% F	11%	14%	7%			
2016/17	Female	18	12	8	67%	67%	44%
	Male	105	24	14	23%	58%	13%
	% F	15%	33%	36%			

Due to small numbers, it is difficult to assess any difference in submission rates for female PGRs relative to males (Table 12). However it is notable that all but one female students had submitted and we will investigate means to improve submission rates for males.

Table 12: Thesis completion data for full-time postgraduate research students (PGR) by gender and by academic year.  
\*Cohort analysis which looks at the entry points, instead of the year the PGR degree was completed.

Mechanical Engineering: PhD submission rates (*)		Submitted within 4 years	Submitted after 4 years	Not submitted (in time)	Not submitted (out of time)	Total	% submitted
2010/11	Female	3	0	0	0	3	100%
	Male	11	0	0	5	16	69%
	% F	21%	-	-	0%	16%	-
2011/12	Female	6	1	0	1	8	88%
	Male	6	1	0	4	11	64%
	% F	50%	50%	-	20%	42%	-
2012/13	Female	0	1	0	0	1	100%
	Male	12	3	1	7	23	65%
	% F	0%	25%	0%	0%	4%	-

The destination data for PGR students for 2015/16 shows that 60% of females and males go on to work in engineering outside of academia, however no females go into Academic and Research jobs compared to 45% of male PGRs (Table 13, Table 14). Understanding the factors leading females not to consider careers in academia will be investigated (SA4c ii).

Table 13: PGR destination data by year & gender.

		Year							
		2014/15				2015/16			
		Gender		Gender		Gender		Gender	
		Female	Male	Female	Male	Female	Male	Female	Male
		Number	%	Number	%	Number	%	Number	%
Employment	Unemployed	0	0%	0	0%	0	0%	0	0%
	Further study	1	20%	0	0%	0	0%	0	0%
	Engineering	3	60%	11	58%	3	60%	5	45%
	Non-engineering	0	0%	0	0%	1	20%	1	9%
	Academic & Research	1	20%	7	37%	0	0%	5	45%
	Other	0	0%	1	5%	1	20%	0	0%

Table 14: PGR destination data by year & domicile.

		Year											
		2014/15						2015/16					
		Domicile			Domicile			Domicile			Domicile		
		Home	EU	Overseas	Home	EU	Overseas	Home	EU	Overseas	Home	EU	Overseas
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Employment	Unemployed	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
	Further study	1	9%	0	0%	0	0%	0	0%	0	0%	0	0%
	Engineering	6	55%	2	33%	6	86%	5	42%	2	100%	1	50%
	Non-engineering	0	0%	0	0%	0	0%	2	17%	0	0%	0	0%
	Academic & Research	3	27%	4	67%	1	14%	4	33%	0	0%	1	50%
	Other	1	9%	0	0%	0	0%	1	8%	0	0%	0	0%

#### 4.1 (v) Progression pipeline between undergraduate and postgraduate student levels

Our destination data show that 21% of our female students progress to postgraduate study compared to 5% of males (Table 6) (**BA1.8, BA1.9**). However, given the small number of female students these data still translate into low numbers of female PGRs. Additionally, as a greater proportion of females go on placement (Figure 8), they are more likely to be offered engineering jobs outside of academia. The **BAP** has given insight into why some female undergraduates were not considering a PhD (**BA1.9**). Two important factors emerged: females were already engaged in long-term career and family planning; and the lack of strong female role models. Female students considered the pressure of an academic career would make having a family difficult.

**BRONZE ACTION PLAN ACHIEVEMENT BA1.9: Understanding of factors preventing female undergraduates applying for postgraduate degrees.**

Based on these findings we have an action to increase the visibility of female role models (**SA13c**). The headline example was that Dr Jenny Cane (lead on Joint European Taurus and Bath alumnus, Figure 16) gave the 2016 keynote address at the Department's Design Exhibition to 350+ undergraduates and colleagues from industry; this is the flagship, end-of-academic year annual event for the Department. We now monitor and are working to improve the gender balance of speakers at all events (**SA11a**). These activities will expand with the aim of increasing our female applicants for PGR degrees (**SA3**).



Figure 16: Dr Jenny Cane (alumnus and lead for Joint European Taurus) delivering Design Exhibition keynote address, 2016.

SILVER ACTION 3: Increase numbers of female undergraduates and postgraduate taught students progressing to postgraduate research programmes

SILVER ACTION 11. Improve gender balance of speakers at seminars and events

SILVER ACTION 12. Increase visibility of female role models and diversity in Department

#### 4.2 Academic and research staff data

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

There are 114 academic and research staff (18% female) including teaching fellows (Figure 17); the proportion of females is now above the previous sector average for 2013-2016 (Figure 18) [NB: current year sector average was not available at time of writing]. The **impact** of **BAs** around recruitment, including training for interview panel members and job adverts that include our Athena SWAN logo and positively welcome applications from women, likely accounts for the steady increase in the proportion of female staff at lecturer level (Figure 19, Table 15) (**BA2.4, BA3.1**). No technical staff have progressed to academic roles, however technical staff are involved in UG project supervision, UG laboratory based teaching and provide input to the student competition teams.

BRONZE ACTION PLAN ACHIEVEMENT **BA2.4, BA3.1**: % of female academic and research staff above previous sector average.

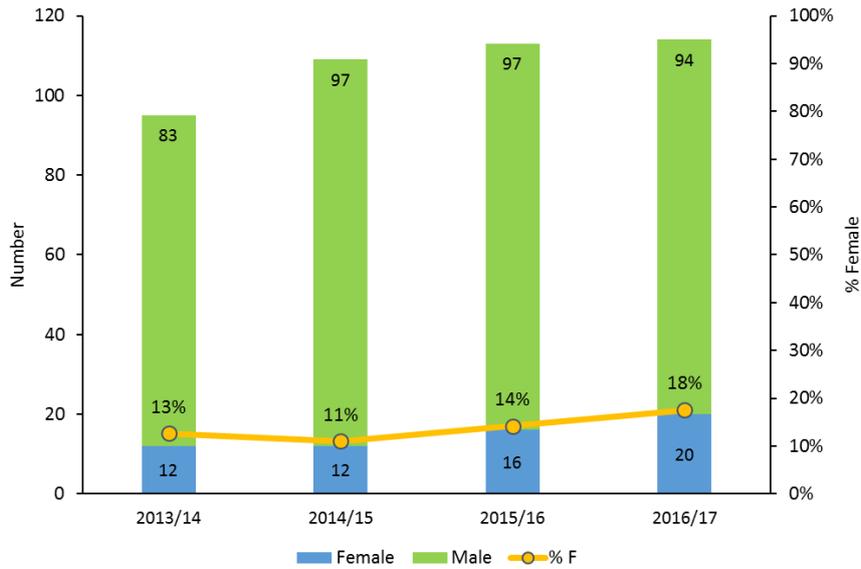


Figure 17: Number of academic and research staff in the Department of Mechanical Engineering by gender and year.

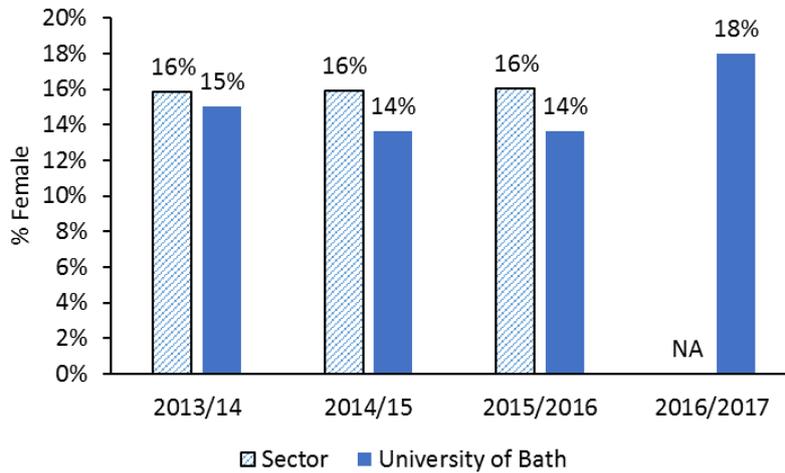


Figure 18: Percentage of female academic and research staff in the Department of Mechanical Engineering at the University of Bath compared to other Higher Education Institutions across the sector, by academic year. Sector data for 2016/17 not available (NA) at time of writing. Numbers are rounded to 5 from raw data, and therefore may not match Figure 17.

The Department has a low percentage of female post-doctoral research staff (grades 7 and 8) where historically females have accounted for only 10% of the research staff; see Section 5.1 for actions addressing this.

**BRONZE ACTION PLAN ACHIEVEMENT BA2.2, BA2.3:** Understanding of factors preventing female postgraduates pursuing academic career.

Table 15: Academic staff in the Department of Mechanical Engineering by role and gender by academic year.

Mechanical Engineering (ACADEMIC AND RESEARCH)		Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other
2013/14	Female	12	5	0	0	5	2	0	0
	Male	83	36	3	14	9	3	14	4
	%F	13%	12%	0%	0%	36%	40%	0%	0%
2014/15	Female	12	4	0	1	4	3	0	0
	Male	97	43	3	14	12	4	16	5
	%F	11%	9%	0%	7%	25%	43%	0%	0%
2015/16	Female	16	8	0	3	4	1	0	0
	Male	97	44	4	16	10	3	17	3
	%F	14%	15%	0%	16%	29%	25%	0%	0%
2016/17	Female	18	6	0	7	4	0	1	0
	Male	100	47	3	20	9	3	15	3
	%F	15%	11%	0%	26%	31%	0%	6%	0%

BRONZE ACTION PLAN ACHIEVEMENT **BA2.1**: Changed postgraduate research & PDRA induction processes to introduce RDF and VITAE.

BRONZE ACTION PLAN ACHIEVEMENT **BA1.8, BA1.9**: Female led seminars, highlighting role models and career stories

SILVER ACTION 4: Increase number of female postgraduates progressing to research staff

The successful work done, knowledge and experience gained in understanding and improving the recruitment process for *academic* staff (no all-male short-listing and interview panels, female contacts on job advertisements, *etc.* – see Section 5.1) will be used for attracting and recruiting research staff at *all* levels (**SA6**).

SILVER ACTION 6: Embed good practice into Departmental academic recruitment process for research staff

Analysis of the career pipeline by grade (Figure 19) shows that from 2012/13 the positive changes in the academic recruitment process (**BA3.1**) (see Section 5.1) have had palpable impact through increased numbers of female lecturers from zero to seven; one of these lectureship appointments was a progression from a post-doctoral research staff position within the Department. We are committed to further increasing the number of female academic staff (**SA5**). The recruitment of senior staff into the Department, of either gender, has proven to be difficult; the number of senior lecturers and readers has decreased due to leavers and retirement. The HoD has led a strategy to appoint at

lectureship level replacements for all leavers and retiring staff; vital to this strategy is a nurturing environment with strong mentoring and support for progression to senior roles. We have been able to promote staff from lecturer to senior lecturer at the end of their three-year probation period (see 5.1(iii) and Case Study 1); the development and promotion of ECR staff will increase the numbers of staff at senior lecturer and higher positions.

**BRONZE ACTION PLAN ACHIEVEMENT BA2.4:** Increase in female lecturers from 0 (0%) in 2013 to 7 (22%) in 2017.

**BRONZE ACTION PLAN ACHIEVEMENT BA2.5:** Disseminated simple description of promotion process/criteria.

A major milestone has been the promotion from reader to professor of a female staff member in 2017; this is the first female professor in the Department in 50 years of Mechanical Engineering at Bath (**BA3.3**) (see case study 2).

**BRONZE ACTION PLAN ACHIEVEMENT BA3.3:** First female professor in the Department.

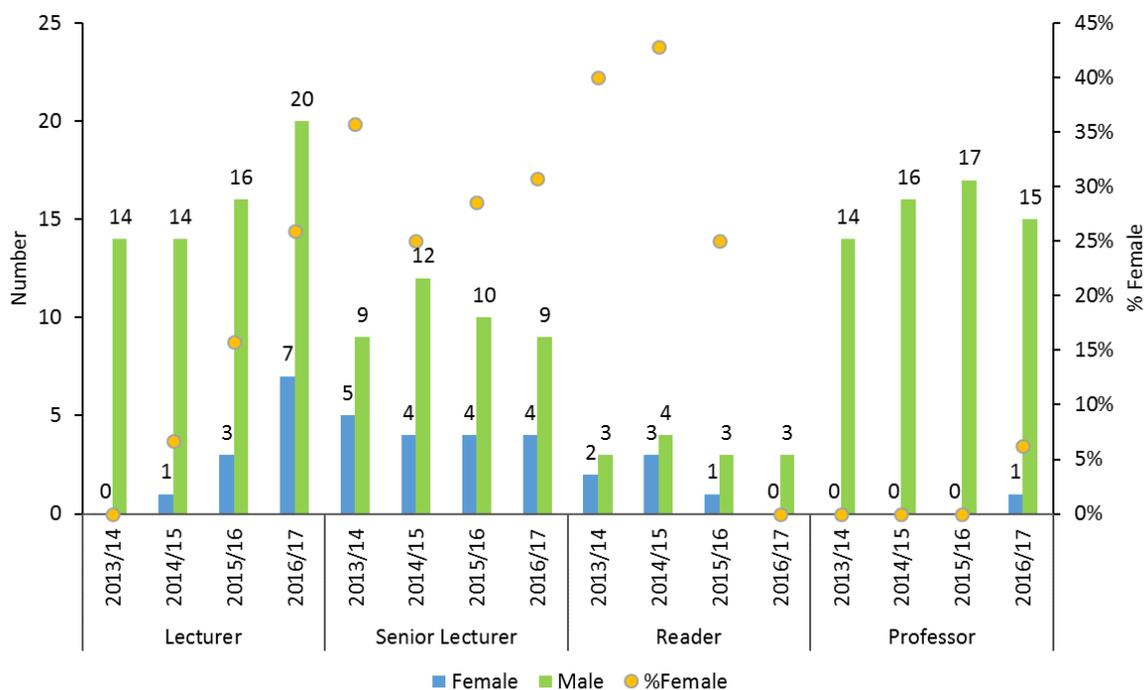


Figure 19: Academic staff in the Department of Mechanical Engineering by grade, gender and academic year.

Figure 17 shows data for academic staff by grade and clearly reveals the low proportion of females in both teaching and research. Figure 18 shows data for academic staff by function.

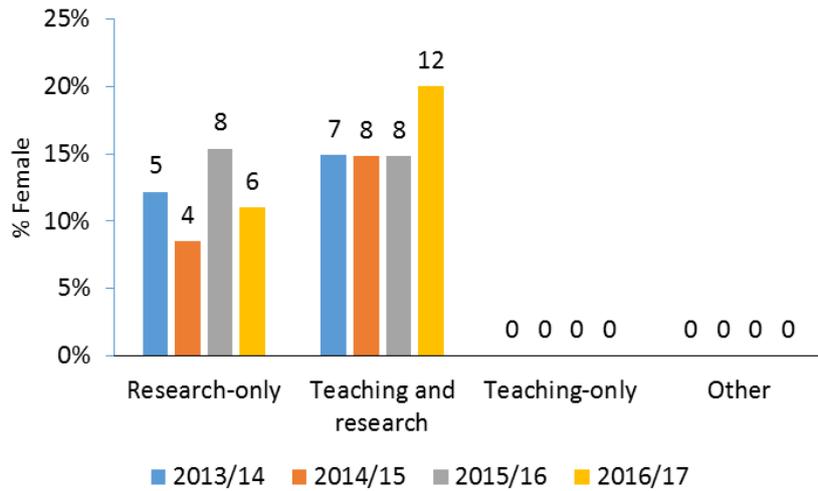


Figure 20: Academic staff, showing % female and number of female staff in each function, in the Department of Mechanical Engineering by contract function from academic years 2013/14 to 2016/17.

Figure 21 illustrates the breakdown of BME staff by gender in the different job families; the proportion is particularly low for Professional and Support Staff. The Research Staff has approximately the same percentage of BME staff regardless of gender (35-40%), which is consistent with the female academics, but the males have a lower proportion (15%). The reason for this is unclear; however, the data samples are small and we do not have statistical confidence to draw firm conclusions on intersectionality. It is now University policy to collect intersectional data and carefully monitor data to improve equality.

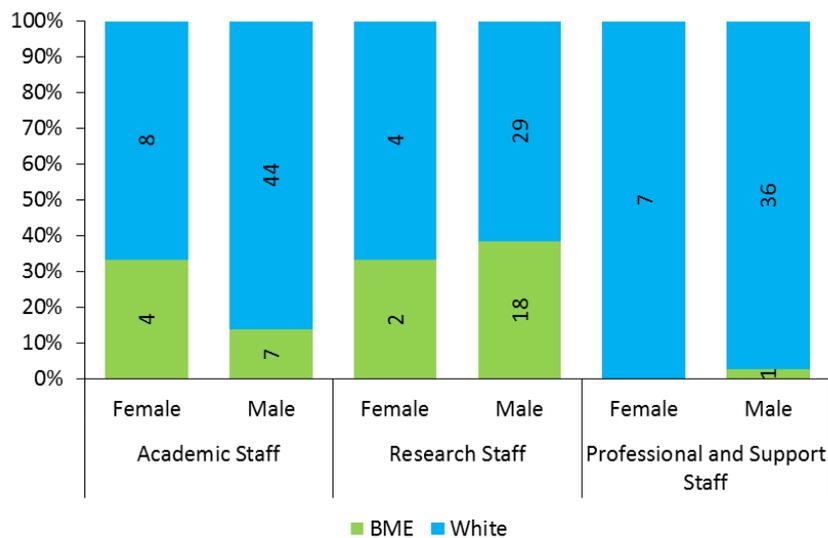


Figure 21: Breakdown of ethnicity of staff of different genders and job families for academic year 2015/16.

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

The majority of fixed-term staff are on research only contracts with a small number on fixed-term contracts. There are no gendered patterns among research only staff (Table 16 and Figure 22). The University policy is that all fixed-term contracts convert to open-ended contracts after four years.

Table 16: Academic and research staff contract type split by contract function by gender and academic year (headcount at 31st July). (fixed-term contract, FTC; open-ended contract, Open).

Mechanical Engineering (ACADEMIC AND RESEARCH)		FEMALE					MALE				
		TOTAL	Research-only	Teaching-only	Teaching and Research	Other	TOTAL	Research-only	Teaching-only	Teaching and Research	Other
2013/14	FTC	4	4	0	0	0	38	33	0	1	4
	Open	8	1	0	7	0	45	3	3	39	0
	% FTC	33%	80%	-	0%	-	46%	92%	0%	3%	100%
2014/15	FTC	3	3	0	0	0	48	41	0	3	4
	Open	9	1	0	8	0	49	2	3	43	1
	% FTC	25%	75%	-	0%	-	49%	95%	0%	7%	80%
2015/16	FTC	8	8	0	0	0	47	41	0	3	3
	Open	8	0	0	8	0	50	3	4	43	0
	% FTC	50%	100%	-	0%	-	48%	93%	0%	7%	100%

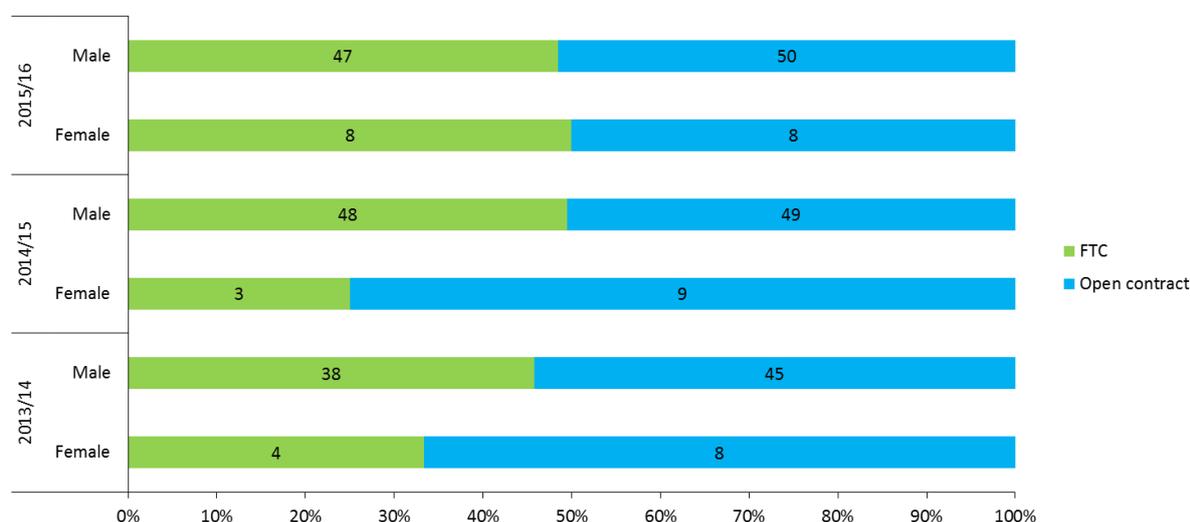


Figure 22: Proportion of academic and research staff on fixed term (FTC) and open-ended (Open) contracts by gender and by academic year. Numbers of staff in each category are shown in bars.

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

We have examined carefully the data regarding leavers (Figure 23) and held exit interviews to establish the reasons for leaving. The data shows no gender bias concerning teaching and research staff. The largest proportion are research staff on fixed term contracts, due to end of contract (see also Table 18). Leaving rates do vary for female and male research staff, and although the numbers of female research staff are small the data do suggest that they are more likely to leave than males (Table 17).

We will further examine why the rates are different for women and men (**SAsi**). We have had a small number of academic staff on open contracts leave to take up positions elsewhere or retire.

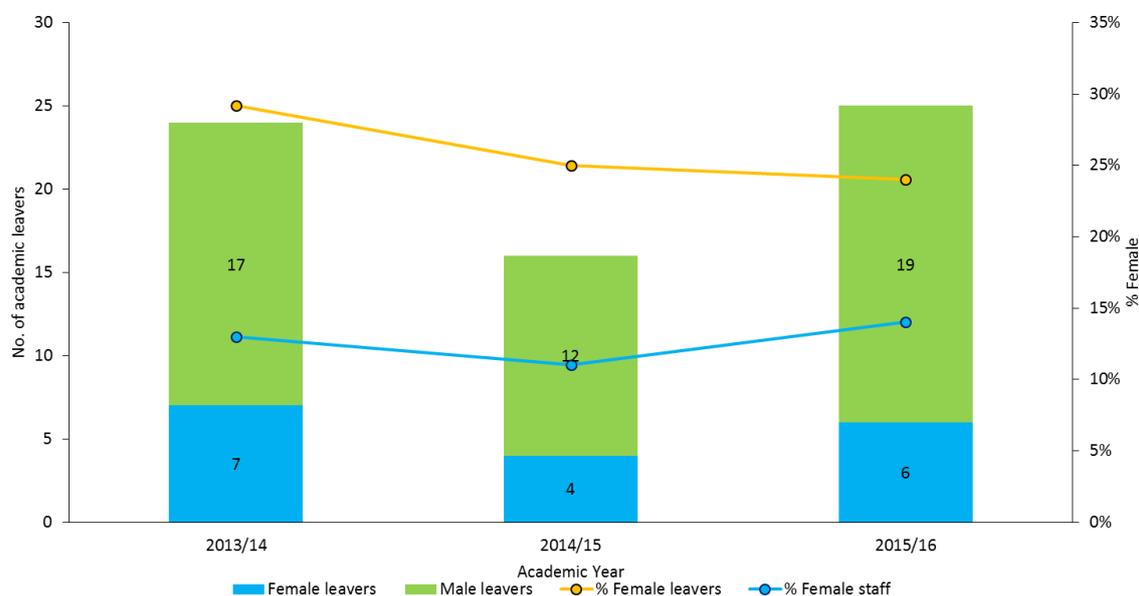


Figure 23: Academic leavers by gender (bars) and % female leavers and % female staff (lines) by academic year.

Table 17: Academic and research staff leavers by contract function, gender and by academic year. (Data exclude other staff who are included above. In some years staff joined and left within the same academic year hence some of the turnover rates are above 100%)

Mechanical Engineering (ACADEMIC & RESEARCH)			Total	Research	Teaching	Research and Teaching
2013/14	Female	Number	7	6	0	0
		Turnover(%)	58	120	0	0
	Male	Number	17	9	1	2
		Turnover(%)	20	25	33	5
	% F		29	40	0	0
2014/15	Female	Number	4	3	0	0
		Turnover(%)	33	75	0	0
	Male	Number	12	10	0	1
		Turnover(%)	12	23	0	2
	% F		25	23	-	0
2015/16	Female	Number	6	4	0	2
		Turnover(%)	38	50	0	25
	Male	Number	19	11	0	3
		Turnover(%)	20	25	0	7
	% F		24	27	-	40

Table 18: Academic and research staff leavers by contract type and gender by academic year (In some years staff joined and left within the same academic year hence some of the turnover rates are above 100%)

Mechanical Engineering (ACADEMIC & RESEARCH)			Fixed-Term	Open-Ended	Full-time	Part-time
2013/14	Female	Number	7	0	6	1
		Turnover (%)	175	0%	60	50
	Male	Number	16	1	12	5
		Turnover (%)	42	2	15	125
2014/15	Female	Number	4	0	2	2
		Turnover (%)	133	0	18	2
	Male	Number	11	1	11	1
		Turnover (%)	23	2	12	17
2015/16	Female	Number	3	3	5	1*
		Turnover (%)	38	38	31	
	Male	Number	15	4	18	1
		Turnover (%)	32	8	21	9

\*Part time member of staff switched to part time working and left during the same year.

(Section 4 Word Count: 2110)

## 5 SUPPORTING AND ADVANCING WOMEN'S CAREERS

*"I joined the department in 2015 as a PDRA on a fixed-term contract. I decided to take part in the Departmental Mentoring Scheme, and I found the guidance from my mentor and my line manager really helpful. They encouraged me to apply for the Faculty Future Awards. I was accepted on to the scheme, which helped me to create a vision for my career and develop my grant writing skills. In 2016 my line manager informed me of a lectureship opportunity. I contacted some of the newly-appointed lecturers to discuss the working environment, and their positive responses gave me confidence that the Department was somewhere I could continue to grow and develop. Therefore, when I was offered the position I accepted it and started the post in January 2017."*

**Nicola Bailey, Lecturer**

### 5.1 Key career transition points: academic staff

#### 5.1 (i) Recruitment

A priority for the Department over the next four years is to address the gender imbalance in our staff (Section 2).

In 2015 a new HoD (Prof Gary Lock) introduced several changes to recruitment policy to improve practice. First, we introduced mixed gender for **all** short-listing and interview panels for academic appointments. Secondly, all academic job adverts now explicitly state: *“We encourage the development of a diverse and inclusive workforce and offer excellent benefits, with options for flexible working. The position is open for applicants interested in full-time, part-time or job-sharing employment.”* Thirdly, we have contact details of both a female and male in all advertisements. Fourthly, arrangements are made so that all shortlisted candidates are encouraged to meet informally with both male and female academics at their level (either over lunch or coffee) so they can ask any questions about the working environment without it being part of the interview process. Fifthly, all academic staff involved at any stage of recruitment have been given mandatory training on Recruitment and Selection for Panel Members and Unconscious Bias. The Departmental Co-ordinator checks the central training records to ensure that this is the case. All academics are asked to talent-spot promising junior researchers; when posts become available and these individuals are then contacted and invited to apply. (See feedback on new recruitment process from recent recruit, Dr Elise Pegg below.)

BRONZE ACTION PLAN ACHIEVEMENT **BA2.4**: Abolition of all-male short-listing and interview panels.

BRONZE ACTION PLAN ACHIEVEMENT **BA2.4**: All recruitment (shortlisting & interviewing) panels now undertake mandatory unconscious bias training, as well as specific training on recruitment and selection.

In alignment with our University strategy, the Department also ensures that search processes are used to identify good female candidates and will only allow a single-gender shortlist for recruitment if a search strategy including a gender focus has been deployed.

**University Action:** No all-male shortlists unless a gender specific search process has been deployed

The above changes have unfortunately not altered the percentage of female applicants, which remain between 11% and 13% across all staff roles (Table 19); however, the proportion of shortlisted female candidates rose notably from 17% in 2014 to 24% in 2015, and the proportion of appointed female candidates increased from 16% in 2014 to 34% in 2015. The **impact** of the **BA**s is that now 20% of the academic staff are female (increased from 15% in 2014).

"I applied for a lecturer position in the Department in 2015, and at every stage of the recruitment process I felt welcomed and able to perform at my best. I noticed the advert mentioned Department's commitment to equality and inclusivity which I found reassuring and gave a good first impression. After applying I was invited give a seminar to the academics within the department, and I was impressed that the Head of Department took the time to meet with me informally prior to the seminar to check I had everything I needed and put me at ease. I was given a tour of the Department and had the opportunity to speak with other academics about what it was like to work at Bath which was really helpful. I was then invited back for an interview, the panel had a mix of genders which I think made me more relaxed. Happily after the interview I was offered the job!"

**Elise Pegg, Lecturer**

Table 19: Number of applicants and shortlisted candidates in the Department of Mechanical Engineering by gender and grade for applications to academic and research posts by academic year. \*Where positions are advertised at multiple levels e.g. Lecturer/Senior Lecturer, the lowest grade has been taken.

Mechanical Engineering (ACADEMIC & RESEARCH)	APPLICANTS (*)								SHORTLISTED								
	Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other	Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other	
<b>2013/14</b>	<b>Female</b>	<b>54</b>	29	2	17	0	4	2	0	<b>13</b>	10	0	2	0	0	1	0
	<b>Male</b>	<b>362</b>	183	6	119	0	34	4	16	<b>62</b>	52	2	2	0	0	0	6
	<b>% Female</b>	<b>13%</b>	14%	25%	13%	-	11%	33%	0%	<b>17%</b>	16%	0%	50%	-	-	100%	0%
<b>2014/15</b>	<b>Female</b>	<b>65</b>	39	0	12	2	0	1	11	<b>14</b>	8	0	2	1	0	0	3
	<b>Male</b>	<b>538</b>	327	0	106	40	0	7	58	<b>68</b>	53	0	5	2	0	0	8
	<b>% Female</b>	<b>11%</b>	11%	-	10%	5%	-	13%	16%	<b>17%</b>	13%	-	29%	33%	-	-	27%
<b>2015/16</b>	<b>Female</b>	<b>67</b>	53	0	12	0	0	1	1	<b>20</b>	18	0	2	0	0	0	0
	<b>Male</b>	<b>468</b>	324	0	100	0	0	30	14	<b>65</b>	55	0	5	0	0	2	3
	<b>% Female</b>	<b>13%</b>	14%	-	11%	-	-	3%	7%	<b>24%</b>	25%	-	29%	-	-	0%	0%

Table 20: Number of new starters in the Department of Mechanical Engineering by gender and grade for academic and research staff by academic year. Data collected from the HR database, note that new starters could have applied in the previous academic year.

Mechanical Engineering (ACADEMIC & RESEARCH)	NEW STARTERS							
	Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other
<b>2013/14</b>	<b>Female</b>	<b>3</b>	3	0	0	0	0	0
	<b>Male</b>	<b>17</b>	14	1	0	0	0	2
	<b>% Female</b>	<b>15%</b>	18%	0%	-	-	-	0%
<b>2014/15</b>	<b>Female</b>	<b>5</b>	3	0	1	0	0	1
	<b>Male</b>	<b>26</b>	20	0	1	1	0	2
	<b>% Female</b>	<b>16%</b>	13%	-	50%	0%	-	33%
<b>2015/16</b>	<b>Female</b>	<b>12</b>	10	0	2	0	0	0
	<b>Male</b>	<b>23</b>	17	1	2	0	0	2
	<b>% Female</b>	<b>34%</b>	37%	0%	50%	-	-	0%

BRONZE ACTION PLAN ACHIEVEMENT **BA2.4**: Percentage of shortlisted female academic staff increased from 17% in 2014 to now 24% in 2015.

BRONZE ACTION PLAN ACHIEVEMENT **BA2.4, BA3.1**: Percentage of appointed female academic staff increased from 16% in 2014 to now 34% in 2015.

For research posts in 2015/16, 37% of new starters were female, compared to 13% to 18% in previous years (Table 20). The improvements in gender balance are primarily at the lower levels as our Departmental strategy is to replace retiring academics with early career academics in order to provide more opportunities for post-doctoral researchers.

The new recruitment policies will be applied to Departmental recruitment of staff at all levels (**SA6**).

SILVER ACTION 6: Embed good practice into Departmental academic recruitment process for research staff

#### 5.1 (ii) Induction

All staff are given a half-day induction to the University and Department, which provides an overview of functions, procedures, strategy and values. There is 75% positive feedback from attendees. At a Departmental level, staff are given an induction by their line manager, and managers are guided by what to include in the induction through a Departmental checklist including:

- The job role, expectations, and support available
- Introduction to key people
- A tour of the Department
- Departmental organisation and structure
- Safety
- Equality and Diversity, Athena SWAN
- Energy, Environment and Sustainability
- Flexible working
- Maternity and parental leave

All new members of staff are required to undertake equality and diversity training, which includes unconscious bias, this mandatory training is monitored centrally and compliance reported to the HoD. All staff have a formal probation which requires the manager to agree objectives, monitor at mid-point and confirm completion; this will be recorded on an individual's personal file with HR. The process for new academic staff is more intensive. Early career (ECR) academic staff also undergo training through the three-year *Bath Course*, which has been approved by the Higher Education Academy. ECRs are given a reduced teaching load, giving them time to establish their research. ECRs also receive a start-up fund of £5K and a PhD studentship. They are assigned a mentor within the Department to support their career development. Post-doctoral staff and academics at any level can request a mentor, arranged by the Department's mentoring champions (1F, 1M).

Currently, only the training of academic-staff recruits is monitored and there is no mechanism in place to ensure that all aspects of the induction checklist are covered for all new members of staff, or to review the efficiency of the induction processes. We will review and improve processes and feedback for induction to ensure equality for all staff members within the Department (**SA18**).

**SILVER ACTION 18: Improve feedback and monitoring of induction processes across all levels**

### 5.1 (iii) Promotion

Whilst the University has a clear and transparent promotions document, our survey showed that there was generally poor understanding of the promotions procedure and criteria. The promotions document clearly states the contribution of staff employed on part-time contracts is expected to be the same in terms of quality, whilst reduced proportionately in terms of quantity. We have held events for all academic and research staff specifically related to promotions, and have produced and disseminated simple flow diagrams explaining the process (**BA3.2**). We have also changed the standard operating procedures for our SDPR process, highlighting promotion opportunities for all and providing mentoring for career progression at all levels (**BA3.2**). Furthermore, we held Departmental seminars focused on career progression and the promotions framework to increase awareness and transparency of the procedures.

Decisions on promotions of all academic staff are made at University level by the Academic Staff Committee (ASC). The ASC meet four times a year, and prior to each meeting the HoD circulates the deadlines for applications and the promotion criteria (set by the University). The HoD and HoGs review individual staff progression with regard to the criteria; eligible staff are approached and encouraged to apply for promotion; consideration is taken of maternity leave, career breaks and part-time working in terms of outputs or research grant income. Promotion candidates discuss their case with the HoD, who assists with developing the application. The HoD will circulate the case and invite anonymous feedback from staff senior to the candidate, specifically addressing the question of whether the promotion criteria have been met; the candidate can use this support and feedback to improve their application prior to submission to the ASC or, if criteria has not been met, the candidate is given support, guidance and clear targets to build CV for future promotion applications.

Our Department culture survey in 2013 shows that only 58% of staff agreed or strongly agreed that the Department encouraged staff to apply for promotion. Criteria for promotion were made a standing item to be discussed at each annual SDPR, with each staff member encouraged to create an action plan aligned with the promotion criteria to support their progression. Our 2017 culture survey showed 63% of female staff and 82% of male staff agreed or strongly agreed that the Department encourages staff to apply for promotion, evidencing the **impact** of the **BAs** in terms of improvement in communication and process. Nonetheless we will go further in ensuring that SDPR discussions are used to encourage in particular women's promotion and career development (**SA7c**).

**BRONZE ACTION PLAN ACHIEVEMENT BA2.5:** Criteria for promotion is now a specific section for discussion in annual Staff Development and Performance Review.

**BRONZE ACTION PLAN ACHIEVEMENT BA2.5:** Seminars explaining the promotions processes held for all postgraduates, research staff and academic staff in the Department.

**BRONZE ACTION PLAN ACHIEVEMENT BA2.5:** Our 2017 survey found 63% F and 82% M staff agree or strongly agree that the Department encourages staff to apply for promotion (increased from 58% in 2013).

The number of applications for promotions of female staff have varied between zero and two over the past four years (Table 21); these are small sample rates although those women who have applied have a 100% rate of success (Table 22). The Department has recently recruited several female early career academics but these are currently on a three-year probation. However, the low-number of female staff applying for promotion is a concern and we plan to address this issue by creating a support processes for our female academic and research staff (**SA7**).

**SILVER ACTION 7:** Further support progression to senior academic posts, including proactive identification and encouragement of the best female candidate

Table 21: Number of academic staff applying for promotions and success rate by gender and by academic year.

Mechanical Engineering (ACADEMIC & RESEARCH)	Applications							Promotions				Success rate		
	Female		Male		Total		% Female	Female	Male	Total	% Female	Female	Male	Total
	Number	Application Rate	Number	Application Rate	Number	Application Rate								
<b>Total</b>	3		9		12		25%	3	8	11	27%	100%	89%	92%
<b>2013/14</b>	2	29%	2	7%	4	11%	50%	2	2	4	50%	100%	100%	100%
<b>2014/15</b>	1	13%	5	15%	6	15%	17%	1	5	6	17%	100%	100%	100%
<b>2015/16</b>	0	0%	2	6%	2	5%	0%	0	1	1	0%	-	50%	50%

Table 22: Grade of successful promotion of academic staff by gender and by academic year, all were full-time staff.

Year	Applications for promotions
2013/14	2 females promoted to senior lecturer 1 male promoted to senior lecturer 1 male promoted to professor
2014/15	1 male promoted to professor 1 male promoted to reader 2 males promoted to senior lecturer 1 female translated to reader 1 male translated to reader
2015/16	1 male promoted to teaching fellow grade 8
2016/17	2 males promoted to senior lecturer 1 female promoted to professor

Decisions on promotions for research staff are also made by the ASC, though research staff very rarely apply for promotion. This is in part due to limits in research funding and the nature of the short-term contracts. We are currently addressing this disparity in two ways: encouraging all academic staff to factor in the possibility of research staff promotion in the costs to all grant applications; and by creating more permanent positions within the Department for which research staff can apply.

The **BAP** highlighted the importance of strong role models to encourage female progress from post-doctoral research to academic positions. We organised a series of female-led seminars to discuss academic career development and Fellowship opportunities (**BA1.9**, **BA2.1**, **BA2.4**) as well as Staff Spotlight stories on the University's main internal webpage<sup>1</sup>.

#### SILVER ACTION 5: Increase number of female research staff progressing to academic staff

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

In 2014 six of the seven female academics in the Department submitted to the Research Excellence Framework (86%), and 40 out of the 45 male academics were submitted (89%). This is an improvement from the 2008 RAE where four of the six eligible female academics were submitted (67%), compared to 47 of the 51 male academics (92%) (Table 23).

<sup>1</sup> <http://www.bath.ac.uk/news/2017/10/20/staff-spotlight-on-dr-elise-pegg/>

Table 23: Comparison of number of eligible female and male academics submitted to REF in 2014 and RAE in 2008, note that RAE gender breakdown based on DSAT analysis of Departmental records.

		Submitted	Total eligible	% of eligible staff submitted
REF 2014	Female	6	7	86%
	Male	40	45	89%
	Total	46	52	88%
	% Female	13%	13%	-
RAE 2008	Female	4	6	67%
	Male	47	51	92%
	Total	51	57	89%
	% Female	8%	11%	-

## 5.2 Key career transition points: professional and support staff

### 5.2 (i) Induction

There are 44 Professional and Support staff in the Department; four (100% F) staff in administration and 40 (10% F) staff in technical roles. All are line-managed via Faculty-wide structures. The same induction processes described in Section 5.1(ii) for academic staff are used for professional and support staff, including equality and diversity training. As before, no monitoring of these processes is currently in place: we will address this (**SA18**). Gender inequality is a key issue and it is a target to increase the proportion who are female within the Faculty to 20%. As part of that work we will collect data to benchmark the department and also survey our current technical and experimental staff in order to understand the reasons underlying the low recruitment rate of women (**SA16a**). There is a three-year apprenticeship scheme; gender balance is one of the key recruitment considerations. Since 2013 seven (28% F) technical and four (50% F) administrative apprentices have been recruited; the evidence suggests that the apprenticeship scheme is an effective vehicle for addressing gender balance as relatively few female engineering technicians are available in the general employment pool.

**SILVER ACTION 16: Increase proportion of women in the Technical and Experimental job family**

### 5.2 (ii) Promotion

There are five routes for Professional and Support staff career progression: (1) Annual increments according to the pay scale for grades 1-9; (2) Recognising Excellence Award (REA) - single payment; (3) Outstanding Contribution Award (OCA) - staff who have shown sustained exceptional performance, exceeding expectations of their role over a period of at least 2 years, can be recognized and rewarded with a tangible increase in pay; (4) Job Evaluation and Grading Review - evaluates new jobs and reviews existing ones to ensure that the pay offered is appropriate for the level of responsibility and duties; (5) Applying for higher grade job - this is the main route for progression.

Managers encourage staff to apply for opportunities related to advancements. Within the Department there has been some significant success since 2014 with 10% of technical staff regraded using route (4) described above.

*“I started my Mechanical Engineering apprenticeship in 2013. I was supported throughout the three years of training, and when I had completed my apprenticeship I was promoted from grade 2 to 4. During my first year as a fully-qualified engineer, my Technical Supervisors made the promotions opportunities clear to me and supported me to a grade 5 skilled-technician position.”*

**Emma Walker, Technician**

**BRONZE ACTION PLAN ACHIEVEMENT BA4.6:** Of the Department’s 40 technical staff, 10 (25%) are at higher-graded positions relative to 2017: 3 of 3 female staff (100%), and 7 of 37 male staff (19%).

In 2017, the HoD conducted focus groups with the technical and administrative staff separately to assess their perceptions of the current processes in place for career development. Despite recent successes with regrading, staff were unclear on the criteria for promotions, and did not feel that the procedure was transparent or fair. There have been no promotions of administrative staff, principally due to a lack of opportunity at Faculty level. These are significant concerns and we plan measures to impart to Professional and Support staff the good practice we have implemented for academic staff in particular focussed career-progression plans. (SA8c).

### 5.3 Career development: academic staff

#### 5.3 (i) Training

All staff are encouraged to develop new skills through training, now a standing issue during SDPRs. Training programmes are clearly advertised. Although training participation data are available, we need more comprehensive data to monitor patterns by gender and grade so data collection is improved (SA7d). The University annually funds 15 competitively-allocated places on the Aurora Leadership Programme; the Department has had one female member participate; two females have completed the University Leadership Programme and one female the Academic Leaders’ programme (Table 24). We encourage female academics to participate in all programmes (SA7a).

Table 24: Training Courses Attended

	Female	Male	%F
2015/16 Academic Leaders Programme	3	6	33%
BATH COURSE INDUCTION	1	4	20%
Bath Scheme SF Workshop 1	0	1	0%
Process Improvement	1	0	100%
Recruitment and Selection for panel members	2	6	25%
2014/15 Academic Leaders Programme	3	6	33%
Aurora annual programme	1	0	100%
Aurora Network	1	0	100%
BATH COURSE INDUCTION	0	2	0%
Careers: Developing your academic career	0	1	0%
Choosing a career in STEMM	1	1	50%
Performance Review: Conducting an Effective Review		1	0%
Recruitment and Selection for panel members	5	19	21%
2013/14 Academic Leaders Programme	0	3	0%
Careers: Developing your academic career	0	1	0%
Charing Recruitment Panels	1	3	25%
THE BATH SCHEME INTRODUCTORY WORKSHOP	0	1	0%

**BRONZE ACTION PLAN ACHIEVEMENT BA3.3:** 25% of female staff have attended leadership programmes.

### 5.3 (ii) Appraisal/development review

The University mandates that all non-casual staff who have completed probation undergo an annual SDPR. Staff on probation have an annual review with the HoD and ASC. The SDPR provides a structured discussion for staff to receive feedback on their performance, to discuss and set objectives for the coming year, and to explore and support their training/learning needs and career aspirations. Each HoG performs the SDPR for non-professorial group members, and HoD performs the SDPR for all professors. Before engaging with Athena SWAN there was no monitoring of consistency between the various appraisers. The SDPR process undertaken in the department was modified by the HoD in 2015 to ensure uniformity of the process between groups and to highlight the career development aspects; the HoD observed the majority of SDPRs taking place to assess the effect of the changes. Scheduling and monitoring of SDPRs is now performed by the Department Coordinator; this has had an **impact** of 100% completion of SDPR for academic staff in 2015/16 compared to 49% in 2013/14 (Table 25). The reviewer now summarises the promotion process and criteria; this then facilitates a discussion regarding the career aspirations of the reviewee. For those seeking promotion, the reviewer now maps their achievements to the promotion criteria. The SDPR discussions feed into the monitoring of staff against promotion criteria and eligible staff are approached to encourage them to apply for promotion (Section 5.1 (iii)). The **impact** of the actions is that 88% F and 72% M staff agree they are clear about what happens to appraisal documents and what follow-up action should be taken (2017 Department survey) to compared to 68% in 2013. However, there is still a requirement to further improve the process by improving the training of SDPR reviewers, implementation of a mid-point review, and the introduction of an annual survey (SA8b).

*“The SDPR process meant that I could review my progress against the promotion criteria with my line manager. This encouraged me to gather evidence against this criteria and target improvements. A senior member of staff explained the process of promotion, having engaged with the process himself and acted as reviewer.”*

**Colin Copeland, promoted to Reader November 2017**

Table 25: Completion rates of SDPR by academic and research staff. Data were not collected for research staff in 2013/14 and 2014/15.

Uptake of SDPR	Academic staff				Research staff/ECRs			
	F	M	%F	Total (% eligible staff)	F	M	%F	Total (% eligible staff)
2013/14	4	18	18%	22/45 (49%)				-
2014/15	3	27	10%	30/45 (66%)				-
2015/16	5	38	12%	43/43 (100%)	0	19	0%	19/37 (51%)

BRONZE ACTION PLAN ACHIEVEMENT **BA4.6**: The 2017 Department survey showed that 88% F and 72% M staff agreed that they were clear about the SDPR process and follow-up actions, compared to 68% in 2013.

SILVER ACTION 8: Improve SDPR process and feedback mechanisms

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

The conversion of female PGRs to PDRAs and then to academic staff within the Department (as well as the efflux/influx to/from other universities) is a key priority; we have held focus groups to discover the factors inhibiting conversion (**BA2.1**). The main issues were visibility of female role models, financial uncertainty associated with fixed-term contracts, and a general lack of awareness of academic-career progress. In response, we have held focused sessions on academic-career planning, changed the induction processes for PGRs and PDRAs to introduce the Research Development Framework (RDF) and VITAE tools. We have organised seminars led by female academics describing their experiences and career stories, and changed wording on job adverts (**BA2.2**). We have also organised seminars on fellowship application, describing the opportunities with PDRAs presenting their experience; fellowship applications are reviewed by senior staff with feedback for improvements. The University has implemented the “Concordat to Support the Career Development of Researchers” and introduced clear promotion criteria for ECRs.

The focus groups also highlighted the need for further involvement of PDRAs in Departmental activities and more networking. Since 2015 there has been PDRA representation on the Department’s Research Committee and a monthly Department-sponsored coffee social for the PGRs and PDRAs.

As well as the annual SDPR, the Department provides mentors for all staff, from both within and outside the Department. All ECRs on probation have a mentor, assigned by the HoD; meetings occur quarterly and reports are documented and circulated to MEEC. Training for mentors is available. The ECRs are all enrolled in the accredited Bath Course, leading to FHEA on completion. All PDRAs are provided with a profile on PURE (the University’s Research Information System) in order to document their research outputs and impacts, and manage their research data. As well as the formal mentoring, the Departmental culture fosters a collegiate environment providing support and guidance from experienced academics, all of whom operate an open-door policy. There is also an important mutually-supportive culture amongst the ECRs, who share best practice on teaching, research and grant applications.

The **impact** of these actions is that 100% F and 78% M of the PDRA staff (2017 Department survey) now agree that they are provided with training to assist with their next career step.

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

Our undergraduates are allocated a personal tutor who offers career-progression advice, academic guidance and pastoral support; we now provide training to new staff on personal-tutor duties emphasising advice on career progression. Students can request to change tutor at any time and further support is available from the Director of Studies. All students are welcome to attend the weekly Departmental Research Seminars. The Department-supported competition teams (TBR, TBRe, etc.) present to undergraduates and invite all students to join them, providing valuable experience and insight into all aspects from raising funding, project management and technical skills. The

Department annually runs a series of undergraduate-focused talks, *Insight into Engineering* with invited speakers from industry. All undergraduates are encouraged to apply for an industrial placement during their second/third year, supported by the dedicated Faculty-Placement Team. The **impact** of **BAs** encouraging and promoting female career opportunities is demonstrated in the increased proportion of females taking placement (Figure 8). During the final year a specialised seminar is organised to introduce research opportunities available for postgraduate study. Final-year research projects are proposed by academic staff, and students choose projects that interest them; projects operate full-time over an entire semester with frequent supervisor meetings, providing further opportunity for undergraduates to experience research possibilities. The **impact** of **BA1.7** and **BA1.9** was an increase in the percentage of female undergraduates progressing to postgraduate studies from 13% in 2014/15 to 21% in 2015/16. The University’s Careers Service offers 1:1 support for all students.

**BRONZE ACTION PLAN ACHIEVEMENT BA1.7, BA1.9: Increase in the percentage of female UGs progressing to postgraduate studies from 13% in 2014/15 to 21% in 2015/16.**

A full range of Department/University induction activities, including both social and academic events, are undertaken by new PGRs. All are introduced to the Vitae Researcher Development Framework (see 5.3(iii)). We will further encourage the uptake of the tool (**SA4a**). Each PGR has a supervisory team providing advice on career progression, training requirements, pastoral care and academic support. Supervisors must meet with PGRs quarterly but the Departmental culture is such that meetings are more frequent. New academic staff are required to attend University training on PGR supervision. The **impact** of the actions are that the Postgraduate Research Experience Survey (PRES) score for the Department has improved from 77% in 2015 to 84% in 2017.

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

All staff who apply for funding have the support of experienced members of the Department for advice and guidance. Recently, the Department has created a new system of monthly research-funding surgeries, where members of the University’s Research and Innovation Services are available for consultation on funding opportunities and developing applications. A formal internal review (organised by the Director of Research) provides feedback for all grant applications and the Department arranges mock interviews and review panels. As well as University-organised grant-writing courses, the Faculty runs the Future Awards scheme, to develop the academic leaders of the future. ECRs are offered generous contributions, such as PhD student funding and laboratory space, for supporting their first grant applications. The Department has also created a special focus on developing fellowship applications, with targeted support from senior members with direct fellowship experience. Unsuccessful applicants meet with the Director of Research and their mentors for feedback and re-developing applications in light of response. Individual strategies for grant-funding applications is an important dimension of the SDPR and HoD probation review. The **impact** of these actions has increased the number of applications submitted by ECRs as principal investigators (Table 26).

Table 26: Grant applications led by ECRs, as principal investigators (PI), by year and gender.

	Applications as PI		Male	Female	%F
2013/14	4	4	0	0%	
2014/15	16	12	4	33%	
2015/16	12	10	2	20%	

## 5.4 Career development: professional and support staff

### 5.4 (i) Training

Training needs of professional and support staff are assessed annually in the SDPR conducted by their line manager. The SDPR follows University guidelines, where staff are asked to consider their long-term career aspirations and the activities/training required to achieve them. All staff are invited to partake in training (including equality and diversity) run by the University, and receive monthly email notifications of current courses. The Faculty has a specific budget for training of professional and support staff.

The effectiveness and perception of training given to the professional and support staff was discussed at a focus group conducted by the HoD (June 2017). All in the focus group had received training, which was primarily directly related to their role, as well as health and safety training. All felt that they could ask for training if needed, and that it was useful; however, they did not feel that there was a direct connection between training and career development. This is an issue we will address (SA8c).

*“Training puts me in a better and more effective position to do my job, but I’m not sure how it is directly aligned to my career progression”*

**Clare Ball, Senior Technician**

A gender breakdown of the training undertaken by technical staff for the past four years is summarised in Figure 24. It is difficult to draw firm conclusions due to the small number of female technicians.

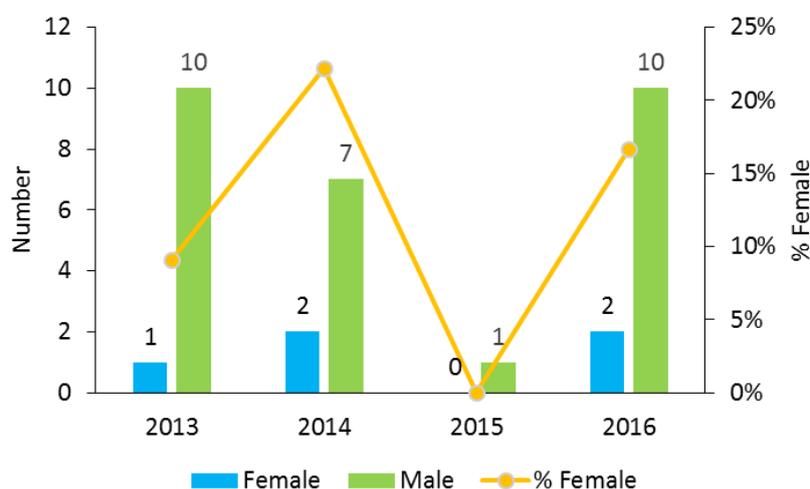


Figure 24: Gender breakdown of technical staff who have undergone training by year.

### 5.4 (ii) Appraisal/development review (Staff Development and Performance Review – SDPR)

SDPRs for professional and support staff are performed annually by line managers, and include:

- Review of activities and achievements over the past year
- Objectives for the next year
- Profession and development needs, such as training or mentoring
- Work-life balance

Staff who wish to be considered for discretionary-performance-award schemes must have a completed appraisal. Copies of all documents are maintained on the University iTrent HR system.

All line managers undertake mandatory training in how to conduct an effective review (although this is not currently monitored by the Department), and all new members of staff are offered training “Getting the most out of your review”. There are also e-learning refresher courses. Although the appraisal is conducted annually, line managers are encouraged to also perform a mid-year review to assess progress against objectives. In line with the proposal for improving academic-staff appraisal, we will make the mid-year reviews universal (**SA8b**). The focus group conducted with the technical staff highlighted that they found their appraisals useful, particularly early in their careers.

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

The University provides a variety of general staff development courses which cover topics such as leadership, time-management, self-development and networking. There is also a staff Development Toolkit which has over 2000 resources including e-learning, top tips and guides. Discussion of career progression is included as part of the SDPR, and the line manager will help identify relevant courses depending on needs. Mentoring support is currently not provided for professional and support staff, although shadowing is regularly used for training, particularly for technicians, *e.g.* for skill training on equipment. The apprentices shadow staff as part of their training.

Feedback from focus groups on career progression was also gathered. The comments were mixed: those at a more junior level (particularly apprentices) felt that they had well-structured and clear targets for progression; those at a higher level were uncertain about career advancement. The focus groups revealed a disconnection between policies and procedures, and poor awareness of these processes. We will address these issues (**SA8c**).

### 5.5 Flexible working and managing career breaks

We offer support for staff taking leave (maternity, parental, paternity and wider-caring responsibilities - see Case Study 1). Our policy is to ensure meetings occur before, during and after the leave to support the staff member.

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

Before taking maternity/adoption leave, the HoD and HoG meet with the staff member to plan a phased, temporary transfer of duties to a colleague. This ensures a smooth transition, reduces concerns, and provides flexibility in the return schedule. Staff are provided paid leave to cover ante-natal appointments for both partners. The line manager also undertakes a risk assessment using a standard checklist to ensure that the working environment is suitable during pregnancy and on return.

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

During the leave staff use up to 10 paid “Keeping in Touch” days; this helps maintain links with their work and colleagues. The one member of staff who had taken leave recently took all ten KIT days, using them for working with colleagues on grant applications. In addition, each month the staff have a coffee morning and those on leave are invited to attend.

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

When staff return we aim to manage a slow transition, with reduced workload to allow time to re-establish research (if academic) and adjust to changes. Prior to returning, the HoD and HoG meet with the staff member to discuss support measures and possible working patterns.

The University has an on-site nursery assessed as OSFTED Outstanding and provides NurseryPlus, a salary sacrifice scheme to enable parents with these costs. Furthermore, a childcare voucher scheme operates for all staff.

Feedback from the University culture survey highlighted that staff felt more support was needed to assist in the transition back into work. We will improve and formalise the additional support at Department level, encouraging an inclusive culture where staff with caring responsibilities are fully supported (SA9a). The HoD has introduced a new return policy, ensuring that during the initial six months no new teaching activities are undertaken, reducing the burden of lecture preparation and we will work to ensure that this is fully implemented (SA9b).

**SILVER ACTION 9: Improve awareness of career break policies and improve support upon return to work**

#### 5.5 (iv) Maternity return rate

We had one member of academic member of staff take maternity leave in 2014/15 and she has stayed in post since her return. No Professional and Support Staff took maternity leave during this period.

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

Paternity leave has been increasing (Table 27) with all new fathers taking paternity leave, and one taking a two-month shared-paternity leave (see Case Study 1 Dr Richard Burke). We have had no requests for adoption or parental leave. The Department communicated to all staff the introduction of the University's new Parental-Leave Policy. This policy allows the relevant partner to take 1-2 weeks paid leave if they have 26 weeks' continuous service. The policy allows staff to take 18 weeks unpaid leave per parent per child. Shared parental leave allows a maximum of 50 weeks and line managers are obliged to approve all requests.

Table 27. Paternity, shared paternity and parental leave

		Paternity Leave	Shared Paternity Leave	Parental Leave
Academic and Research staff	2013/14	1	-	0
	2014/15	2	0	0
	2015/16	4	0	0
	2016/17	3	1	0
Professional and Support Staff	2013/14	0	0	0
	2014/15	0	0	0
	2015/16	0	0	0
	2016/17	1	0	0

**BRONZE ACTION PLAN ACHIEVEMENT BA4.5: Staff aware of shared paternal leave and fully supported in taking shared leave**

#### 5.5 (vi) Flexible working

The Department actively supports those with caring responsibilities with flexible-working arrangements. All applications are viewed favourably and involve one-to-one discussions with workload fully considered to ensure a full-time job is not squeezed into part-time hours, and to provide flexibility to allow return full-time working at a later date. Our recruitment process explicitly

encourages applicants with caring responsibilities.

All staff who have applied for flexible working have been granted their requests. Although numbers are small, our data indicate no gender bias in staff applying for flexible working over recent years (Table 28).

Table 28: Flexible working by year & gender.

	Female	Male	% Female
<b>Academic &amp; Research Staff</b>			
2013/14	2	0	10
2014/15	1	1	50
2015/16	1	1	50
<b>Professional &amp; Support Staff</b>			
2013/14	0	0	0
2014/15	0	0	0
2015/16	0	0	0

**BRONZE ACTION PLAN ACHIEVEMENT BA4.5:** All staff who have applied for flexible working have been granted their requests

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

The Department always supports request from staff to increase their working hours. As with 5.5(iii), the focus is to ensure a smooth and gradual transition, including a return policy in graduated steps. It is important that staff have the opportunity to re-align their activities in a phased manner. The gradual loading to full-time duties is discussed in one-to-one meetings with the HoD, ensuring staff have the time to adjust.

### 5.6 Organisation and culture

#### 5.6 (i) Culture

The Department has fully embraced the principles of the Athena SWAN Charter with a commitment to gender equality and inclusivity. Progress is a standing item on the majority of our Departmental committees, and we will extend this reporting to all committees (**SA1b**). The HoD and DHoD are members, and chairs respectively, of EDaTE and DSAT, with all committees now having female members. The Athena SWAN Bronze Award logo is displayed on our website, Departmental stationary, posters and information screens. During our induction processes we introduce our UG, PGT and PGR students to Athena SWAN. Expectations regarding language and behaviour are stated during the induction processes of both students and staff. However, our most recent staff survey included the comment “...some of the ‘banter’ and ‘jokes’ can be off-putting for anybody who is not a British straight white man”. This suggests that the Department needs to be more explicit about its expectations (**SA19c**).

First-year tutor groups all undertake activities considering inclusion and we have made significant investment into our outreach and widening-participation activities.

Our Athena SWAN work has raised an awareness of the social scene and the link to the broader culture in the Department. Regular events for all staff and PGRs have been changed to reflect a changing, more-inclusive environment; social space has been created and regular communal activities are organised at group and research-centre level. The annual *Design Exhibition* exemplifies the joint commitment that all staff (academic, research and support) have to the student body, supporting the showcase of their work to industry and external academic assessors; the *Exhibition* has increased the visibility of strong and positive role models.

The positive **impact** of the changes implemented through the **BAP** are shown by the survey results for staff and students (Figure 25). Further improvements to the department culture at all levels have come from the large number of ECRs on the academic staff and their use of social media.

“22 ECRs within our department have been actively engaged in social networking forming a WhatsApp group. We can freely connect with colleagues to meet up for coffee, Friday-afternoon events, dinners and outing activities. This has encouraged interaction, giving us a feeling of being a united team that welcomes new academic members and integrates them within the department.”

**Hamideh Khanbareh, Prize Fellow**

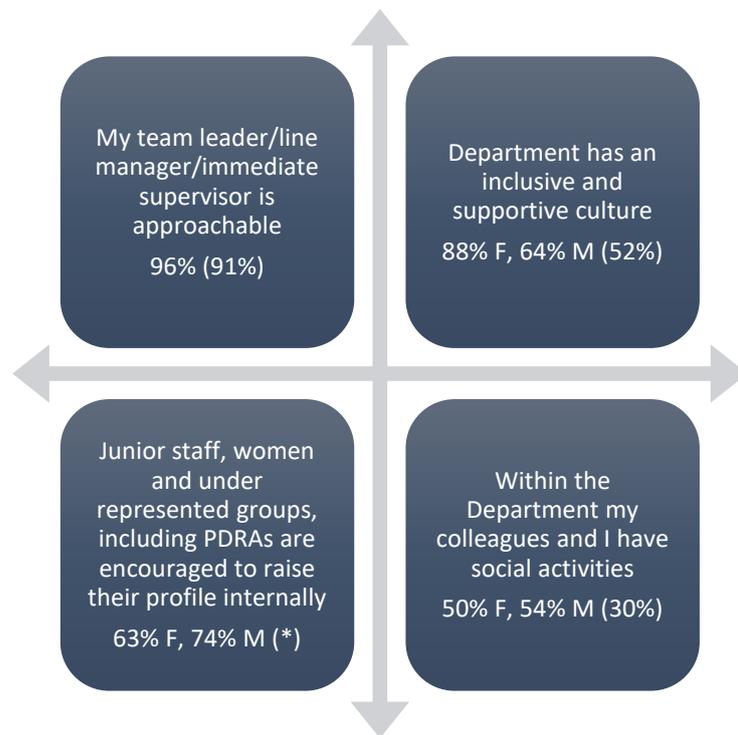


Figure 25: Results from survey 2016/2017 [gender responses] (compared to 2013), \* only asked in 2017.



Figure 26: Early Career Researchers social event

Despite improvements, survey data indicates that students and staff desire more Departmental events which we will provide (SA17).

**SILVER ACTION 17: Continue to improve social culture across all Department levels**

Another important area is mental health. All staff were invited to attend a ‘Mental Health First Aid’ training course run by the University (BA4.3), but more support is needed (SA15a). We will ensure that any staff needing additional help are provided with a life coach (SA15d).

#### 5.6 (ii) HR policies

The University has HR policies and accompanying advice for managers and staff embedded as central support, including a specific policy on “Dignity and Respect for Students and Staff of the University of Bath”; this policy was recently reviewed and updated to include more guidelines relating to harassment, bullying or victimisation. Such HR policy changes are made in consultation with staff and students, including the trade unions and Students’ Union. Any significant changes to an HR policy are approved by the University Executive then communicated through usual University channels. Relevant HR policies are also subject to an Equality Impact Assessment to ensure that there is no direct or indirect discrimination inherent in the approach taken. The University Equality and Diversity Committee receives an annual report which reviews the application of HR casework processes by protected characteristic to determine whether application is consistent.

Each Department has an HR Business Partner; they support and guide HoDs to ensure that policies and good practice are followed. All students and staff can access the HR policies directly from the University website.

The 2016 University Survey revealed that 96% of staff in the Department felt they were not harassed or bullied at work. We have a zero-tolerance policy for all, with a range of people to contact for further advice and assistance: for staff this includes their line manager, the department HR Business Partner, the Department Trade Union representative or the Equality and Diversity Manager; for students this includes the Students’ Union Advice and Representation Centre, Student Services and the Equality and Diversity Manager.

Staff feedback suggests that the Department should more closely monitor cases of harassment and bullying, and increase awareness of support channels for those bullied or harassed (**SA19**).

**SILVER ACTION 19: Increase awareness of support channels for those bullied or harassed**

5.6 (iii) Representation of men and women on committees

We have completely overhauled our Departmental committees and processes for committee appointment (**BA4.7**). The staff survey shows these changes have had **impact**, 63% F and 66% M staff now understand how to join committees compared to 48% in 2013. We will create robust and transparent SOPs for committee appointment (**SA10**).

**BRONZE ACTION PLAN ACHIEVEMENT BA4.7:** Increased understanding of committee-appointment process: 63% F and 66% M staff (2017) versus 48% (2013).

**SILVER ACTION 10: Create robust and transparent standard operating procedures for committee appointment**

Gender balance on committees has been a priority, which has had to be sensitive to any overload for the female members of the Department. We have now achieved a gender balance that equals or better our overall gender ratio (Table 29). The Mechanical Engineering Executive is the main decision-making committee and we have achieved 25% female membership, though this is below the University target of 33%. Given our Departmental gender balance this target will not be achievable, however we aim to have at least 20% female membership for our formal committees. Currently there is only one female committee Chair (12%). Increasing the number of females in committee chairs is an important priority (**SA10b**).

Table 29. Committee membership

Committee	2014-15				2015-16				2016-17			
	M	F	%F	Chair	M	F	%F	Chair	M	F	%F	Chair
Mechanical Engineering Executive	11	0	0	M	8	0	0	M	9	3	25	M
Learning, Teaching and Quality	13	7	35	M	12	2	14	M	16	3	16	M
Research	17	3	15	M	8	2	20	M	11	3	21	M
Computer Resources	10	0	0	M	8	2	20	M	7	4	36	M
Staff/Student Liaison	8	2	20	M	5	3	60	F	14	10	42	F
Health and Safety	9	0	0	M	7	2	22	M	7	3	30	M
DSAT	5	2	29	F	6	3	33	F	5	6	55	M
EDaTe	-	-	-	-	-	-	-	-	2	3	60	M

#### 5.6 (iv) Participation on influential external committees

All staff are encouraged to build national and international profiles both within academic and non-academic sectors; this is highlighted during SDPRs with mentorship provided for career development. The promotions criteria explicitly highlight the importance of profile, and working with influential external committees is fully supported. The Department provides funding for ECRs to attend conferences and working-group meetings. Female staff are actively nurtured to participate in high-visibility positions to further the goals of promoting strong female role models within engineering. Some notable female external profiles include the following: Professor Linda Newnes has been an assessor for the L'Oréal-UNESCO for Women in Science initiative since 2015, a member of Commonwealth Scholarship Commission since 2016 and an EPSRC panel member since 2012; Dr Hamideh Khanbareh is a board member of the Smart Materials and Systems Group of the Institute of Materials, Minerals and Mining; Dr Marcelle McManus has served on policy fellowship committees for the Welsh Assembly and the Office for Low Emission Vehicles; Dr Katherine Fraser has served on grant review panels for the British Heart Foundation and Heart Research UK; Dr Sally Clift is Faculty Director of Doctoral Studies.

#### 5.6 (v) Workload model

The Department's Workload Model (WLM) helps provide a uniform distribution of workload across all staff, offsetting teaching against administration, providing lighter loads to staff appointed recently or returning from absence or with large research grants. WLM data are reviewed annually at SDPR and staff can request a redistribution of duties. The University has implemented a new system for ensuring that WLM allocation is transparent, and staff are able to compare their workloads. All can view their draft WLM and request changes to ensure that their activities are appropriately represented. The **impact** of these actions is that 76% F and 51% M staff consider the WLM as transparent compared to 38% in 2013. Despite the improvement we will take action to further improve the transparency of the WLM (**SA12**).

We plan to hold a departmental seminar to discuss managing high workloads and, if successful, to retain this as an annual event (**SA15c**).

#### 5.6 (vi) Timing of departmental meetings and social gatherings

The department ensures that all formal meetings (committees and staff meetings) occur in core hours (1000-1600), allowing those with caring responsibilities and part-time staff to attend (**BA4.3**). In future, committee meetings are to be timed and necessary decisions identified early. The aim will be to limit meeting to 90 minutes (**SA15b**). Departmental seminars are scheduled at 1315. All social activities organised at departmental level are scheduled during core hours; there is an active social culture at the UG, PGR and PDRA levels which means that these communities arrange evening and weekend sporting and leisure events. Research centres and groups are encouraged to ensure their meetings occur within core hours.

#### 5.6 (vii) Visibility of role models

The Department actively encourages all members to participate in seminars and workshops, both internal and external to the institution; gender balance is an important consideration but not always achievable given our current ratio of women to men. With our continued focus on increasing the number of women into Mechanical Engineering, we have redesigned our promotion material. We now highlight the importance of strong role models to encourage female participation at all levels (**BA1.9**), right from entry into the undergraduate programme, graduate education, post-doctoral research and application for academic positions. We organised a series of female-led seminars to discuss academic development and opportunities, which provided a platform for showcasing the career stories of

recently-appointed female lecturers. Promoting female role models is a priority (**SA13**) and we will create an annual Athena SWAN lecture (**SA13c**).

**BRONZE ACTION PLAN ACHIEVEMENT BA1.9, BA2.1, BA2.2:** In the 2017 Department survey 63% F and 74% M staff agree or strongly agree with the statement: “Junior staff women and under-represented groups including PDRA’s are encouraged to raise their profile”.

### 5.6 (viii) Outreach activities

Outreach is a vital activity for the Department, in particular to schools. Outreach can be included in WLM returns however we will formalise this with a specific section (**SA14**) to be linked to promotion criteria. The outreach targeting schools has helped us to increase female applications (**BA1.8**).



Our undergraduate Formula Student team (TBR) have been particularly effective at engaging with schools (Figure 27). We have invested in our undergraduate student competition teams, creating three new teams (including TBRe) and provided facilities, space and funding. These teams have been excellent champions for Mechanical Engineering, each performing two/four outreach events annually.

Figure 27: Team Bath Racing at Bath Taps into Science 2016.

*“I just wanted to send an email to say how impressed we were with the Bath Drones Team. They worked with pupils in years 8/9 last week. They did a presentation and the paper aeroplane activities were really successful with students getting much from it ... fingers crossed they’ve inspired some budding young future engineers!”*

**Amy Tytherleigh, Curriculum Team Leader, Science, Ralph Allen School, June 2017.**

The Department is highly active in widening participation and have engaged and led University STEM summer schools (2014-2016) and an engineering-specific summer school in 2017 (57% F participants, Figure 28). Members of the Department participate regularly in international events such as Pint of Science, national level events organised by the IMechE, RAeS and Royal Academy of Engineering, and local events (e.g. Bath Taps into Science) - Table 30. The Department is committed to outreach and ensuring it is fully recognised for career progression and within the WLM (**SA14c**).



Figure 28: Widening Participation Mechanical Engineering Summer School, July 2017; PGRs running Summer School indicated by circle ●, remaining individuals were participants.

“Before coming to the Engineering summer school I wasn’t really set on doing engineering. I really enjoyed the project work much more than I had expected and this made me consider engineering with real life applications.”

**Attendee of Widening Participation Mechanical Engineering Summer School, June 2017**

Prior to 2015 outreach data were not routinely collected; going forward we will implement a robust data-collection system and evaluate and monitor positive changes in attitude (SA14d).

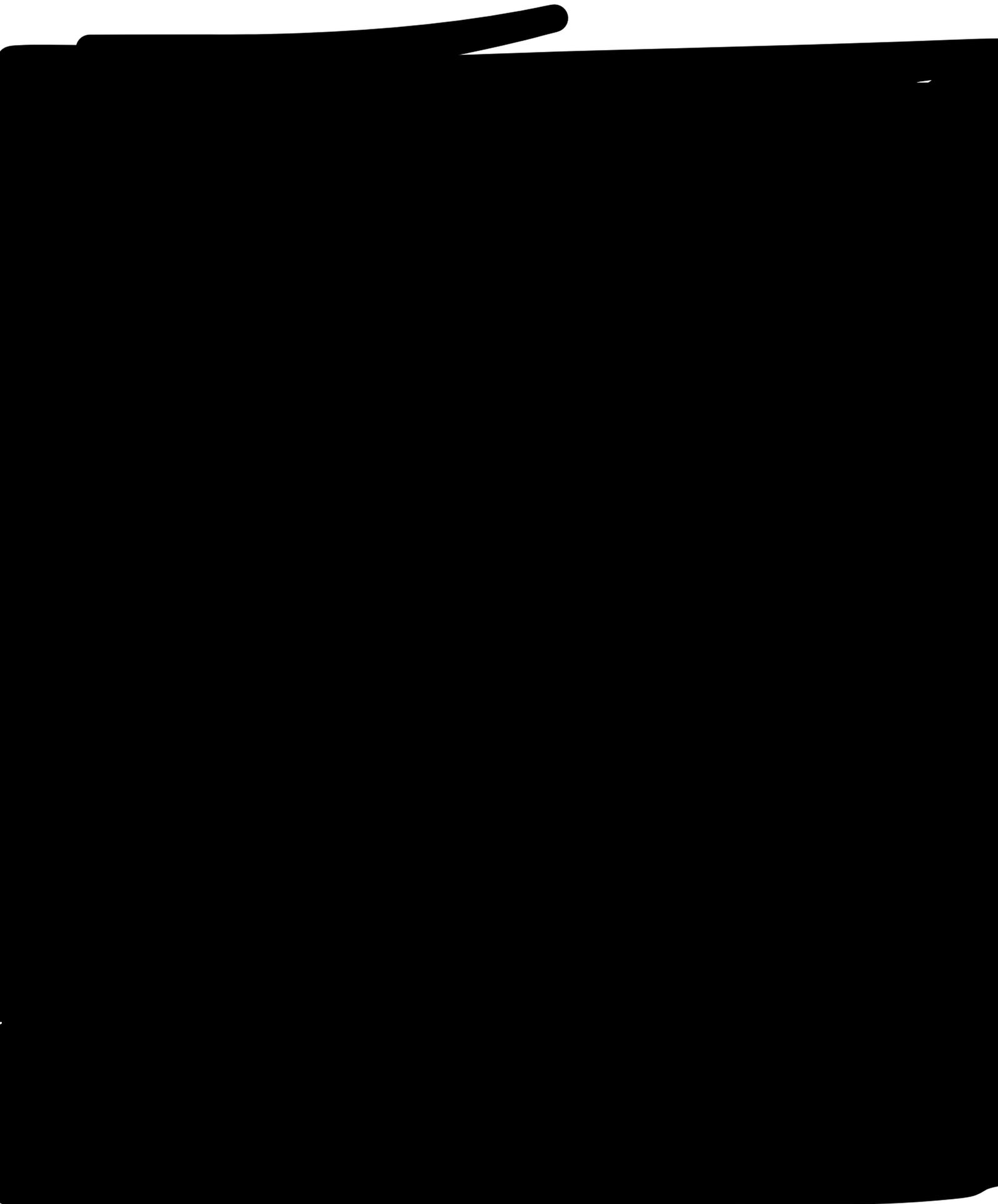
Table 30: Outreach and public engagement events undertaken by gender and role. Data were only collected from 2015/16.

Year	Role	No. of Outreach Events	Participants from Dept.		
			Male	Female	%Female
2015/16	UG	4	11	5	31%
	PGR	2	0	2	100%
	Academic	12	11	2	15%
2016/17	UG	15	40	6	13%
	PGR	7	1	9	90%
	Academic	21	10	9	47%

**BRONZE ACTION PLAN ACHIEVEMENT BA1.3, BA1.4:** Creation of three new undergraduate competition teams in 2016/2017, all participating in outreach

**SILVER ACTION 13:** Increase recognition for those undertaking outreach activities.

(Section 5 Word Count: 6569)





## 7 FURTHER INFORMATION

### 7.1 Inclusivity

Our aim is to achieve a fully-inclusive environment for work and study which embraces an intersectional approach to equality and diversity. Our first step in introducing intersectionality within our data was through an Inter-Engineering LGBT+ Department event, held on the 8th of May 2017. The event was advertised to our undergraduates, PGT, PGR and all staff.

InterEngineering is an external volunteer-run organisation that aims to connect, inform and empower LGBT+ engineers and their supporters. Research performed by InterEngineering has highlighted that LGBT+ engineers often find leaving university to work in industry problematic, and that homophobia is widespread within the engineering sector. The event was intended to widen awareness of the issues faced by LGBT+ engineers, provide a forum for discussion including how the Department can help, and to highlight schemes which students and staff within the Department may find useful (such as a mentoring scheme recently launched by InterEngineering, and networking events).

The advertising for the event made it clear that this was an event for all, and not just for LGBT+ engineers. The audience was a mixture of academic staff, professional staff, undergraduate and postgraduate students, from within the Department and beyond. It was an informal evening that began with pizza and soft drinks, which gave the attendees a chance to speak with the external speakers and network. The HoD welcomed everyone and emphasised the commitment of the Department to inclusivity and nurturing a supportive culture. Two speakers from InterEngineering South West gave an overview of the issues and the work that they do, then two speakers gave personal accounts of their experiences working in industry as LGBT+ engineers and the issues they had to overcome. An excellent discussion followed with suggestions for actions the Department can take to help.

The feedback from this inaugural event was extremely positive. In our Athena Swan PGR culture survey one of the attendees commented on the event:

*“It was great to know that the Department is trying to break down cultural barriers and to make its LGTB+ members feel more integrated. The Inter-Engineering event and the discussion opened afterwards was really empowering and motivating.”*

**PGR in the Department.**

**(Section 7 Word Count: 356)**

## **8 ACTION PLAN**

In this section you will find two tables. The first outlines our Silver Action Plan. The second outlines the progress on the actions which were defined in our Bronze submission and the impact that these have had on our department Silver Action Plan

### **8.1 Silver Action Plan**

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
1.	<p><b>Increase staff participation in and support for the Athena SWAN charter.</b></p> <p>In our culture survey in 2017 some people expressed a concern that Athena SWAN was disadvantaging male staff. We need to engage more with staff and increase understanding.</p>	1a. Provide success stories of both male and female staff to show benefits of equality.	From Dec2017 to Jan 2019.	Professor Chris Brace.	Stories disseminated and the process for refreshing stories implemented by 2019.
		1b. Embed Athena SWAN a standard item on all Department committees.	From Dec 2017 to Dec 2018.	HoD	Meeting minutes demonstrate discussion and engagement on equality and diversity.
		1c. Ask specific question on 2018 culture survey to ascertain staff understanding of SWAN	By Dec 2018	DSAT Chair	Question included in survey and responses show that 85% of staff report understanding of Athena SWAN's aims
		1d. Increase male membership of DSAT, add UG representatives	From Dec 2017. Embedded by Oct 2018.	DSAT Chair	Male membership of DSAT increased to at least 50%. Established UG members of DSAT
2.	<p><b>Increase number of female students on undergraduate programmes</b></p> <p>Our percentage of female undergraduates remains below the sector average.</p>	2a. Investigate causes for low offer acceptance rates for female UG compared to men, and implemented actions based on the findings in order to increase acceptance rates so that they match those of men	From Aug 2017 until Aug 2019	Undergraduate Admissions Tutor.	Causes identified and reported to DSAT together with and appropriate actions identified.
			From Aug 2019 to Aug 2021		Women's acceptance rate of offers the same as that for men.
		2b. Ensure Department course information and open-days highlight the societal impact of engineering (shown to increase female applicants), and also the networking opportunities for women in engineering at the University of Bath	Begin Oct 2017 Embedded by Oct 2019.	Undergraduate Admissions Tutor.	Monitoring demonstrates that Departmental course information and open day talks include information on societal impact of engineering and networking opportunities for women.
		2c. Increase the number of female academic and research staff and overall diversity in the Admissions Team	Begin Oct 2017 Embedded by Oct 2019.	Undergraduate Admissions Tutor.	Number of females and BME staff in Admissions increased from 36% to 50%.

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
		2d. Introduce a system of contacting females in receipt of offers by current female undergraduates in order to emphasise the positive aspects of the department and to give the opportunity to ask any questions.	Begin Oct 2018 Embedded by Oct 2019.	Undergraduate Admissions Tutor.	System of contacting females in receipt of offers in place.
3.	<p><b>Increase numbers of female under-graduates and postgraduate taught students progressing to postgraduate research programmes</b></p> <p>Our figures are showing a decrease in the number of females accepting PGR appointments. Our undergraduate focus groups highlighted that female undergraduates were focussing on the long term career and family plans. They felt being a student for three more years could delay their family and career plans.</p> <p>Our PGT female students are not attaining distinctions. This is required for PhD study at Bath.</p>	<p>3a. Provide case studies on the advantages of a PhD for your career.</p> <p>3b. Investigate reasons for female PGT students not attaining Distinctions.</p> <p>3c. Embed advertising PhD opportunities earlier in the academic year</p> <p>3d. Investigate in detail the reasons for the increase in the relative offer rate for female and male PhD applicants, including whether this is due to clear differences in the calibre of female and male applicants.</p> <p>3e. In 2015 17% of our PGRs teaching undergraduate labs were female. We wish to sustain this and will therefore have a target of 20% of PGRs engaged in undergraduate teaching should be female</p>	<p>From Nov 2017 to Nov 2019.</p> <p>Oct 2017 to Oct 2020</p> <p>From Nov 2017 to Dec 2018.</p> <p>From Nov 2017 to July 2018.</p> <p>In place by July 2018</p>	<p>PGR Director of Studies.</p> <p>PGT Director of Studies</p> <p>PGR Director of Studies.</p> <p>PGR Director of Studies.</p> <p>PGR Director of Studies</p>	<p>Portfolio of case studies created, with a defined process for updating and monitoring.</p> <p>More female PGRs accepting PhD appointments.</p> <p>Underlying causes identified and actions put into place to address issues.</p> <p>Equal proportions of women and men gain distinctions.</p> <p>Practice of advertising PhD opportunities before Christmas in place.</p> <p>Report to DSAT with reasons and proposed actions</p> <p>Target implemented. Checks show that at least 20% of PGRs engaged in undergraduate teaching were female.</p>

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
		3f. Provide role model case studies of PGRs with families whilst studying for their PhD	From Nov 2017 to Nov 2019.	PGR Director of Studies and DSAT PGR representatives	Checks show that website has case studies of PGRs with childcare responsibilities.
4	<p><b>Increase number of female postgraduates progressing to research staff</b></p> <p>As with our PGR data our PDR female numbers are also decreasing. The aim of this action is to increase the number of female PDR staff in the Department.</p>	4a. Embed and encourage the uptake of the VITAE tool and assess its usefulness in career management by running survey.	Dec 2017 to Aug 2019	Department research staff co-ordinator and DSAT PGR and PDR representatives	VITAE tool purchased for all PGRs and introduced at induction. 60% using VITAE.
			Dec 2017 to Aug 2020.		Survey PGRs on effectiveness of VITAE shows 75% positive responses.
		4b. Embed practice that every 6 months, supervisor discusses career management plan with PGR student. Compliance to be measured by PGR 6 monthly review form	Dec 2017 to Aug 2018.	PGR Director of studies	70% compliance
			Dec 2017 to Aug 2021		80% compliance.
		4c. Monitor number of PGRs wishing to enter academia and their feedback on support provided at Department.		PGR Director of studies	
		i) Collect data on PGRs interested in academia to establish benchmark data, and embed career intention data collection process	From Oct 2017 to Jan 2018		Data collected on PGRs interested in academia embedded and data benchmarks established
		ii) Hold focus groups with PGRs to collect information on their views of careers support and barrier to undertaking an academic career and use information to improve support offered, in particular around academic careers.	Jan 2018 to Dec 2020		Discussion groups held and changes to support implemented. Annual PGR survey shows 80% of PGRs satisfied with career support.
iii) Monitor destinations of PGRs using DLHE survey results and by surveying research supervisors.	April 2022		70% of PGRs wishing academic careers are successful. Overall Increase interest in academic careers by 10%.		

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
5.	<p><b>Increase number of female research staff progressing to Academic Staff</b></p> <p>The department over the last two years has had a strategy of employing staff at lecturer level to build up our pipe-line of talent. Several of our recent appointments at lecturer level have been women, and currently 20% of the academic staff are female.</p> <p>We would like to continue this trend and aim to have 25% of our academic staff being female by 2021.</p>	5a. Allocate career mentor to every new PDR starter.	Nov 2017 Nov 2018	Department research staff co-ordinator	100% of new starters allocated a career management mentor
		5b. Embed and encourage the uptake of the VITAE tool. Collect feedback and Continue onwards if feedback positive.	From Dec 2017 to Dec 2018.	Department research staff co-ordinator	All staff who wish to use the full VITAE Tool have the tool purchased for them by the Department. Feedback collected, and decision made as to whether to continue practice.
		5c. Establish process for providing PDRA staff the opportunity and training to be involved with teaching.	Complete by Oct 2018.	Department research staff co-ordinator	Process in place for offering all PDRA's the opportunity to be involved with teaching. Training course in place (including E&D), and all PDRA's required to take the course before being allowed to teach.
		5d. Embed encouragement of PDRA staff to apply for Academic Career Academy which is a scheme run by the Faculty.	December 2017 – December 2019	Department research staff co-ordinator	At any one time, at least 25% of PDRA's to have applied for Academic Career Academy.
		5e. Increase awareness of a pilot scheme to provide PDRA's with the opportunity to become Associate Fellows of HEA.	Completed by January 2020.	Andrew Heath, Director of Centre for Learning & Teaching	Survey results shows 75% of PDRA's report good awareness of the scheme, and at least 25% of PDRA's have applied for Associate Fellowship of the HEA
		5f. Encourage PDR staff to become researcher co-investigators (Co-I) on eligible research grant submissions.	From Oct 2017 onwards. Standard practice by 2021.	Chair of Research Committee	All applications with named researcher Co-I are reviewed to ensure research staff Co-I are discussed, and named as a Co-I where appropriate. 50% increase in named researchers becoming researcher Co-I.

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
		5g. Follow up research staff who have not had SDPR within 3 months of annual target date to ensure compliance with department policy.	From Jan 2018 onwards. 100% compliance by Jan 2020	Department research staff co-ordinator	Increase SDPR compliance for research staff from 51% to 100%
		5h. Directly advertise PDRA vacancies amongst our PGR community as standard and provide advice and feedback to all PGRs who show an interest	From Jan 2018 onwards. Standard practice by 2021	Department research staff co-ordinator.	Data collected on PDR vacancies, interest shown, short listing and success rates.  Increase success of our female PGR becoming PDRA's by 10%
		5i. Examine the leavers' data for research staff in detail to determine why the leaving rates for females are higher than those for males. Present actions in order to reduce the leaving rates for females.	From Jan 2018 to Sept 2021	Department research staff co-ordinator.	Report presented to DSAT with detailed breakdown for leaving destination of female and male PDRAs focus in particular on the leaving data for females. Changes made so that leaving rates for women fall to within the same range as those for men.
6.	<b>Embed good practice into Departmental recruitment process for research staff</b>  We have been successful at recruiting more females as academic staff. In achieving this success we have changed our recruitment processes to embed good practice.  We believe adopting the same practices at PDR level will yield the same benefits.	6a. Embed practice of no all-male short lists for PDRA positions without a gender focus search strategy.	Nov 2017 to Nov 2019	Deputy HoD	Data gathered demonstrating process is being applied in 100% of vacancies.
		6b. Embed practice of mixed gender short lists and interview panels for all advertised PDR staff positions	From Nov 2017 to Nov 2018	Deputy HoD	Good practice is shown to be sustained through evidence based data demonstrating all shortlist and interview panels are mixed gender.
		6c. PDR staff adverts and particulars to include our Department statement on inclusivity	From Nov 2017 to Jan 2018	Deputy HoD	Human Resources use template provided by Department when placing adverts. 100% compliance

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
		6d. Embed practice of including a female contact listed on all job adverts.	From Nov 2017 to Nov 2018	Deputy HoD	Data gathered demonstrating process is being applied in 100% of vacancies.
		6e. Review recruitment practices for PDRAs to ensure that process changes are in place and to measure effect in respect of the recruitment of female PDRAs	Dec 2020 to June 2021	Deputy HoD	Review completed and demonstrates that all changes are being consistently applied. Demonstrable evidence of improvement in females applying for PDRA positions. Applications to consist of at least 20% from females.
7.	<p><b>Support progression to senior academic posts, including proactive identification and encouragement of the best female candidate(s).</b></p> <p>Our current bronze actions have resulted in successful promotion of our first female professor. However, we recognise that one success does not show sustained success. This action is to embed good practice further to enable planned career progression for staff moving to senior roles.</p>	7a. Increase the number of women senior lecturers participating in the Aurora programme by encouraging eligible staff who wish to apply to do so. To provide women who are unsuccessful with feedback and training identified to assist in meeting their goals.	From Oct 2017 to Sept 2019	HoD	70% of eligible staff enrolled on Aurora training programme within five years of appointment.
		7b. Currently there are no females in senior Department roles and 50% females in senior faculty roles. Achieve a more balanced gender representation in senior departmental roles by encouraging more females to apply for senior departmental roles such as HoD, Deputy HoD, Director of Research, HoG, Director of Studies, Director of Learning and Teaching.	From Dec 2017 to Dec 2019	HoD	20% of roles are held by women reflecting our current proportion of women academics
		7c. Embed the practice of proactively using SDPR to encourage women to apply for more senior roles and promotion. Monitor figures of women applying for roles or promotion and take action as required to address any gender issues.	From Jan 2018 to Jan 2020	HoD	SDPR checks demonstrate that women are being encouraged to apply for senior roles and promotion. Increase in applications for senior roles at Department level from 0% to 33%.  Applications for promotions are equal in proportion to male applications.

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
		7d. Implement and embed departmental monitoring of all staff training by collating training data from HR, Research Innovation Services and Academic Staff Development every 6 months	From Jan 2018 to Jan 2019	Department Co-ordinator	Process in place. Comprehensive reports on staff training available every 6 months.
8.	<p><b>Improve SDPR process and feedback mechanisms</b></p> <p>During our bronze award period we have altered our appraisals process to specifically highlight career management. However, feedback from our 2017 Department culture survey highlighted that the quality of SDPR varied and the feedback was variable between groups. 28% of staff were unclear on what happened regarding follow up of SDPR</p>	8a. Ensure all staff undertaking SDPR are trained in good SDPR practice. Implement system for checking on training status of all reviewers before SDPR cycle begins.	From Oct 2017 to Jan 2018	HoD	<p>All staff undertaking SDPR are trained and training is monitored.</p> <p>Survey results show at least 75% of staff believe review is of good quality.</p>
		8b. Undertake a short yearly survey specifically on SDPR process to identify areas for improvement.	From Oct 2017 to Jan 2019	DSAT representative for staff development and review processes.	<p>Annual April survey in place.</p> <p>90% of staff, including PDRAs, report being clear about the process and follow-up.</p>
		8c. Improve the career planning for more senior professional and support staff. Ensure that SDPRs cover options for progression at the university and outside and that training needs to meet those aspirations are identified and acted upon.	From Oct 2017 to Jan 2019	HoD	Annual SDPR survey show that 70% of experienced professional and support staff report that their career aspirations and progression is covered and that training needs are met.

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
9.	<p><b>Improve awareness of career break policies and improve support upon return to work</b></p> <p>Our recent culture survey highlighted the need for greater support for staff when they return from parental leave.</p>	9a. Have a clear documented department process which provides details on how we implement and support maternity/shared paternity leave. Emphasising support over and above HR policies. 2017 culture survey showed 36% of staff were unclear on how career breaks are considered	Jan 2018 to April 2019	HoD.	Document created, discussed and agreed at a staff department meeting.  Culture survey showed no more than 15% of staff are unclear on how career breaks are considered.
		9b. Ensure all maternity / shared paternity leave staff have a reduced load for a year after returning to work.	Aug 2017	HoD.	100% compliance that all academic staff who have maternity / shared paternity leave protected for one-year after returning to work.
10.	<p><b>Create a robust and transparent standard operating procedure for committee appointments</b></p> <p>Currently we have a process of advertising committee vacancies via email. However, in our 2017 survey staff were still unsure of the process and only 12% of committees are chaired by a female.</p>	10a. Culture survey showed 27% of staff do not understand how to become committee members. Review and modify standard operating procedures for committee membership. Document the process including timings when vacancies will arise.	March 2018 to March 2019	HoD	Document process setting out processes for committee membership and timings when vacancies will arise. Culture survey show that no more than 15% of staff report that they do not understand how to become committee members.
		10b. Encourage females to apply for Chair vacancies.	Jan 2018 to Jan 2021	HoG	Percentage of female Chairs of committees to be equivalent to gender balance in Department staff.
11.	<p><b>Improve gender balance of speakers at seminars and events</b></p> <p>Our data for speakers at our Departmental seminars shows only 7% of speakers were female. This gender imbalance needs addressing.</p>	11a. Embed processes for monitoring of the gender balance of seminar speakers and report data to DSAT every quarter. Ensure that each year 20% of presenters at departmental seminars and events are female.	Oct 2017 to Oct 2018	Seminars Co-ordinator	Monitoring in place and quarterly reports made to DSAT. 20% target reached.

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
12	<p><b>Improve the transparency of the WLM</b></p> <p>Although the reported transparency of the WLM has improved, only 51% of men (and 76% of women) report that they consider the WLM to be transparent.</p>	Improve the reported transparency of the WLM by improving the description of the operating of the WLM and by ensuring that WLM issues are regularly discussed in staff meetings.	From Jan 2018 to Jan 2020	HoD	WLM description improved. WLM regularly discussed at staff meetings. Survey shows that at least than 70% of men and women report that they consider the WLM to be transparent.
13.	<p><b>Increase visibility of female role models and diversity in Department</b></p> <p>Qualitative feedback from our staff and student culture surveys highlighted that the diversity in the Department was not as wide as it could be. We need to increase our diversity (action 6) and ensure the diversity is visible.</p>	13a. Ensure standard practice is that we have diversity in staff and visitors providing lectures and seminars.	From Oct 2017 to Oct 2019	Insight to engineering staff co-ordinator.	20% of Inside Engineering talks are given by females.
		13b. Biannual undergraduate student survey showed 20% did not feel that there were diverse role models within the department and therefore undertake a review of the Department website and in future use the web pages/social media to advertise successes of staff ensuring that examples represent a diversity of backgrounds.	From Nov 2017 to April 2021	DSAT Chair.	Initial review undertaken, and staff successes publicised with an awareness of the need to ensure that a variety of backgrounds should be represented.
		13c. Establish annual Athena SWAN lecture celebrating achievements of female role engineering models.	From Jan 2018 to Jan 2021	HoD	No more than 10% of undergraduates to report that they did not feel that there were diverse role models within the department.
14.	<p><b>Increase recognition for those undertaking outreach activities</b></p>	14a. Introduce Department prizes to reward outstanding outreach work for staff and students.	May 2018 May 2019	Outreach co-ordinator.	At Department Design Exhibition prizes presented for outreach work.
		14b. Establish use of the Department web pages/social media to highlight outreach work and maximise recognition of excellent work.	From Nov 2017 to Nov 2019	Outreach co-ordinator.	Process in place that Department web pages and social media updated with new outreach content at least once a month.

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
	We have an excellent outreach range of activities, however, we recognise the workload they can require. We would like to increase activities and reward appropriately.	14c. Change WLM template to specifically include outreach activities for all staff. Outreach data separately collated.	From Dec 2017 to Dec 2019	Department outreach officer	WLM template modified and check show that outreach data are routinely collected and collated.
		14d. Improve the collection of data on school-age participants in outreach activities to include gender and school type.	From Dec 2017 to Dec 2019	Department outreach officer	Data collection tools trialled and final version in use for all outreach events.
		14e. Use participant data to embed reporting on gender and school type of participant in outreach events	From Jan 2020 to Dec 2021	Department outreach officer	Report overall participation in outreach events presented to DSAT annually. Aim to have at least 40% female participants.
		14f. Evaluate a set of outreach events with particular reference to females' attitude to mechanical engineering	From Oct 2018 to Sept 2019	Department outreach officer	Evaluation designed and carried out. Results used to feed back into the design of outreach events in order to further improve females' perceptions of mechanical engineering.
15.	<b>Improve long-hours culture and workload management</b>  Comments from our staff surveys highlight many staff have difficulties managing work-life balance. This is a key issue to address.	15a. Improve Department awareness and provision of mental health support by encouraging training in Mental Health First Aid.	Jan 2018 to Jan 2020	HoD	Minimum of 20% of academic staff trained in Mental Health First Aid.
		15b. Committee meetings to be timed and clear decisions required highlighted at start	From Sep 2017 SOP by Sep 2018	HoD	Committee maximum duration 90 minutes. Must have a decision-making activity to be held.  Data demonstrates 100% compliance by September 2018.
		15c. Departmental seminar held to discuss managing high workloads and if successful established as an annual event.	March 2018 to March 2019	Seminars co-ordinator	Feedback gathered from seminar to monitor effectivity.  Culture survey results demonstrate improvement in work-life balance amongst staff, with at least 75% of staff reporting having a good work-life balance.

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
		15d. Embed practice that a life coach is made available for staff requiring assistance in managing their workloads and establishing a good work life balance.	From March 2018 to March 2021	HoD	Evidence provided that all staff requesting a life coach are provided one. Staff survey data to indicate that at least 75% of staff report having a good work-life balance.
16.	<p><b>Increase proportion of women in the Technical and Experimental job family in the Faculty of Engineering &amp; Design</b></p> <p>The low proportion of women in the Technical and Experimental job family in the Faculty of Engineering &amp; Design does not provide a good role models for students.</p> <p>The Director of Technical Services has a University SWAN action to increase proportion of female technical staff in the Faculty from 9% to at least 20% by 2020.</p>	16a. Establish a set of comparators to enable benchmarking the department's technical and experimental staff against national indicators. Establish production of annual comparison statistics.	March 2017 to March 2018	Director of Technical Services within Faculty.	Comparator dataset established, and annual reports produced.
		<p>16b. Survey staff to analyse recruitment issues and retention rates with particular focus on recruitment and retention of women. Use finding to produce actions to improve the recruitment of women which are proposed to DSAT.</p> <p>Implementation of proposed actions initiated.</p>	March 2019 to March 2022	Director of Technical Services within Faculty.	Reasons for low proportion of recruited female technical staff identified. Actions identified and implemented. Target that at least 30% of applicants for technical posts should be from women.
17.	<p><b>Continue to improve social culture across all department levels</b></p> <p>Our survey highlighted that most social activities are at group level, and students and staff would like more events for the whole Department</p>	There are five teaching groups in the Department and each Christmas/Summer a different group will lead the activity for the whole Department (all students, staff and families).	From Nov 2017 to Sep 2020	HoG in rotation	Regular cycle of bi-annual events (Christmas and early Summer) established. Improved staff feedback on social activities and inclusiveness within the Department with at least 90% of women and men reporting this.

Action	Objective and Rationale	Key outputs and milestones	Timeframe	Person responsible	Success criteria
18.	<p><b>Improve the feedback and monitoring of induction processes across all levels</b></p> <p>The induction process to date has been left to individual academics and the quality of the induction can vary. Through training and monitoring we aim to ensure consistency of inductions.</p>	18a. Have a formal process to ensure each new staff member is offered a high-quality induction to the Department as standard.	From Jan 2018 to 2020	Department Co-ordinator	<p>Formal process created, discussed and agreed at Department Meeting. Improved induction implemented.</p> <p>Survey of new starters indicates that 90% of new starters from point of new induction process felt that the induction process was high-quality.</p>
		18b. Circulate improved induction procedures to all academic staff, and store on intranet.	Jan 2019	HoD	Staff culture survey indicates an increase in awareness of induction procedures- 75% of all staff report awareness of processes.
		18c. Improve monitoring of all academic and professional and support staff who are given induction. Introduce a checklist to be held by the inductee and to be signed off by the inductee and their line manager on completion of induction process.	From Jan 2018 to Dec 2019	Department Co-ordinator	<p>Checklist system introduced, and record kept of completed inductions of all new staff.</p> <p>100% inductions fully undertaken by 2019.</p>
19.	<p><b>Increase awareness of support channels for those bullied or harassed</b></p> <p>Some comments in our culture survey highlighted concerns related to harassment and bullying. Greater awareness of support channels is required.</p>	19a. On the Department web pages/social media include information for students on who they can go to for advice and support for harassment and bullying.	Jan 2018	Department Co-ordinator	Information on Department harassment and bullying support is available online.
		19b. Organise a presentation from HR updating staff on current University harassment and bullying policy.	Feb 2018	Seminars co-ordinator	Seminar held and feedback gathered on how to minimise harassment and bullying within Department.
		19c. Ensure messages around expected languages and “informal” behaviours are explicit and identify and embed mechanisms to remind staff and students of the department’s expectations.	Dec 2017 to Dec 2019	Department Co-ordinator	Staff surveys show no reports of off putting “banter” which offend.

## 8.2 Progress on the Bronze Action Plan

Key:  = Green, action completed successfully,  = Amber, action partially completed and continued in SA,  = Red, action not completed

Action	Objective	Actions Achieved	Impact and sustainment of good practice
1	STUDENT DATA AND SUPPORTING EVIDENCE		
1.1	The department to find out student perceptions of gender equality within the Department.	Undergraduate focus group undertaken. No perception of inequality within the Department, but students reported that there was a pre-university gender bias and this will be addressed through increased Outreach activities.	 Findings have fed into future SWAN actions. In particular further focus groups and cultural study development.
1.2	Gender specific email lists required to assist in focused communication with students and staff.	Gender email lists now automatically created for all groups in the Department (UG, PG, Staff). List is generated centrally and automatically updated.	 The good practice proposed by the Department has been adopted by the whole University as good practice. 
1.3	Provide pre-university students with the opportunity to be exposed to engineering as a subject to be considered.	Minimum of four Year-10 Taster lectures undertaken each year. Minimum of four Year-12 taster lectures undertaken each year. An annual 'girls into engineering' inspirational event organised hosted in the Department.	 All actions completed and now embedded as part of our outreach activities.  Furthermore, the Department has undertaken additional activities such as a summer school to introduce students to engineering. 
1.4	Create innovative ways to engage students in STEMM and encourage female pupils to consider and select engineering.	Science of sport curriculum created, pupil workshops undertaken and iPad application created for use by teachers (sport and key stage activities). Department has been instrumental in working with the IMechE in preparing a venture with primary schools.	 Results from both pilot schemes trialled in local schools with very promising results. Both schemes will be expanded out over the coming years. 
1.5	Create and promote the women in engineering network for our current students, which is run by the students.	Bath Student Women in Engineering society (WESBath) remains a success. By 2017 50% of the female students in the Department are now members of WESBath. Two students each year funded by the Department to attend annual Women in Engineering Student Conference.	 Our target of 80% membership of WESBath for our female students has not been reached, but there has been a significant increase in membership due to these Bronze actions, and a more positive perception of the society within the department.  

Action	Objective	Actions Achieved	Impact and sustainment of good practice
		<p>WESBath society details provided at every UCAS talk and stand at Open days.</p> <p>Programme of events held throughout the year for the students, starting with a department induction week event to encourage membership and awareness.</p>	<p>WESBath is now self-sustaining due to its success, and the student committee attract both external and internal funding.</p> <p>As well as supporting each other, WESBath undertake a variety of outreach activities to encourage women into engineering.</p>
1.6	Set in place routine collection of data in gender mix for internal PG recruitment talks.	Each recruitment day for postgraduates there is now always a 50% gender split in the talks from the post-graduate researchers, and of the academic speakers the gender breakdown has been at lowest of 25% female.	Despite these actions being successfully implemented, unfortunately our percentage female applicants for postgraduate research positions has continued to reduce. Additional approaches have been suggested in the Silver Action Plan to address this.
1.7	Enhance promotional materials for all courses and postgraduate research degrees.	Promotional literature is now reviewed every year to ensure gender mix.	Applications still low despite these actions. Approaches to address this are detailed in the Silver Action Plan.
1.8	Encourage women into mechanical engineering.	<p>Bath WES group is introduced at all UCAS day recruitment events.</p> <p>Range of outreach activities encouraged within the Department (see Section 5.6)</p>	Female undergraduate applicants increased from 215 in 2013, to 304 in 2016). Offers to female candidates have also increased from 11 to 13%.
1.9	Encourage women to apply for postgraduate positions.	<p>Focus group held with final year students and now have a better understanding on what factors attract female applicants.</p> <p>Issues identified were that long term planning was a priority, and insufficient female role models in the department. The department has now increased the percentage of female academic staff so have more female role models. Work still required to address planning concerns (see Silver Action Plan).</p>	<p>Postgraduate research applications have decreased from 18 (12%) in 2013/14 to 14 (11%) in 2015/16. However the percentage of female applicants offered a place has increased from 39% in 2013/14 to 71% in 2015/16.</p> <p>Actions to improve applications are detailed in the Silver Action Plan.</p>

Action	Objective	Actions Achieved	Impact and sustainment of good practice
1.10	Monitor processes used by individual academics for PGR recruitment and monitor short-listing of applicants who are interviewed.	Mandatory training provided to all academics on unconscious bias, and selection and recruitment panel procedures.	 This action was superseded by the fact that University processes have been changed where the quality of the student is the primary metric for decisions.
2.1	Encourage our PGRs to move to PDRs, and increase recruitment of female post-doctoral researchers.	<p>Focus group was undertaken and actions to look at career progression of PGRs identified.</p> <p>Events have been held to inform and encourage students to the use of VITAE, however uptake is still low.</p> <p>PGRs are now engaged in the weekly departmental seminars and attendance is monitored.</p> <p>Each year an ECR hosts an annual department seminar on career progression.</p>	<p> We have a better understanding of the factors which influence PGR's decision whether to progress to PDR and have implemented activities to address these factors.</p> <p> In 2015 37% of research staff appointed were female, compared to 18% in 2013.</p> <p></p> <p></p>
2.2	Increase recruitment of female PDRs.	Academics encouraged to include wording on job adverts to encourage applicants with caring responsibilities.	 In 2013/14 12% of our PDRs were female. In 2015/16 this has risen to 15%.
2.3	Collect data on PDR career development and adoption of the VITAE framework.	<p>Focus group undertaken with PDRs and meetings with the Department's research staff co-ordinator.</p> <p>Appraisals are now scheduled by Department administration support, and the appraisal document includes a section on career aspirations/development, followed by a section on specific project deliverables.</p> <p>The use of VITAE or similar tool is falling below what we would like to assist staff in their career management.</p>	<p> The measures implemented have been well received by several research staff but career progression continues to be an area of concern for research staff and forms a key part of our Silver Action Plan.</p> <p></p> <p></p>
2.4	Increase number of female applicants and shortlisted female applicants for academic posts.	<p>100% of adverts now include agreed wording to encourage applicants with caring responsibilities, and include contact details for both a male and female member of staff.</p> <p>100% of staff on recruitment and selection panels have now undertaken mandatory Recruitment and Selection, Diversity in the workplace, and Unconscious Bias training.</p>	<p> The percentage of female academic staff has increased from 15% in 2013 to 20% in 2015.</p> <p> In the past 24 months there has been 15 lectureships appointed, and 5 of these positions were female (33%).</p>

Action	Objective	Actions Achieved	Impact and sustainment of good practice
		100% of shortlisting and interview panels now have a gender mix. 	
2.5	Improve transparency of promotions processes.	<p>Specific seminars de-mystifying the promotions processes have been held. </p> <p>Criteria for promotion is now a specific section for discussion in appraisals. </p> <p>HoD discusses criteria with potential applicants, applicants are also given feedback from senior staff so they can improve their application. </p>	The department's 2017 culture survey showed 76% of staff agreed or strongly agreed that the Department encourage staff to apply for promotion, regardless of gender; an increase from 58% in the 2013 survey.
2.6	Tackle negative views within the Department regarding Athena SWAN.	<p>Staff kept informed of developments in practices in the Department which benefits all staff. Staff informed through regular updates on the website, and at department meetings led by the HoD (min 1 per year). </p> <p>Annual staff culture survey used to gauge staff feeling about working in the department. </p>	<p>Survey results analysed by the DSAT found a year-on-year increase in staff satisfaction with the culture in the department, to 65% satisfaction by 2017.</p> <p>Still work to be done but more positive outlook is encouraging.</p>
3.1	Improve internal research staff progression to lectureship posts	<p>Focus groups with research staff undertaken and departmental research staff co-ordinator activity working with research staff and monitoring key issues </p> <p>Through departmental career seminar given by ECRs, promoted training (such as Futures awards), fellowship and grant writing opportunities. </p> <p>It is important for the career progression of research staff that they are listed as co-investigators on research grants. Currently this is still not possible unless it is a fellowship application. The DSAT is actively working with our grants team to address this. </p>	<p>Two female research staff have been promoted to lectureship posts in the past two years (see Case Study Nicola Bailey).</p> <p>Two of our current female research staff are applying for fellowship grants.</p>
3.2	Increase transparency of appraisals processes	A new template has been created for appraisals, which includes discussion of career progression.  	In the university survey regarding the appraisals process, in response to the question "Did you agree clear objectives as part of your SDPR review?" increased by

Action	Objective	Actions Achieved	Impact and sustainment of good practice
		<p>Promotions process clearly explained at staff meetings, simplified flow diagrams created and disseminated.</p> <p>Training of academic staff in how to conduct appraisals is patchy and the efficacy of the training is not currently monitored.</p>	<p>20% for our department. More work to be done to monitor appraisals to ensure they are consistent and effective.</p>
3.3	Increase number of female professors in department	<p>100% of female readers within the Department have an action plan for progression to professor, but this needs to be extended to male readers.</p> <p>Mentoring champion now responsible for finding a mentor for any member of staff who requests one.</p>	<p>Department now has a female professor who was promoted from reader in 2016.</p>
4.1	Monitor student and staff perception of inclusiveness within the department	<p>It is now embedded in the culture of the Department that there are focus groups and annual surveys held.</p>	<p>Increase in academic staff agreeing or strongly agreeing that the Department is inclusive and supportive (Staff survey results, 52.5% in 2013, 65% in 2017).</p>
4.2	Increase awareness amongst academic staff of the faculty 'Women in Engineering network'	<p>The women in engineering network has been recognised and has regular attendance from ECRs from the department.</p>	<p>Women in Engineering network was instrumental for Prof Newnes promotion (see Case Study 2)</p>
4.3	Reduce long-hours working culture in the department	<p>Timing of all committees and departmental social events (such as monthly coffee morning) now scheduled to be between 10am and 4pm.</p> <p>All staff were invited to attend a 'Mental Health First Aid' training course run by the university, but more work on mental health issues planned in the Silver Action Plan.</p> <p>Department has been recruiting new academics to improve student to staff ratios, due to several staff retiring the impact of this has been reduced.</p>	<p>Surveys indicate there is a long-hours culture across the whole university and this is an endemic issue which remains a problem. The Silver Action Plan details how we plan to alleviate this.</p>
4.4	Improve nursery provision	<p>This issue was raised to the USAT, who presented to concerns regarding provision to the nursery. The University has actively disseminated the use of child care vouchers.</p>	<p>Nursery provision remains limited and some staff members have been forced to use nurseries off-campus. The department</p>

Action	Objective	Actions Achieved		Impact and sustainment of good practice
		Although the issue has been raised on-site provision remains limited.		has limited powers to address this but it is being examined at a university level.
4.5	Increase awareness of the flexibility on paternity leave and shared leave.	<p>The university has actively disseminated the paternity leave guidelines and staff in the Department are fully supported when applying for paternity leave.</p> <p>The paternity leave process is embedded through HR, is followed, and is transparent.</p>	<p>G</p> <p>G</p>	Only one male has taken more than a two-week paternity leave. However, all males are aware that the support is available. However, we recognise this is a complex issues which includes many factors, and the Silver Action Plan aims to identify reasons for the current low uptake.
4.6	Improve succession planning processes.	HoD and DHoD now follow the university process for filling vacancies. Appraisals are used to identify staff with the key skills required by the heads of groups, and this information is passed onto the HoD.	G	Future work aims to formalise these processes as a standard operating procedure within the department.
4.7	Improve transparency of committee membership.	<p>A department management document is now disseminated every year with all the committee members, purpose, roles and responsibility across the Department.</p> <p>Although the current process to filling vacancies is transparent, work is underway to formalise committee membership procedures (see section 5.6 (iii)).</p>	<p>G</p> <p>A</p>	The number of staff who agree or strongly agree that it is clear how to get onto important committees has increased from 27% in 2013, to 41% in 2017, demonstrating an improvement but numbers are still low.
4.8	Implement a 360 degree appraisals process.	360 degree appraisals were introduced as a pilot scheme with the HoD and Dep HoD. Based on the feedback it was decided that there would be more benefit to changing the structure of the appraisals process	A	Positive aspects of the 360 degree appraisals process have been incorporated into the new appraisals document.