



## Department Application Bronze and Silver Award



## ATHENA SWAN BRONZE DEPARTMENT AWARDS

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

## ATHENA SWAN SILVER DEPARTMENT AWARDS

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

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

## COMPLETING THE FORM

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

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

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

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

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

## WORD COUNT

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

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

We have provided the following recommendations as a guide.

Department application	Bronze	Our application
<b>Word limit</b>	<b>10,500</b>	<b>9,849</b>
<i>Recommended word count</i>		
1.Letter of endorsement	500	630
2.Description of the department	500	531
3. Self-assessment process	1,000	987
4. Picture of the department	2,000	1678
5. Supporting and advancing women's careers	6,000	5632
6. Case studies	n/a	
7. Further information	500	391

<b>Name of institution</b>	University of Bath
<b>Department</b>	Electronic and Electrical Engineering
<b>Focus of department</b>	<b>STEMM</b>
<b>Date of application</b>	30 <sup>th</sup> November 2018
<b>Award Level</b>	<b>Bronze</b>
<b>Institution Athena SWAN award</b>	<b>Date: April 2017      Level: Bronze</b>
<b>Contact for application</b> <small>Must be based in the department</small>	Despina Moschou
<b>Email</b>	d.moschou@bath.ac.uk
<b>Telephone</b>	01225 38 3245
<b>Departmental website</b>	<a href="http://www.bath.ac.uk/departments/department-of-electronic-electrical-engineering/">http://www.bath.ac.uk/departments/department-of-electronic-electrical-engineering/</a>

#### GLOSSARY

**AS** Athena SWAN

**AP** Action Plan

**AVD** Applicant Visit Days

**DSAT** Departmental Athena SWAN Self-Assessment Team

**EC** Environment and Culture

**ECRs** Early Career Researchers

**EEE** Electronic & Electrical Engineering

**EPSRC** Engineering and Physical Sciences Research Council

**FED** Faculty of Engineering & Design

**HoD** Head of Department

**IMEE** Integrated Mechanical and Electronic Engineering

**PDRA** Post-doctoral Research Associate

**PGR** Post-Graduate Research students

**PGT** Post-Graduate Taught students

**PSS** Professional and support staff

**REF** Research Excellence Framework

**SAC** Supporting and Advancing Careers

**SDPR** Staff Development and Performance Review

**UG** Undergraduate Students

**WES** Women in Engineering Society

**WG** Working Group

**1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT (630 WORDS)**

**Recommended word count: Bronze: 500 words**

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

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

**Dr Adrian Evans BEng PhD MIET CEng FHEA**

*Head of Department*

Telephone 01225 386303

Email [a.n.evans@bath.ac.uk](mailto:a.n.evans@bath.ac.uk)

Department of  
Electronic & Electrical  
Engineering



UNIVERSITY OF  
**BATH**

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Athena SWAN Manager,  
Athena SWAN Charter,  
Equality Challenge Unit,  
First Floor, Westminster Tower,  
3 Albert Embankment,  
LONDON SE1 7SP

12<sup>th</sup> October 2018

To Whom It May Concern,

**Athena SWAN Bronze Award Application**

I am very pleased to endorse our application for an Athena SWAN (AS) Bronze Award. Our Departmental Self Assessment Team (DSAT) was chaired by a female academic and its membership was gender balanced and had representatives from diverse roles within the Department. AS is an important activity within the Department and a critical instrument in implementing culture change within the Department and DSAT membership is recognised by a workload allocation in the University's Workload Model, with an additional allocation for the Chair.

As a member of the DSAT, I have been fully involved in the AS application process. Analysis of the data and the results of surveys and focus groups of staff and students has been instrumental in not only highlighting areas where we are doing well but, more importantly, revealing areas for improvement. In addition to informing our Action Plan, where possible an immediate start on addressing issues has been made. For example, the survey of academic staff revealed a lack of clarity about the promotion process and subsequently a presentation on the promotion process by member of the University's Academic Staff Committee was arranged for a Department Staff Meeting.

The application process revealed a significant increase to the proportion of female academic, research and teaching staff (up from 11% in 2013/14 to 20% in 2016/17). This is above the norm for the discipline and, in part, reflects our increased efforts to positively encourage females to join the Department. For example, we provide both female and male contacts for informal enquiries for staff posts and have a positive gender balance in promotional material for undergraduate (UG) and post-graduate (PGT, PGR) students. A less positive aspect identified was the lack of female representatives across all of the Department's committees; this has now been addressed and a transparent process of committee membership implemented.

Between 2013/14 and 2015/16 the percentage of female UGs and post-graduates in the Department showed a steady increase, such that we are now above the sector average. I am pleased to note that the proportion of females achieving higher degree classifications has also increased, and for postgraduate taught surpasses main attainment. We would like this trend to continue and will continue our outreach and work with the Faculty's Student Women's Engineering Society to help ensure it does.

As part of our Action Plan we are determined to develop staff mentoring and career development. Systems for these are in place for academic staff but the provision for postdoctoral research staff (PDRS) is less consistent. The AS process has identified PDRS as an under-recognised sector of the Department and addressing this through our Action Plan is a priority.

Both our AS application and Action Plan have evolved through full consultation with the Department's students and staff, including focus groups and internal surveys. Clear actions targets have now been set and achieving these will improve the Department's environment and diversity for all its members. To ensure the items in our Action Plan are delivered on, I will make all the necessary resources available. I will also ensure that all AS staff activity continues to be recognised in the workload model, through Staff Development and Performance Reviews and in probation reviews and promotion applications.

Finally, I can confirm that all the information in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the Department. This submission has my full support and I commend it to you.

Yours faithfully,



Dr Adrian Evans

Head of Department, Electronic and Electrical Engineering

(630 words)

## 2. DESCRIPTION OF THE DEPARTMENT (531 WORDS)

Recommended word count: Bronze: 500 words

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

The Department of Electronic & Electrical Engineering (EEE) is one of the four departments in the Faculty of Engineering & Design (FED) at the University of Bath. We are consistently ranked as a top 10 EEE Department in the UK, ranking #5 according to the 2019 Guardian University Guide and achieving an overall satisfaction of 88.24% in the 2018 National Student Survey. We deliver a range of undergraduate and postgraduate courses and specialise in electronic and electrical engineering research (91% graded as world leading/internationally excellent in REF2014, awarded in excess of £14 million of external funding over the last five years) across three key themes; each theme organized in an individual Centre:

- Centre for Advanced Sensor Technologies
- Centre for Space, Atmospheric and Oceanic Science
- Centre for Sustainable Power Distribution

All members of staff within EEE are allocated in the Centre more closely related to their research interests. Given the highly cross-disciplinary and collaborative environment in the University of Bath, many members of staff are additionally affiliated to existing intra-University Research Centres (e.g. Centre for Biosensors, Bioelectronics and Biodevices, Centre for Sustainable Chemical Technologies, Centre for Therapeutic Innovation, Water Innovation and Research Centre).

The department offers the following UG degrees, providing in all of them the option of an additional year dedicated to a sandwich industrial placement:

- BEng/MEng in Computer Systems Engineering
- BEng/MEng in Electrical and Electronic Engineering
- BEng/MEng in Electrical Power Engineering
- BEng/MEng in Electronic Engineering with Space Science and Technology
- BEng/MEng in Electronic Systems Engineering
- MEng in Robotics Engineering

We are also equally participating in the cross-departmental (joint Mechanical and EEE programme) MEng in Integrated Mechanical and Electrical Engineering (IMEE), providing again the option of an additional year dedicated to a sandwich industrial placement. The annual undergraduate intake is about 125 students across all programmes and the standard is high, with current offers being AAA for BEng/MEng programmes. The MEng Robotics Engineering had its first intake in 2018/19.

The MSc degrees offered by EEE are:

- Electrical Power Systems
- Electronic Systems Design (1<sup>st</sup> intake 2017/18)
- Mechatronics
- Robotics and Autonomous Systems (1<sup>st</sup> intake 2018/19)

There are 56 (11F: 45M) members of staff in the department and 674 (120F: 554M) total students on our UG, PGT and PGR courses. Professional and Support Staff (PSS) in this table refers to staff who are employed by the department. PSS who have a primary job



role within the department yet are managed within the faculty (which is the majority), are not included.

		2013/14			2014/15			2015/16			2016/17		
		Numbers		F (%)	Numbers		F (%)	Numbers		F (%)	Numbers		F (%)
		F	M		F	M		F	M		F	M	
Academic, research and teaching staff	Research	2	14	13%	2	20	9%	3	17	15%	5	19	21%
	Teaching	0	0	-	0	0	-	0	0	-	1	0	-
	Lecturer	1	7	13%	1	8	11%	1	8	11%	2	11	15%
	Senior Lecturer	0	10	0%	0	9	0%	0	6	0%	0	6	0%
	Reader	0	2	0%	0	3	0%	0	4	0%	0	3	0%
	Professor	2	4	33%	2	4	33%	2	4	33%	2	5	29%
	Other (eg. KTP)	0	4	0%	0	3	0%	1	2	33%	1	1	50%
	<b>Total</b>	<b>5</b>	<b>41</b>	<b>11%</b>	<b>5</b>	<b>47</b>	<b>10%</b>	<b>7</b>	<b>41</b>	<b>15%</b>	<b>11</b>	<b>45</b>	<b>20%</b>
Professional and support staff	Management, specialist and administration	0	0	-	0	0	-	0	0	-	0	0	-
	Technical and Experiment	1	0	100%	1	0	100%	1	0	100%	0	0	-
	Operational and Facilities Support	0	0	-	0	0	-	0	0	-	0	0	-
	<b>Total</b>	<b>1</b>	<b>0</b>	<b>100%</b>	<b>1</b>	<b>0</b>	<b>100%</b>	<b>1</b>	<b>0</b>	<b>100%</b>	<b>0</b>	<b>0</b>	<b>-</b>
Students	UG Students	63	416	13%	71	433	14%	84	447	16%	92	472	16%
	PGT Students	26	155	14%	14	161	8%	13	94	12%	10	57	15%
	PGR Students	17	44	28%	18	38	32%	19	31	38%	18	25	42%
	<b>Total</b>	<b>106</b>	<b>615</b>	<b>15%</b>	<b>103</b>	<b>632</b>	<b>14%</b>	<b>116</b>	<b>572</b>	<b>17%</b>	<b>120</b>	<b>554</b>	<b>18%</b>

Table 1: Total EEE number of academic staff, professional & support staff, and students by gender since 2013/14.

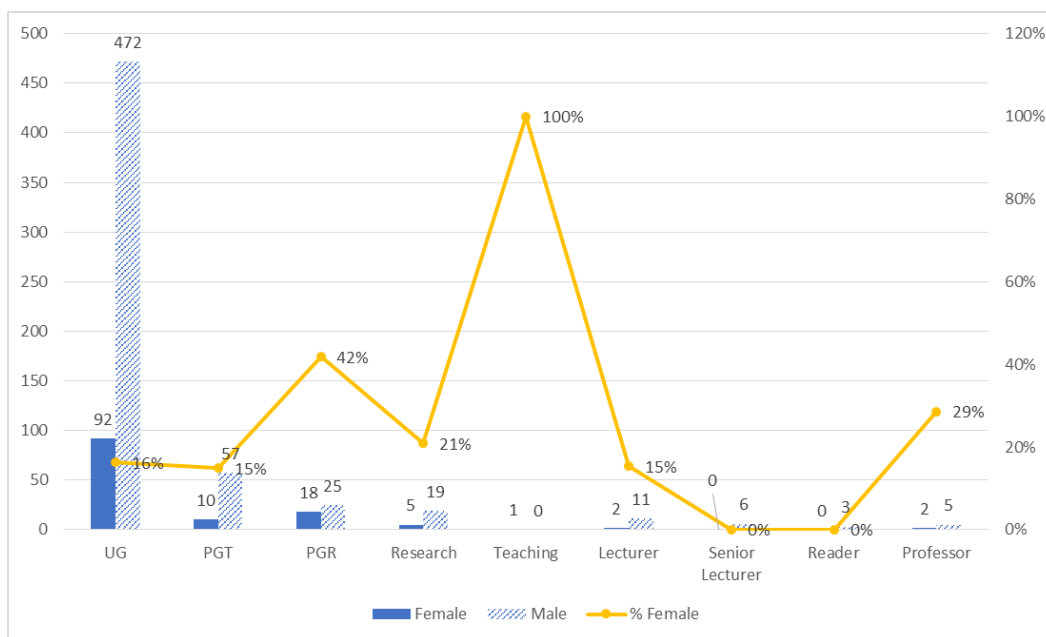


Figure 1: Current (2016/17) number of academic staff and students by gender and respective F:M ratios.

The Department is located in Building 2E, at the centre of Bath's attractive campus. 2E houses well equipped teaching laboratories, computer rooms and research laboratories. Additional research laboratories, including clean room facilities, are located elsewhere on campus. Over the 2015/16 academic year a £350k investment was used to create new student project activity spaces. Laboratory refurbishments are ongoing, as part of an ongoing investment in infrastructure. The teaching and research laboratories are supported by a Technical Manager, with a further six technicians working across all the laboratories. Notable social events for staff include the annual staff away day, twice-weekly coffee mornings, fortnightly coffee and cake afternoon catch-ups and early career academic bi-monthly Friday afternoon drinks. A block diagram of the Departmental administrative structure can be found in Figure 2.

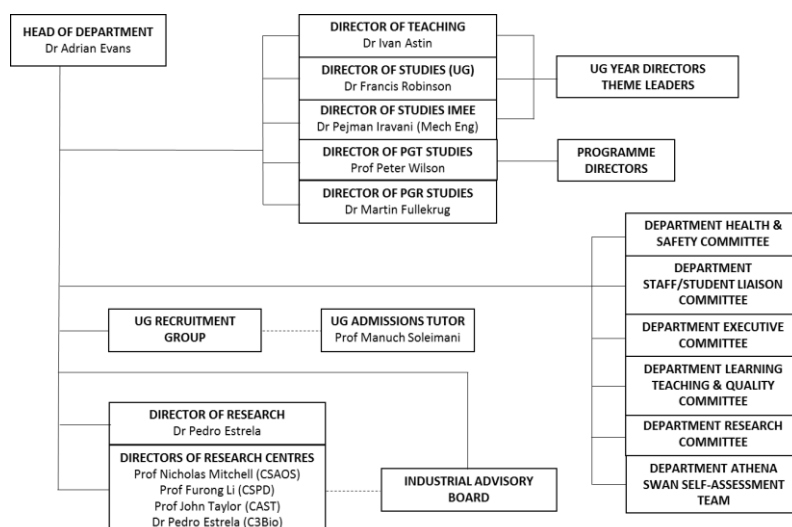


Figure 2: Block diagram depicting the administrative structure of EEE.

(531 words)





### 3. THE SELF-ASSESSMENT PROCESS (987 WORDS)

Recommended word count: Bronze: 1000 words

Describe the self-assessment process. This should include:

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

Our SAT has 14 members (5F, 9M), including students and academics at various career stages and Professional Support staff. The SAT reflects a diverse range of perspectives in relation to experience, work-life balance and career stage. Membership is voluntary, however some individuals have been approached by the HoD and DSAT chairs to ensure gender balance and experience. Chair is currently taken into account in the workload model, while an action to include membership also in the workload model has been identified to be implemented within this academic year. The DSAT membership is shown in the following table.

NAME	DEPARTMENT ROLE	DSAT ROLE	WORK-LIFE BALANCE
Dr Despina Moschou (F) 	<ul style="list-style-type: none"><li>• Lecturer</li></ul>	Co-Chair	
Prof Manuchehr Soleimani (M) 	<ul style="list-style-type: none"><li>• Professor</li><li>• Head of Recruitment</li></ul>	Co-Chair DSAT (2016-2018)	
Dr Pedro Estrela (M) 	<ul style="list-style-type: none"><li>• Senior Lecturer</li><li>• Director of Research</li></ul>	Co-Chair DSAT (2018 onwards)	
Dr Adrian Evans (M) 	<ul style="list-style-type: none"><li>• Head of Department</li></ul>	Head of Department	

<p>Mr Jamil Bataineh (M)</p> 	<ul style="list-style-type: none"> <li>• Postgraduate Research student</li> </ul>	<p>Focus: PGR students (PGR WG)</p>	
<p>Dr Seyed Mahdi Fazeli (M)</p> 	<ul style="list-style-type: none"> <li>• Research Associate</li> </ul>	<p>Focus: PDRA career development (SAC WG)</p>	
<p>Dr Martin Fullekrug (M)</p> 	<ul style="list-style-type: none"> <li>• Reader</li> <li>• Director of Studies for Doctoral Students</li> </ul>	<p>Focus: PGR students (PGR WG)</p>	
<p>Mr Oliver Holt (M)</p> 	<ul style="list-style-type: none"> <li>• Undergraduate student</li> <li>• Student Ambassador</li> </ul>	<p>Focus: UG and PGT students (UG/PGT WG)</p>	
<p>Dr Kang Ma (M)</p> 	<ul style="list-style-type: none"> <li>• Lecturer</li> <li>• Departmental Equality &amp; Diversity Officer</li> </ul>	<p>Focus: UG and PGT students (UG/PGT WG)</p>	
<p>Miss Gege Ma (F)</p> 	<ul style="list-style-type: none"> <li>• Postgraduate Research student</li> </ul>	<p>Focus: PGR students (PGR WG)</p>	





<p>Prof Cathryn Mitchell (F)</p> 	<ul style="list-style-type: none"> <li>• Professor</li> <li>• Academic Director of University Doctoral College</li> </ul>	<p>Focus: PGR career development (EC WG)</p>	
<p>Ms Fatima Mustafa (F)</p> 	<ul style="list-style-type: none"> <li>• Electronics Teaching Support Technician</li> </ul>	<p>Focus: Professional and Support Staff (EC WG)</p>	
<p>Dr Kerianne Nicoll (F)</p> 	<ul style="list-style-type: none"> <li>• NERC Research Fellow</li> </ul>	<p>Focus: Academic staff career development (SAC WG)</p>	
<p>Dr Paulo Rocha (M)</p> 	<ul style="list-style-type: none"> <li>• Lecturer</li> <li>• PDRA Departmental Coordinator</li> </ul>	<p>Focus: Academic staff career development (SAC WG)</p>	

Table 2: Current DSAT membership (November 2018).

(ii) an account of the self-assessment process

The initial group was formed by our current Head of Department, Dr Evans in November 2016. With the initiative of Dr Evans, an expression of interest invitation e-mail to all academic staff members within the Department was sent, looking for a chair of the Departmental Athena SWAN Self-Assessment team (DSAT). Dr Moschou volunteered for the role, based on her year-long involvement with the Equality Challenge Unit as a panel member and as a DSAT member in her previous institution. Based on her experience and commitment to AS principles, Dr Evans agreed; considering however Dr Moschou's Early Career Academic status and her very recent appointment within the Department (September 2016), they both agreed that it would be beneficial to the DSAT agenda if the DSAT chair responsibilities were shared with a more senior member of staff. Dr Soleimani volunteered as a co-chair until July 2018 (to be succeeded by Dr Estrela from August 2018). Hence, the first DSAT meeting was held on 27<sup>th</sup> January 2017 between the two co-chairs, the Head of Department and our Administrative support officer assigned by the Head of Department to the DSAT (Ms Sarah Stead). During the first DSAT meeting the membership of the DSAT was discussed and potential members identified across the

whole spectrum of our student and staff, aiming for the representative and balanced membership we have currently achieved.

Since this initial meeting, the DSAT has been meeting every two months for one hour, with a specific agenda circulated via e-mail in time before the meeting to all members. The agendas and minutes from each meeting are stored on a dedicated shared drive, which all members of the team can access and comment on. During the first DSAT meetings the agenda comprised with analysis of the University centrally provided student and staff data relating to gender equality, so that the DSAT could get a clear idea of what the current status within the Department is. The DSAT organized its first Department-specific staff survey during the annual Staff Away Day (September 2017), along with PDRA/PGR and UG/PGT surveys ran by the respective DSAT members. These surveys formed a much more complete picture of the Departmental Culture the staff and student statistical data were depicting, and hence these surveys are planned to happen on a biennial basis. The Actions described in the current application reflect exactly these areas of improvement the DSAT has identified ever since its establishment, as analysed in the following sections. The results of all surveys are initially discussed within the DSAT meetings for interpretation, discussion and action planning. AS update has become a standing item both on the Departmental Staff meetings as its Away Days, during which all of the Departmental staff is informed on the survey results, DSAT discussions and planned actions.

**Academic staff survey quote:**

“Embrace AS in real practice, not just for the award”

70% are familiar with AS principles

86% consider inclusivity policies important for current job role

The DSAT is also supported in its activities by the University Equality and Diversity Team, supplying centrally organized, accurate data for each department on a yearly basis. The results and actions of the DSAT are communicated at a University level via the Athena SWAN Leads University network, chaired and organized by the University Secretary at least bi-annually; this way we assure alignment of our actions with the University Athena SWAN and Equality and Diversity strategy and share practice with the other University Departments. We are also in close contact with our University’s Women in Engineering society, participating in their committee meetings and supporting them in their activities and events as requested. Our DSAT is also in frequent contact with numerous Electronic and Electrical Engineering DSATs across the country, exchanging experience and good practice, as also highlighted by recently participating in the organization and funding proposal for a sector-specific, EPSRC Network initiative (EP/S012397/1, “DiVERct: Inspiring diversity in ICT”, revised and resubmitted following EPSRC suggestion).

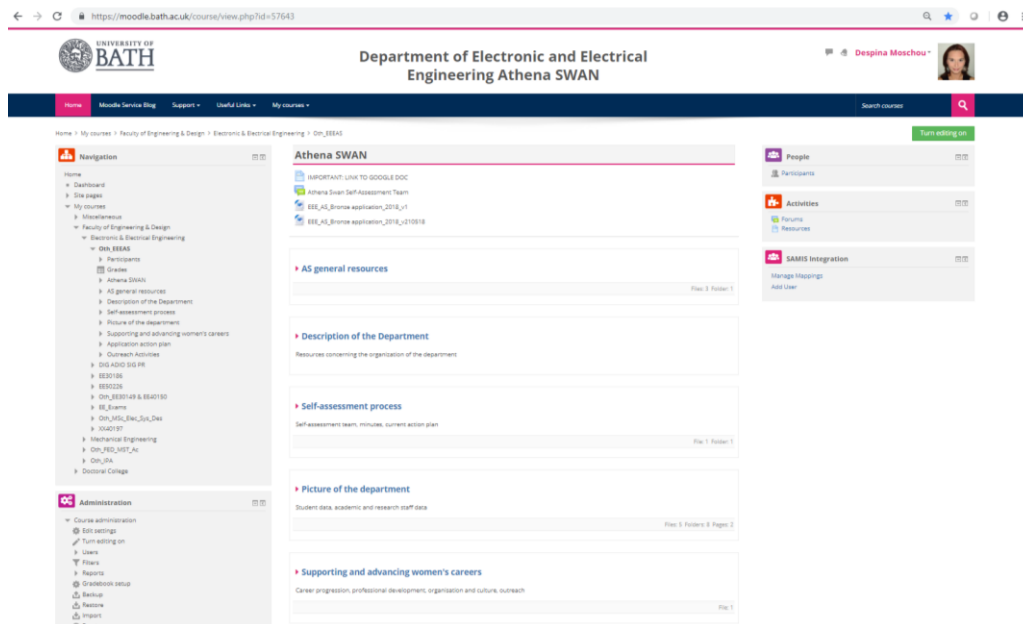


Figure 3: DSAT shared online collaboration platform.

### (iii) plans for the future of the self-assessment team

The DSAT will continue to maintain its already achieved diverse membership and assure the efficiency in the implementation of the action plan (**Actions A3.1-2**). The AP will continue to be reviewed at the start of every academic year, and updated at each meeting; specific actions will be added on the agenda for each meeting by the co-chairs (**Action A3.4**). Our DSAT Meetings will include:

- Monitoring our previous action plan and progress against each action (**Action A3.3**).
- Analysing and monitoring student and staff data by gender (**Action A4.1**).
- Planning future engagement and awareness events (**Actions A2.1-3**).
- Developing and analysing our staff and student surveys (**Actions A1.1-3**).

Our AP is constructed so that we can demonstrate impact and we are intending to apply for a silver award by November 2023.

Membership of the DSAT will naturally change over the following year as staff leave or assume new roles, but we will introduce a membership for 2018/19 with a 4 year term for academic/PSS members. It is the responsibility of the co-chairs to maintain a representative DSAT membership across all Departmental roles. Dr Estrela has taken over the role of DSAT co-chair from Dr Soleimani (August 2018); together with Dr Moschou they will be coordinating the implementation of the action plan. The workload model will also be revised during the current academic term, including also membership of the DSAT (**Action A3.5**). A web-presence of the DSAT on the Departmental web-site (**Action A2.1**) will also support the visibility of the AS agenda across the Department and aid with the further engagement of staff and students.

**Actions:**

- A1.1:** Biennial Departmental staff survey
- A1.2:** Biennial Departmental PDRA and PGR focus group
- A1.3:** Biennial Departmental student survey
- A2.1:** Web-page establishment
- A2.2:** DSAT update standing item on Academic Staff meetings and Away Days
- A2.3:** Coordinate actions with Faculty DSATs and University AS network
- A3.1:** Rotate SAT membership for diversity in expertise
- A3.2:** Create Deputy Chair shadowing prior to handover
- A3.3:** Create working groups corresponding to respective actions
- A3.4:** 5 DSAT meetings per year reporting progress on actions
- A3.5:** DSAT membership in workload model
- A4.1:** Collect and analyse UG, PGT, PGR, PDRA and staff data annually

(987 words)

#### 4. A PICTURE OF THE DEPARTMENT (1678 WORDS)

Recommended word count: Bronze: 2000 words

##### 4.1. Student data

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

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

n/a

- (ii) Numbers of undergraduate students by gender

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

In EEE, from 2013 until 2016, there is a steady increase of female UG by approximately 15% each year, from 63 to 92. During the same period, their percentage has increased from 13% to 16%. It is our aspiration to maintain this slow but steady increase in our UG F:M ratios first of all by increasing the appeal of all of our offered programmes to female candidates (**Actions B4.1-3**).

UG STUDENTS		Total	FT	PT
2013/14	Female	63	63	0
	Male	416	416	0
	% Female	13%	13%	-
2014/15	Female	71	70	1
	Male	433	433	0
	% Female	14%	14%	100%
2015/16	Female	84	84	0
	Male	447	447	0
	% Female	16%	16%	-
2016/17	Female	92	92	0
	Male	472	471	1
	% Female	16%	16%	-

Table 3: Total EEE UG student numbers by gender since 2013/14.



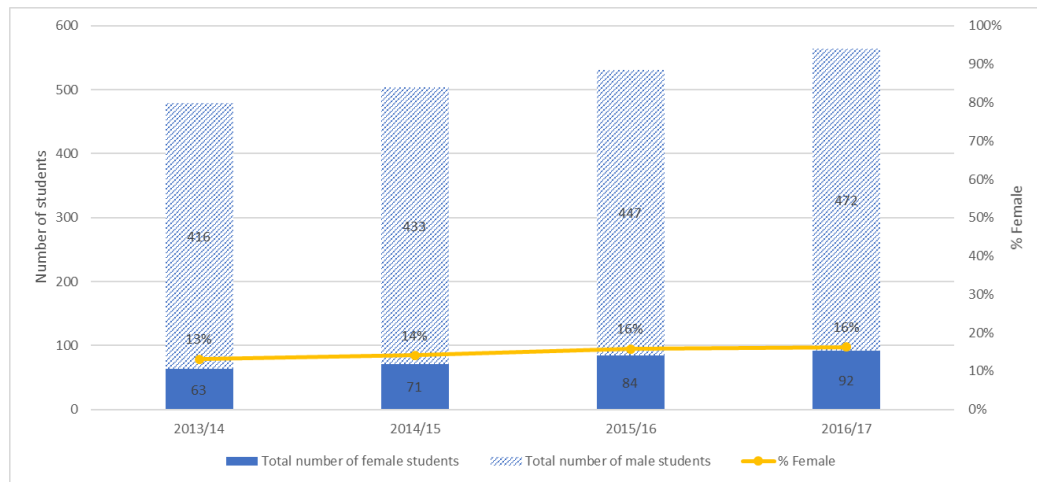


Figure 4: Number of UG students since 2013/14 by gender and respective F:M ratios.

Further breakdown of our UG data by programme reveals that this increase is attributed mainly to the EEE coordinated programmes, rather than our joint IMEE programme; from 2013 until 2016, the number of MEng (hons) female students has increased from 25 to 35 (steady percentage of 14%) and the number of female students on other MEng and BEng programmes has increased from 38 to 57 (increase from 14% to 18%). In order to understand further this difference we plan to undertake joint action with the Mechanical Engineering Department (sharing IMEE) and identify good practice from the EEE recruitment process that can be transferred to the IMEE one (**Action B4.4**).

#### Actions:

**B4.1:** Review language in course descriptions

**B4.2:** Outreach events targeted to girls-only schools

**B4.3:** Add outreach/open days/AVD EEE activities appealing to female candidates

**B4.4:** Revise IMEE recruitment strategy

UG STUDENTS		Total	MEng(hons) Integrated Mechanical and Electrical Engineering	All other MEng and BEng programmes
2013/14	Female	63	25	38
	Male	416	173	243
	% Female	13%	13%	14%
2014/15	Female	71	30	41
	Male	433	181	252
	% Female	14%	14%	14%
2015/16	Female	84	31	53
	Male	447	184	263
	% Female	16%	14%	17%
2016/17	Female	92	35	57
	Male	472	207	265
	% Female	16%	14%	18%

Table 4: Total EEE UG student numbers by academic programme and gender since 2013/14.

EEE:MEng(hons) Integrated Mechanical and Electrical Engineering				
	2013/14	2014/15	2015/16	2016/17
Total number of female students	25	30	31	35
Total number of male students	173	181	184	207
% Female	13%	14%	14%	14%

Table 5: Total Integrated Mechanical and Electrical Engineering MEng UG student numbers by gender since 2013/14.

EEE:All other MEng and BEng programmes				
	2013/14	2014/15	2015/16	2016/17
Total number of female students	38	41	53	57
Total number of male students	243	252	263	265
% Female	14%	14%	17%	18%

Table 6: Total EEE MEng/BEng UG student numbers by gender since 2013/14, excluding the Integrated Mechanical and Electrical Engineering programme.

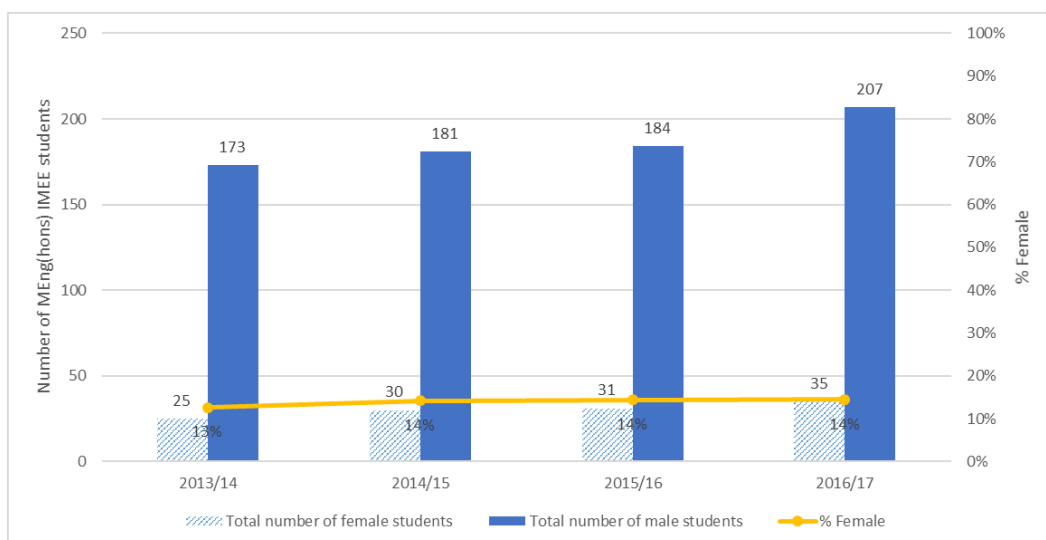


Figure 5: Number of Integrated Mechanical and Electrical Engineering UG students since 2013/14 by gender and respective F:M ratios.

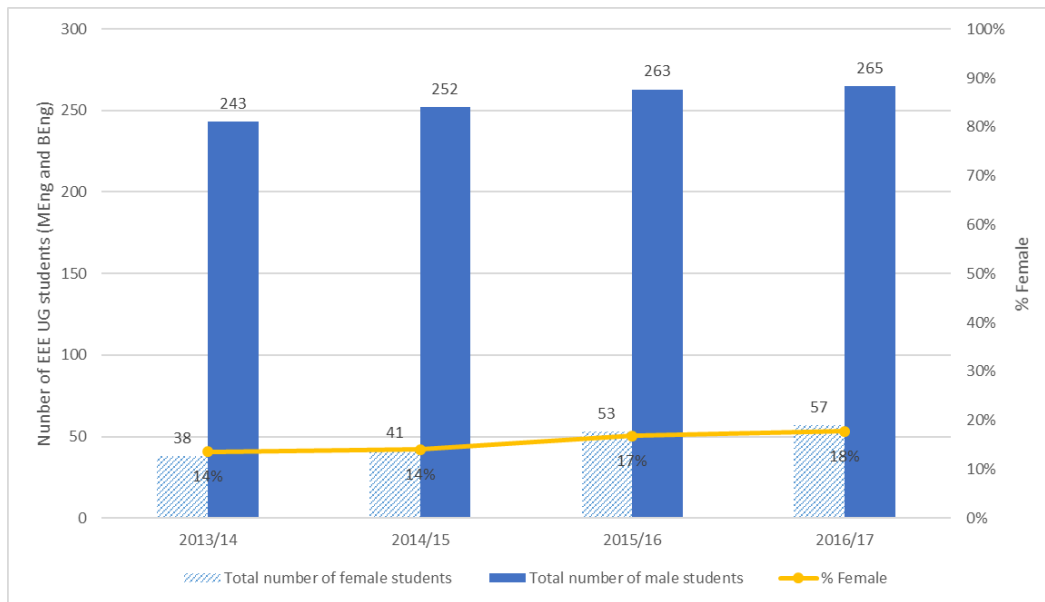


Figure 6: Number of EEE MEng/BEng UG students since 2013/14 by gender and respective F:M ratios, excluding the Integrated Mechanical and Electrical Engineering programme.

Nonetheless, it is worth noting that the gender balance in our Department has improved in the past 4 years, **achieving F:M ratios higher than the national average consistently for the past 2 years (17% vs 14% nationally)**, despite the fact that **4 years ago we were behind our national benchmark (12% vs 13% nationally)**. Following the UG focus group information, we believe that this impressive result can be attributed to a cultural change within the Department, depicted by the student survey comments. Therefore, we believe that the existing inclusive culture of our Department can be one of our strong points in attracting more female applicants and for this reason we have put in place respective actions in better communicating it to perspective applicants (**Actions B2.1-2**).

**UG Departmental focus group:**  
**Female UG:** "I find that the Department has been better than all other places of study and work with equality."  
 >90% agree that the Department offers equal participation opportunities to UG students, irrespective of their gender  
 >85% agree "In my place of study, unsupportive language and behaviour are considered unacceptable"

**Actions:**

**B2.1:** Revision of Departmental marketing material biennially

**B2.2:** Ensure female role models (staff, student ambassadors) in AVDs without overburdening female staff

HESA Cost Centre: Electrical, Electronic and Computer Engineering		University of Bath				All HEIs			
		Total	Full time	Part time	Other	Total	Full time	Part time	Other
2013/14	Female	45	45	0	-	3155	3095	60	-
	Male	315	315	0	-	20510	19730	780	-
	Other	0	0	-	-	5	5	-	-
	Total	365	365	0	-	23665	22,825	840	-
	%F	12%	12%	-	-	13%	14%	7%	-

<b>2014/15</b>	<b>Female</b>	<b>55</b>	55	0	-	<b>3295</b>	3245	55	-
	<b>Male</b>	<b>335</b>	335	0	-	<b>21030</b>	20205	825	-
	<b>Other</b>	<b>0</b>	0	-	-	<b>5</b>	5	-	-
	<b>Total</b>	<b>390</b>	390	0	-	<b>24330</b>	23455	875	-
	<b>%F</b>	<b>14%</b>	14%	-	-	<b>14%</b>	14%	6%	-
<b>2015/16</b>	<b>Female</b>	<b>75</b>	75	0	0	<b>3655</b>	3600	55	0
	<b>Male</b>	<b>375</b>	375	0	0	<b>21430</b>	20675	755	0
	<b>Other</b>	<b>0</b>	0	-	-	<b>5</b>	5	-	-
	<b>Total</b>	<b>445</b>	445	0	0	<b>25090</b>	24280	805	0
	<b>%F</b>	<b>17%</b>	17%	-	-	<b>15%</b>	15%	7%	-
<b>2016/17</b>	<b>Female</b>	<b>80</b>	80	0	0	<b>3850</b>	3790	60	0
	<b>Male</b>	<b>385</b>	385	0	0	<b>21395</b>	20620	775	0
	<b>Other</b>	<b>0</b>	0	0	0	<b>5</b>	5	0	0
	<b>Total</b>	<b>470</b>	465	0	0	<b>25250</b>	24415	835	0
	<b>%F</b>	<b>17%</b>	17%	-	-	<b>15%</b>	16%	7%	-

Table 7: Total EEE number of UG students by gender since 2013/14 in comparison with benchmarking, HESA national data for Electrical, Electronic and Computer Engineering.

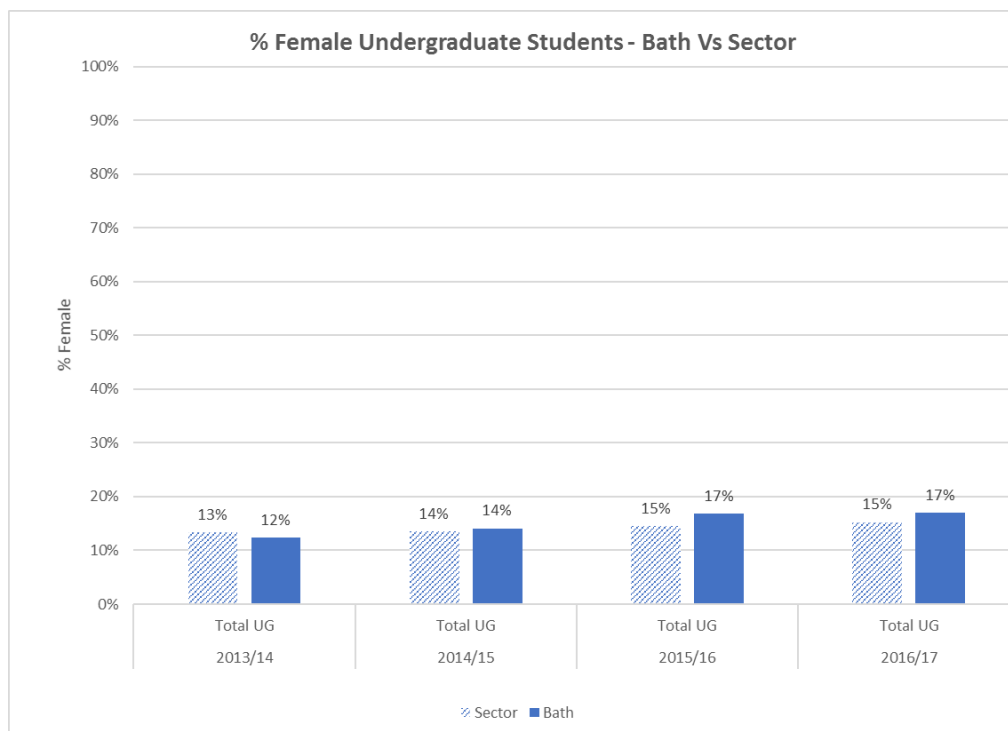


Figure 7: F:M UG student ratios since 2013/14 in University of Bath EEE and in Electrical, Electronic and Computer Engineering departments nation-wide.

This need to better communicate our inclusive culture is also depicted by the decrease in F:M ratio of applicants last year. Further evaluation of the recruitment process reveals that the increase in our overall UG F:M ratio can be ascribed to the consistent **increase of our Offer/Application ratios** for female students. Over the past 4 years the **entry requirements for our programmes have become more demanding**, thus leading us to the conclusion that we are **increasingly attracting better academic quality female applicants** than in previous years.

UG: Electronic & Electrical Engineering			Apps(*)	Offers	Accepts	Offers/ Apps	Accepts/ Offers	Accepts/ Apps
	2013/14	Female	138	105	23	76%	22%	17%
		Male	725	528	116	73%	22%	16%
		% F	16%	17%	17%			
	2014/15	Female	156	127	31	81%	24%	20%
		Male	903	685	119	76%	17%	13%
		% F	15%	16%	21%			
	2015/16	Female	160	134	35	84%	26%	22%
		Male	796	626	135	79%	22%	17%
		% F	17%	18%	21%			
	2016/17	Female	130	119	25	92%	21%	19%
		Male	843	696	132	83%	19%	16%
		% F	13%	15%	16%			

Table 8: Applications, offers and acceptances in EEE Department UG programmes by gender since 2013/14.

MEng(hons) Integrated Mechanical and Electrical Engineering			Apps	Offers	Accepts	Offers/ Apps	Accepts/ Offers	Accepts/ Apps
	2013/14	Female	19	19	8	100%	42%	42%
		Male	111	95	40	86%	42%	36%
		% F	15%	17%	17%			
	2014/15	Female	33	32	10	97%	31%	30%
		Male	177	160	40	90%	25%	23%
		% F	16%	17%	20%			
	2015/16	Female	38	35	8	92%	23%	21%
		Male	221	198	49	90%	25%	22%
		% F	15%	15%	14%			
	2016/17	Female	42	42	8	100%	19%	19%
		Male	271	247	59	91%	24%	22%
		% F	13%	15%	12%			

Table 9: Applications, offers and acceptances in the Integrated Mechanical and Electrical Engineering UG MEng programme by gender since 2013/14.

All other MEng and BEng programmes			Apps	Offers	Accepts	Offers/ Apps	Accepts/ Offers	Accepts/ Apps
	2013/14	Female	119	86	15	72%	17%	13%
		Male	614	433	76	71%	18%	12%
		% F	16%	17%	16%			
	2014/15	Female	123	95	21	77%	22%	17%
		Male	726	525	79	72%	15%	11%
		% F	14%	15%	21%			
	2015/16	Female	122	99	27	81%	27%	22%
		Male	575	428	86	74%	20%	15%
		% F	18%	19%	24%			
	2016/17	Female	88	77	17	88%	22%	19%
		Male	572	449	73	78%	16%	13%
		% F	13%	15%	19%			

Table 10: Applications, offers and acceptances in in EEE Department MEng/Beng UG programmes by gender since 2013/14, excluding the Integrated Mechanical and Electrical Engineering UG MEng programme.

In terms of degree attainment, from 2013 to 2016, the percentages of female undergraduate students getting 1st and 2.1 degrees have increased from 13% to 19% and from 40% to 50%, respectively. Overall, the Department of EEE has demonstrated an overall increasing trend in female students' attainment of 1st and 2.1 degrees, reflecting both the gradual increase in the applicant academic quality and the equal opportunities culture within our Department.

ELECTRONIC & ELECTRICAL ENGINEERING: UG DEGREE ATTAINMENT		1st	2.1	2.2	3rd	Unclassified	Total
2013/14	Female	2	6	6	1	0	15
	Male	30	44	16	0	0	90
	Total	32	50	22	1	0	105
	%F	13%	40%	40%	7%	0%	-
	%M	33%	49%	18%	0%	0%	-
2014/15	Female	5	8	2	0	0	15
	Male	22	61	8	0	2	93
	Total	27	69	10	0	2	108
	%F	33%	53%	13%	0%	0%	-
	%M	24%	66%	9%	0%	2%	-
2015/16	Female	3	8	5	0	0	16
	Male	25	43	17	0	0	85
	Total	28	51	22	0	0	101
	%F	19%	50%	31%	0%	0%	-
	%M	29%	51%	20%	0%	0%	-

<b>2016/17</b>	<b>Female</b>	8	18	2	0	0	<b>28</b>
	<b>Male</b>	29	51	16	1	0	<b>97</b>
	<b>Total</b>	37	69	18	1	0	<b>125</b>
	<b>%F</b>	29%	64%	7%	0%	0%	-
	<b>%M</b>	30%	53%	16%	1%	0%	-

Table 11: EEE UG degree attainment since 2013/14.

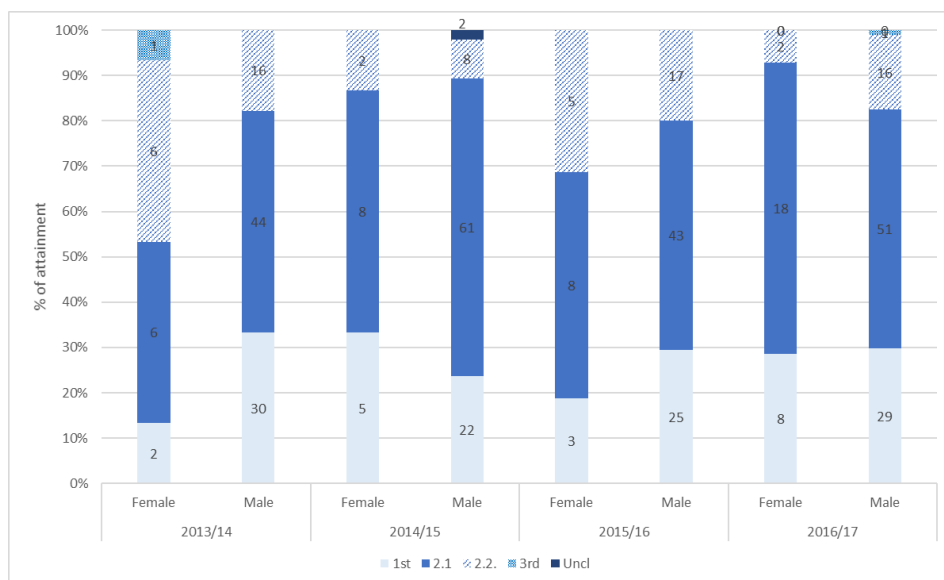


Figure 8: EEE UG degree attainment since 2013/14.

Despite this very positive image of our Department, our UG focus group revealed points that require our attention and can be further improved. Students have reported very low awareness on the Departmental gender equality policies, whilst the personal support route via the tutoring scheme seems to be variable. **Actions B1.1-2** are dedicated to clearly communicating the existing inclusivity policies to our UGs and providing them with alternative personal support routes. In order to suppress any “laddish” behaviour amongst our UGs, **Action B3.1** has been planned, raising UG awareness and improving the perceived importance of inclusivity within our Department.

**UG Departmental focus group:**  
**“Laddish behaviour observed amongst UG students”**  
**10% aware of AS**  
**20% agree “Have you been given clear information about policies relevant to gender equality?”**  
**>65% agree “My tutor gives me adequate support and information about acceptable behaviours in the department”**

#### Actions:

- B1.1:** Signpost students to alternative routes for individual support during Welcome Week (named female non-academic member of staff, openness of academic staff)
- B1.2:** Add slide on Departmental inclusivity policies and acceptable behaviour within the Department in HoD welcome week talk
- B3.1:** Participate and advertise WES events

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

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

In EEE we have consistently had >20% female PGT students registered as a full time and <10% registered as part time every year, averaging to F:M ratios between 8 and 15% annually, owing to the large numbers of the part time student registrations. The majority of part time students are distance learning students; as part of our Department's general reorganization of our PGT programmes, this study mode has not been recruiting in the past two years, while 2 new FT programmes launched within the last 2 years (Electronic System Design and Robotics and Autonomous Systems). Hence we anticipate the picture of our PGT student cohorts to be significantly altered in the following years.

PGT STUDENTS		Total	FT	PT
2013/14	Female	26	16	10
	Male	155	22	133
	% Female	14%	42%	7%
2014/15	Female	14	6	8
	Male	161	21	140
	% Female	8%	22%	5%
2015/16	Female	13	7	6
	Male	94	7	87
	% Female	12%	50%	6%
2016/17	Female	10	8	2
	Male	57	18	39
	% Female	15%	31%	5%

Table 12: Number of postgraduate taught students by gender since 2013/14.

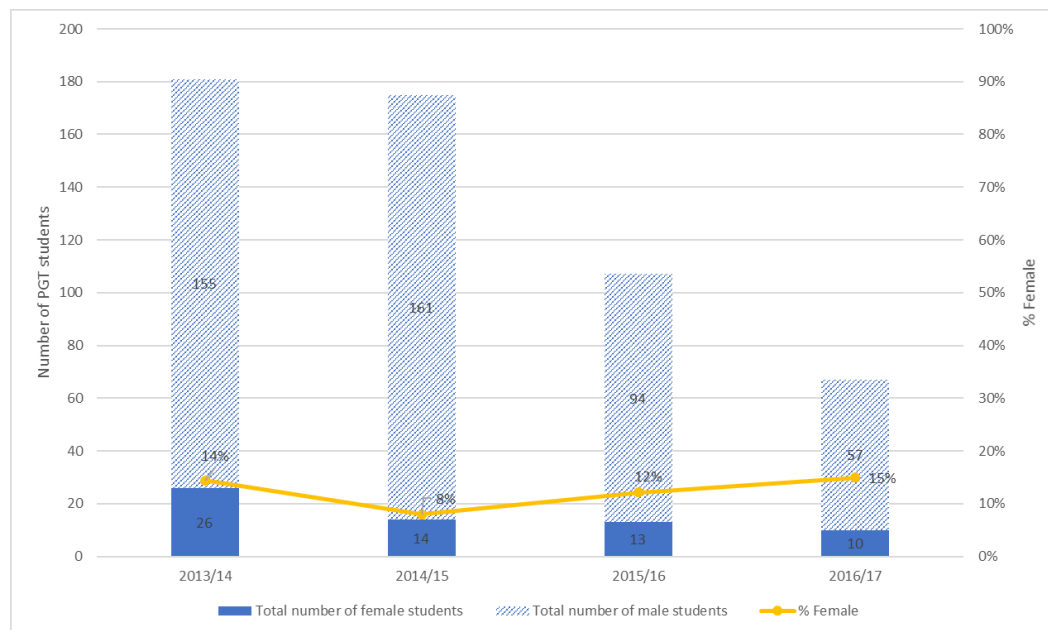


Figure 9: Total number by gender and F:M ratio of postgraduate taught students since 2013/14.



The **full time PGT F:M ratio in our Department varied between 22% and 50%** between 2013/14- 2016/17. However, when considering the total HESA statistics (full time equivalent rather than headcount) and the much larger numbers of our part-time PGTs, our F:M PGT ratio appears to be lower than the national averages. From the above analysis we can understand that the student friendly culture of our Department is being effectively communicated in full time students present on campus, hence the high F:M ratios observed, but not to perspective distance learning or part-time PGT students.

Given the very recent restructuring of our PGT programme strategy and expansion with new ones, at the moment we do not have detailed insight as to the factors that will affect our future gender balance. A set of actions targeted to understanding our recent PGT cohorts and adapting accordingly our recruitment strategy has been planned (**Actions C1.1-3**). Additionally, the Departmental inclusivity policies will be communicated in line with the relevant UG strategy (**Action C1.4**).

**Actions:**

**C1.1:** Focus group/interviews on current PGT students

**C1.2:** Review language in course/programme descriptions

**C1.3:** Analyse current recruitment channels for PGTs and diversify our marketing and recruitment strategy

**C1.4:** Add slide on Departmental inclusivity policies and acceptable behaviour within the Department in welcome week

HESA Cost Centre: Electrical, Electronic and Computer Engineering		University of Bath				All HEIs			
		Total	Full time	Part time	Other	Total	Full time	Part time	Other
2013/14	Female	10	10	0	0	810	755	45	10
	Male	40	15	25	0	2955	2650	270	40
	Other	-	-	-	-	-	-	-	-
	Total	50	25	25	0	3765	3,045	310	45
	%F	20%	40%			22%	25%	15%	22%
	%M	80%	60%			78%	87%	87%	89%
2014/15	Female	5	5	0	0	915	845	65	5
	Male	50	15	35	0	3245	2885	335	25
	Other	0	0	-	-	0	0	-	-
	Total	55	20	35	0	4160	3725	400	30
	%F	9%	25%	0%	-	22%	23%	16%	17%
	%M	91%	75%	100%	-	78%	77%	84%	83%
2015/16	Female	10	5	0	0	935	845	85	10
	Male	35	10	25	0	3060	2675	345	40
	Other	0	0	-	-	0	0	-	-
	Total	40	15	25	0	4000	3520	430	50
	%F	25%	33%	0%	-	23%	24%	20%	20%
	%M	88%	67%	100%	-	77%	76%	80%	80%

<b>2016/17</b>	<b>Female</b>	5	5	0	0	930	860	70	5
	<b>Male</b>	20	10	10	0	2960	2585	365	15
	<b>Other</b>	0	0	0	0	5	0	0	0
	<b>Total</b>	25	15	10	0	3895	3445	435	20
	<b>%F</b>	20%	33%	0%	-	24%	25%	16%	25%
	<b>%M</b>	80%	67%	100%	-	76%	75%	84%	75%

Table 13: Total number of PGT students University of Bath and HEIs Sector, by HESA cost centre.

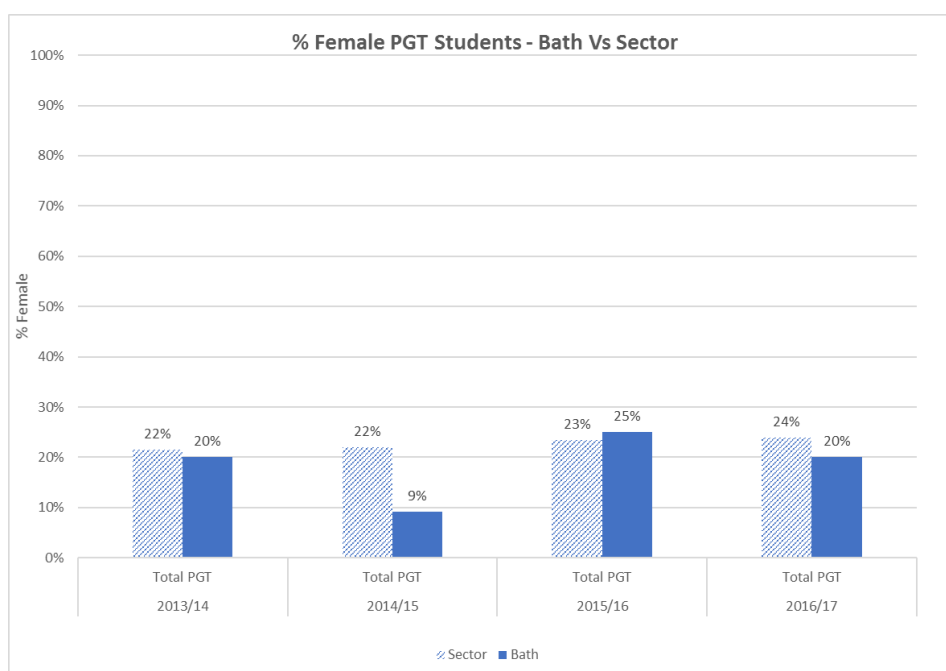


Figure 10: Female PGT student's percentage in the University of Bath versus HEIs Sector, by HESA cost centre.

Over the past 4 years there has been a consistent increase in PGT F:M ratio applicants, suggesting that the changes we are gradually implementing in our programmes will improve the gender equality in our PGT cohorts. The relatively small numbers of graduates regarding grade classification don't allow us to make safe conclusions; nonetheless a higher or comparable percentage of female vs male students achieved a merit the past 4 years.

		<b>Apps(*)</b>	<b>Offers</b>	<b>Accepts</b>	<b>Offers/ Apps</b>	<b>Accepts/ Offers</b>	<b>Accepts/ Apps</b>
<b>2013/14</b>	<b>Female</b>	146	84	29	58%	35%	20%
	<b>Male</b>	443	247	94	56%	38%	21%
	<b>% F</b>	25%	25%	24%			
<b>2014/15</b>	<b>Female</b>	131	94	10	72%	11%	8%
	<b>Male</b>	398	261	70	66%	27%	18%
	<b>% F</b>	25%	26%	13%			
<b>2015/16</b>	<b>Female</b>	81	58	9	72%	16%	11%
	<b>Male</b>	232	121	11	52%	9%	5%
	<b>% F</b>	26%	32%	45%			

<b>2016/17</b>	<b>Female</b>	69	26	5	38%	19%	7%
	<b>Male</b>	156	84	21	54%	25%	13%
	<b>% F</b>	31%	24%	19%			

Table 14: PGT student applications, offers and acceptance rates in EEE by gender.

<b>ELECTRONIC &amp; ELECTRICAL ENGINEERING: PGT DEGREE CLASSIFICATION</b>		<b>Distinction</b>	<b>Merit</b>	<b>Pass</b>	<b>Not complete</b>	<b>Total</b>
<b>2013/14</b>	<b>Female</b>	0	9	6	0	15
	<b>Male</b>	4	14	14	1	33
	<b>Total</b>	4	23	20	1	48
	<b>% F</b>	0%	60%	40%	0%	-
	<b>% M</b>	12%	42%	42%	3%	-
<b>2014/15</b>	<b>Female</b>	1	3	0	0	4
	<b>Male</b>	3	8	12	1	24
	<b>Total</b>	4	11	12	1	28
	<b>% F</b>	25%	75%	0%	0%	-
	<b>% M</b>	13%	33%	50%	4%	-
<b>2015/16</b>	<b>Female</b>	1	5	0	0	6
	<b>Male</b>	0	3	5	0	8
	<b>Total</b>	1	8	5	0	14
	<b>% F</b>	17%	83%	0%	0%	-
	<b>% M</b>	0%	38%	63%	0%	-
<b>2016/17</b>	<b>Female</b>	0	2	1	0	3
	<b>Male</b>	2	8	1	0	11
	<b>Total</b>	2	10	2	0	14
	<b>% F</b>	0%	67%	33%	0%	-
	<b>% M</b>	18%	73%	9%	0%	-

Table 15: PGT degree classification and completion rates by gender.

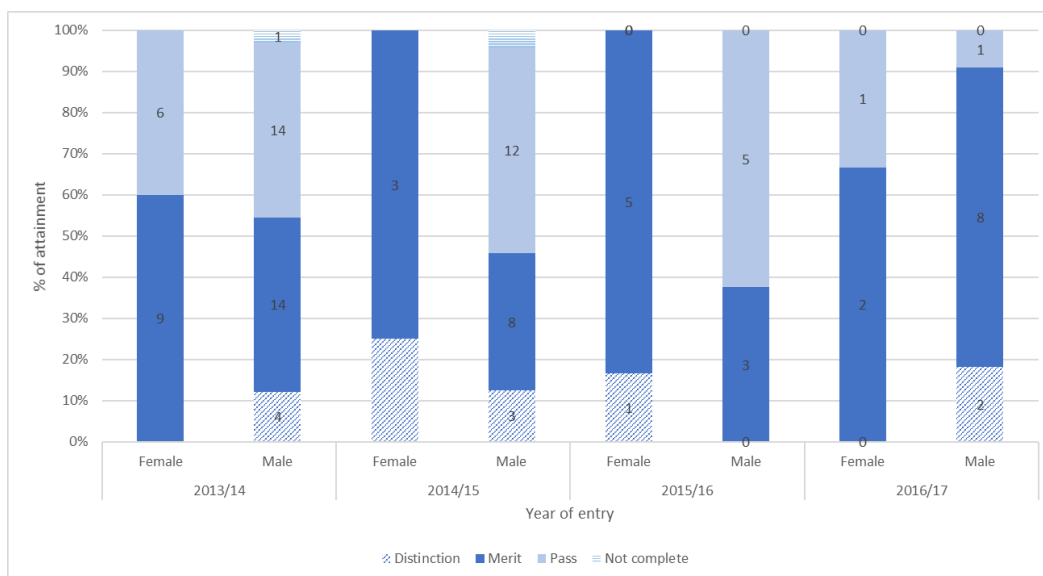


Figure 11: PGT degree classification and completion rates by gender

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

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

Within the past 4 years, the total number of female PGRs has been **consistently increasing from 28% to 42%**. As was the case with the PGT students, we have much higher F:M ratios in full-time students; the difference in PGRs compared to PGTs is that we have much lower numbers of part-time students, hence the above-average gender balance in our PGR cohort is more clearly depicted statistically. Compared with national data, our **F:M ratios** are consistently **well above national averages**, achieving an impressive **44% in the previous year**. The reasoning behind this impressive result was revealed from our Departmental PGR/PDRA focus group survey, with our PGRs describing a very inclusive and supportive research environment. We are planning to understand better the PGR supervision practice and understand whether this is uniform across all research areas (**Actions D1.1-2**).

##### PGR focus group results:

- Almost 50% perceive F:M staff ratio larger than it actually is
- 80% happy with workload
- >70% consider culture female-friendly
- >80% consider culture family-friendly
- >94% Supervisor/line manager never/rarely judgemental on non work-related issues
- >70% report that Supervisor/line manager never ignores their e-mails
- 67% motivated by Supervisor/line manager to engage in non-research career related activities
- 0% considers colleagues rude/aggressive
- >80% feel their supervisor/line manager is appreciative and respectful of them and their work

##### Actions:

- D1.1:** More detailed research on female:male ratios per research area
- D1.2:** Interview individual members of staff with high female:male PGR ratios over time and promote their good practice in staff Away Days

PGR STUDENTS		Total	Full time	Part time
2013/14	Female	17	14	3
	Male	44	39	5
	% Female	28%	26%	38%
2014/15	Female	18	16	2
	Male	38	31	7
	% Female	32%	34%	22%
2015/16	Female	19	17	2
	Male	31	25	6
	% Female	38%	40%	25%
2016/17	Female	18	17	1
	Male	25	23	2
	% Female	42%	43%	33%

Table 16: Number of postgraduate research students by gender since 2013/14.

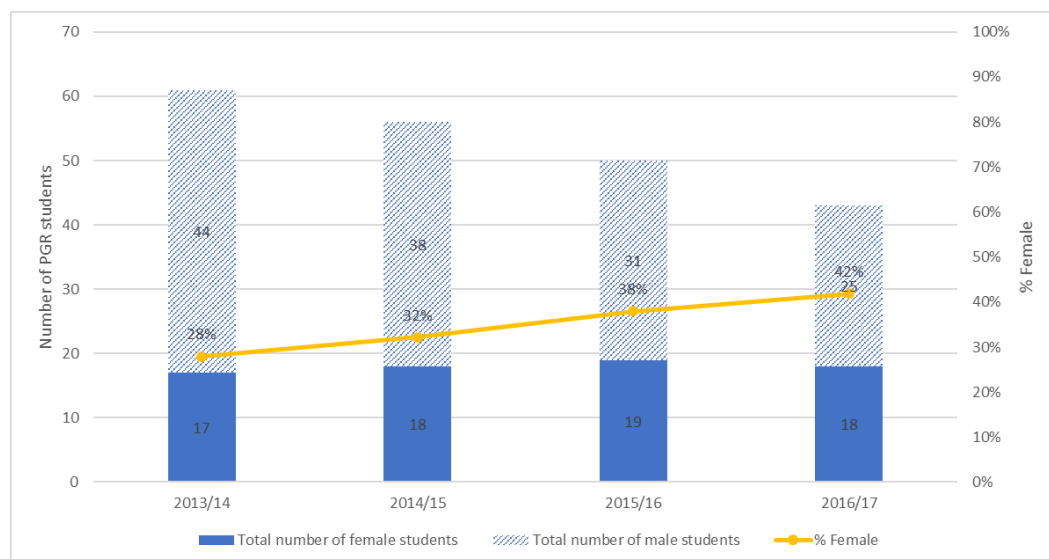


Figure 12: Total number by gender and F:M ratio of postgraduate research students since 2013/14.

HESA Cost Centre: Electrical, Electronic and Computer Engineering		University of Bath				All HEIs			
		Total	Full time	Part time	Other	Total	Full time	Part time	Other
2013/14	Female	15	10	0	0	695	585	35	70
	Male	40	35	5	0	2850	2360	190	295
	Other	0	0	-	0	5	5	-	0
	Total	55	45	5	5	3545	2,950	230	365
	%F	27%	22%	0%	0%	20%	20%	15%	19%
	%M	73%	78%	100%	0%	80%	80%	83%	81%

<b>2014/15</b>	<b>Female</b>	15	15	0	0	745	645	30	75
	<b>Male</b>	40	25	5	10	2820	2360	155	305
	<b>Other</b>	0	0	-	0	5	0	-	0
	<b>Total</b>	60	40	5	10	3565	3005	185	375
	<b>%F</b>	25%	38%	0%	0%	21%	21%	16%	20%
	<b>%M</b>	67%	63%	100%	100%	79%	79%	84%	81%
<b>2015/16</b>	<b>Female</b>	15	15	0	0	805	690	30	85
	<b>Male</b>	30	25	5	5	2905	2415	165	330
	<b>Other</b>	0	0	0	0	0	0	0	0
	<b>Total</b>	50	40	5	5	3715	3105	195	415
	<b>%F</b>	30%	38%	0%	0%	22%	22%	15%	20%
	<b>%M</b>	60%	63%	100%	100%	78%	78%	85%	80%
<b>2016/17</b>	<b>Female</b>	20	15	0	5	765	640	30	100
	<b>Male</b>	25	20	0	5	2810	2325	145	340
	<b>Other</b>	0	0	0	0	0	0	0	0
	<b>Total</b>	45	35	0	10	3575	2960	170	440
	<b>%F</b>	44%	43%	0	50%	21%	22%	18%	23%
	<b>%M</b>	56%	57%	0	50%	79%	79%	85%	77%

Table 17: PGR students University of Bath and Sector, by HESA cost centre.

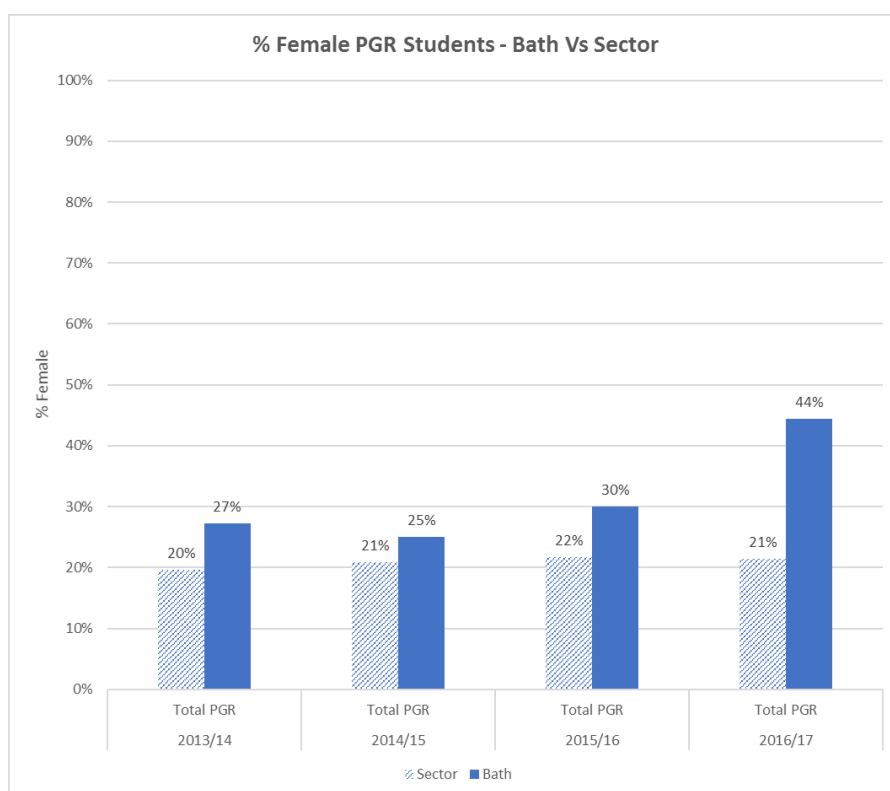


Figure 13: EEE PGR F:M ratio University of Bath and Sector, by HESA cost centre.

In terms of PGR recruitment, we seem to be consistently receiving higher academic qualification female applicants (similarly to our UGs), considering the consistently higher offer/application and acceptances/applications ratios for female students. Concerning PhD submission, the small numbers do not allow for safe conclusions; nonetheless, in 2 of the past 4 years we have had 100% completion rates from female applicants, with the other two years still well above 50%.

		Apps (*)	Offers	Accepts	Offers/Apps	Accepts/Offers	Accepts/Apps
2013/14	Female	32	16	13	50%	81%	41%
	Male	72	22	14	31%	64%	19%
	% F	31%	42%	48%			
2014/15	Female	31	9	8	29%	89%	26%
	Male	95	26	18	27%	69%	19%
	% F	25%	26%	31%			
2015/16	Female	26	11	6	42%	55%	23%
	Male	74	21	13	28%	62%	18%
	% F	26%	34%	32%			
2016/17	Female	32	12	8	38%	67%	25%
	Male	85	20	12	24%	60%	14%
	% F	27%	38%	40%			

Table 18: PGR student applications, offers and acceptance rates in EEE by gender.

Electronic & Electrical Engineering: PhD submission rates (*)		Total	% submitted
2010/11	Female	3	67%
	Male	7	57%
	% F	30%	-
2011/12	Female	2	100%
	Male	13	77%
	% F	13%	-
2012/13	Female	4	100%
	Male	12	100%
	% F	25%	-
2013/14	Female	7	57%
	Male	8	100%
	% F	47%	-

Table 19: EEE PGR submission rates for the past 4 year cohorts.

Whilst the overall PGR picture of our Department seems to be positive, our PGR survey revealed some issues requiring action on the DSAT part. To this end, we will be expanding our communication strategy on Departmental inclusivity policies to PGRs (Action D1.3).

“Occasionally comments will be made that a job requires 'a young gentleman' to complete if it involves physical action or the reverse if it is a minute taking/writing based task”

We have also identified that there is inconsistency in the PGR student career planning. To this end, a set of actions regarding our PGR career development planning has been planned (**Actions D2.1-4**).

- 47% discuss annually their career development plan with PhD supervisor/line manager
- >70% consider mentoring schemes important

#### Actions:

**D1.3:** Add slide on Departmental inclusivity policies and acceptable behaviour within the Department in welcome week talk

**D2.1:** Promote teaching opportunities for PGRs systematically via Departmental administration process

**D2.2:** Workshop on non-research project related Departmental activities available and (e.g. lab demonstrations, outreach activities, departmental representation) importance for future career development

**D2.3:** Connect Departmental activities with Doctoral College PGSkills requirements

**D2.4:** Establish annual career options discussion with supervisor at least once per year

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

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

Our female-friendly culture is clearly demonstrated when analysing the progression pipeline data from our students; both for UG to PGT and for PGT to further study, **all but 2 of the female students aspiring to continue their studies chose our Department rather than moving to another University**. In terms of UG to PhD conversion, 2 out of the last 3 years the **F:M internal PhD student ratio was >75%**, with our poorest year still demonstrating a 33% ratio.

UG to PGT rates	Continued studies at Bath		Continued studies elsewhere	
	Female	Male	Female	Male
2014/15	3	8	0	4
2015/16	5	11	1	0
2016/17	2	8	1	4

Table 20: EEE UG to PGT progression by gender in the past 3 years.

PGT to further study	Continued studies at Bath		Continued studies elsewhere	
	Female	Male	Female	Male
2014/15	2	3	0	0
2015/16	0	1	0	0
2016/17	1	0	0	1

Table 21: EEE PGT to further study by gender in the past 3 years.

UG to PhD rates	2014/15	2015/16	2016/17
Female	3	4	6
Male	1	8	1
% F	75%	33%	86%

Table 22: EEE UG to PGR progression by gender in the past 3 years.



#### 4.2. Academic and research staff data

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

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

While in 2013/14 there were 5 female academic and research staff (including two researchers, one lecturer, and two professors), in 2016/17 there were 11. 33% of our department professors are female, however there are no female Readers or Senior Lecturers. Given the recent increase of our female ECRs, we are developing a pipeline of internal female talent to cover this academic staff pipeline gap. In terms of research staff, we seem to also be achieving a consistent increase in our F:M ratio (13% in 2013 vs 21% in 2016).

While our female academic staff proportion was below national average 4 years ago, our consistently increasing F:M recruitment ratio led to us to surpass the national average in 2016/17 (18% in Bath vs 15% nationally). We are continuously pursuing the recruitment of more talented female candidates in an effort to achieve gender equality amongst our staff (**Actions E1.1-3**).

##### Actions:

**E1.1:** Create Departmental job advert template, explicitly inviting applications from females and other underrepresented groups, and circulate via e-mail to staff annually

**E1.2:** Highlight our Departmental Bronze Award (if awarded) on future departmental job advertisements

**E1.3:** Monitor departmental shortlisting and interview procedures

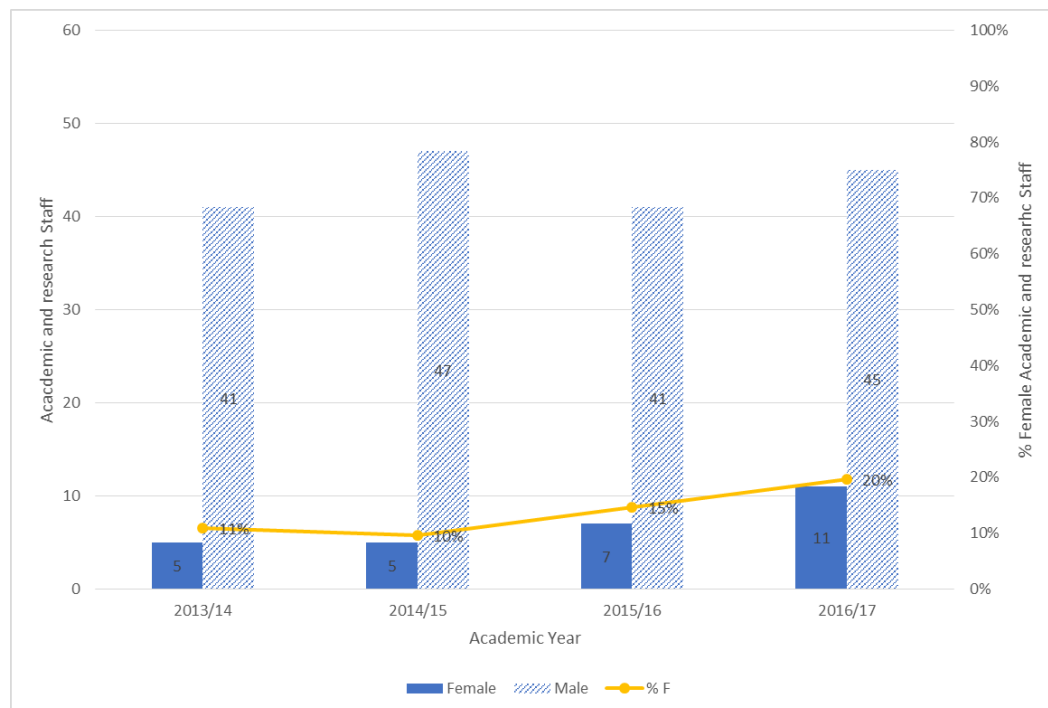


Figure 14: Number of EEE academic and research staff by gender and F:M ratio since 2013/14.

ELECTRONIC & ELECTRICAL ENGINEERING (ACADEMIC AND RESEARCH)		Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other
2013/14	Female	5	2	0	1	0	0	2	0
	Male	41	14	0	7	10	2	4	4
	%F	11%	13%	-	13%	0%	0%	33%	0%
2014/15	Female	5	2	0	1	0	0	2	0
	Male	47	20	0	8	9	3	4	3
	%F	10%	9%	-	11%	0%	0%	33%	0%
2015/16	Female	7	3	0	1	0	0	2	1
	Male	41	17	0	8	6	4	4	2
	%F	15%	15%	-	11%	0%	0%	33%	33%
2016/17	Female	11	5	1	2	0	0	2	1
	Male	45	19	0	11	6	3	5	1
	%F	20%	21%	100%	15%	0%	0%	29%	50%

Table 23: EEE academic and research staff by grade and gender since 2013/14.

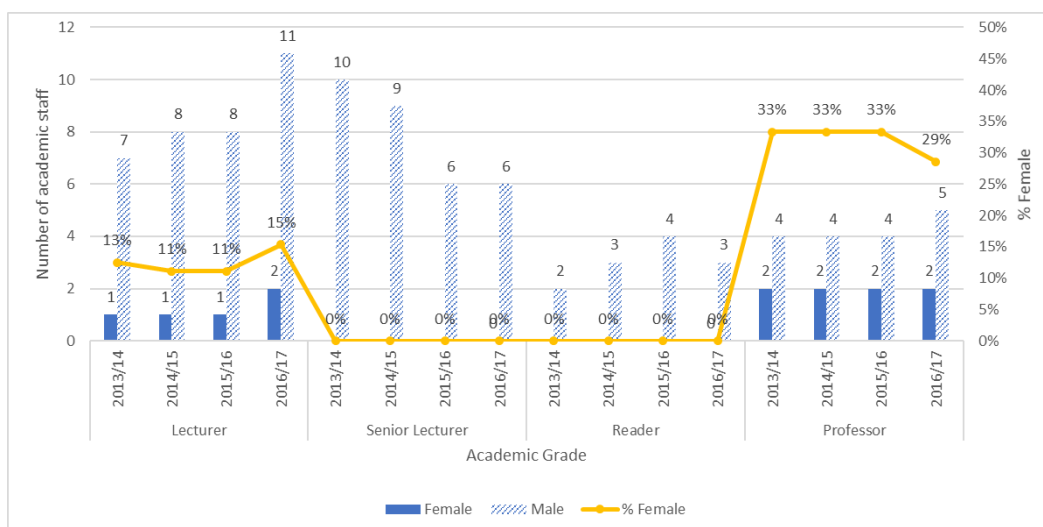


Figure 15: EEE academic and research staff by grade and gender and respective F:M ratio since 2013/14.

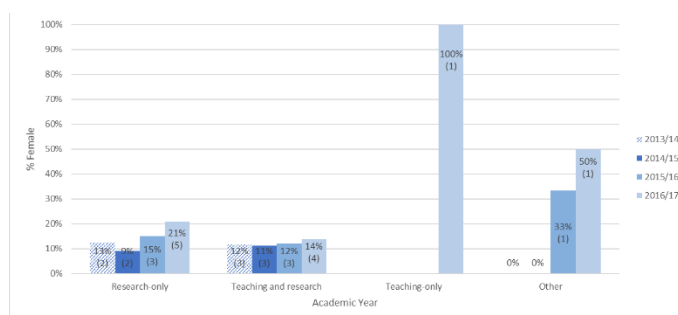


Figure 16: EEE academic and research staff F:M ratio by grade and contract function since 2013/14.

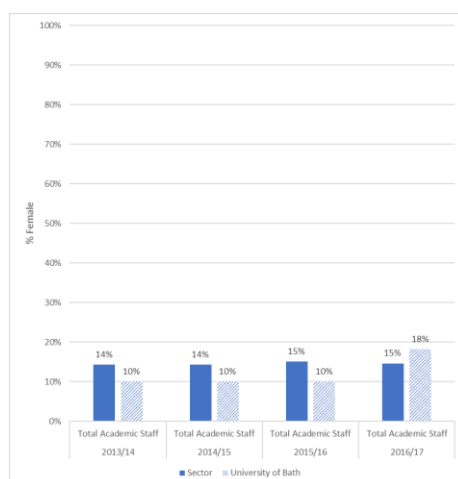


Figure 17: EEE academic and research staff F:M ratio at the University of Bath and Sector, by HESA cost centre: Electrical, Electronic and Computer Engineering.

#### SILVER APPLICATIONS ONLY

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

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

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

Between 2013 and 2015, the number of female staff working as fixed-term contract (FTC) PDRA has also increased from 2 (11%) to 5 (15%).

ELECTRONIC & ELECTRICAL ENGINEERING (ACADEMIC AND RESEARCH)		Female	Male	Total	% Female
2013/14	FTC	2	17	19	11%
	Open	3	24	27	11%
	Total	5	41	46	11%
2014/15	FTC	2	23	25	8%
	Open	3	24	27	11%
	Total	5	47	52	10%
2015/16	FTC	3	18	21	14%
	Open	4	23	27	15%
	Total	7	41	48	15%
2016/17	FTC	5	19	24	21%
	Open	6	26	32	19%
	Total	11	45	56	20%

Table 24: EEE academic and research staff on fixed term, open ended and zero hour contracts by gender.

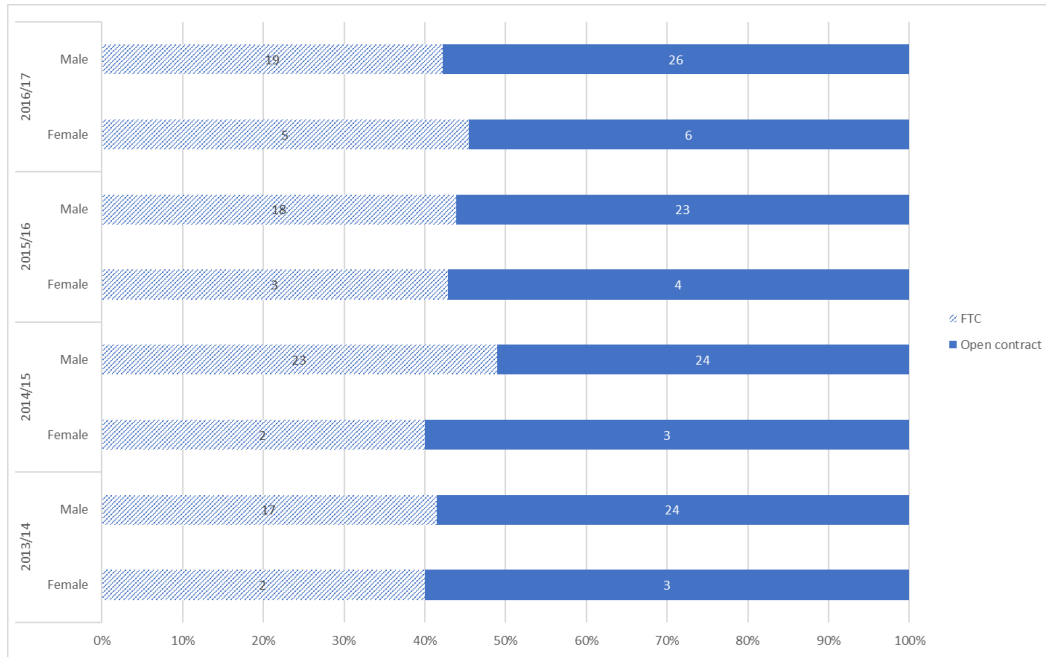


Figure 18: EEE academic and research staff on fixed term, open ended and zero hour contracts by gender.

ELECTRONIC & ELECTRICAL 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	2	2	0	0	0	17	13	0	0	4
	Open	3	0	0	3	0	24	1	0	23	0
	% FTC	40%	100%	-	0%	-	41%	93%	-	0%	100%
2014/15	FTC	2	2	0	0	0	23	19	0	1	3
	Open	3	0	0	3	0	24	1	0	23	0
	% FTC	40%	100%	-	0%	-	49%	95%	-	4%	100%
2015/16	FTC	3	2	0	0	1	18	16	0	0	2
	Open	4	1	0	3	0	23	1	0	22	0
	% FTC	43%	67%	-	0%	100%	44%	94%	-	0%	100%
2016/17	FTC	5	4	0	0	1	19	18	0	0	1
	Open	6	1	1	4	0	26	1	0	25	0
	% FTC	45%	80%	0%	0%	100%	42%	95%	-	0%	100%

Table 25: EEE academic and research staff on fixed term, open ended and zero hour contracts by gender and contract function.

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

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

Between 2013 and 2016, all female academic staff with open-ended contracts stayed with EEE, while 4 female PDRA's left us due to expiry of their external research funding. The University places employees 3 months prior to their contract expiry in the University's redeployment register until their notice period expires and their employment is terminated. Employees on the Redeployment Register will be given preferential consideration in respect of agreed vacant posts within the University. Departments interview redeployment employees before any other candidates. All PDRA leavers receive an exit interview from the University HR; nonetheless, with no such option for academic staff, we have planned a relevant action (**Action F2.5**).

**Actions:**

**F2.5:** Exit interviews for academic leavers

Leavers by grade:									
ELECTRONIC & ELECTRICAL ENGINEERING (ACADEMIC & RESEARCH)		Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other
2013/14	Female	1	1	0	0	0	0	0	0
	Male	8	5	1	0	0	0	0	2
	% F	11%	17%	0%	-	-	-	-	0%
2014/15	Female	1	1	0	0	0	0	0	0
	Male	6	4	0	0	0	0	1	1
	% F	14%	20%	-	-	-	-	0%	0%
2015/16	Female	2	2	0	0	0	0	0	0
	Male	19	12	0	1	2	0	1	3
	% F	10%	14%	-	0%	0%	-	0%	0%
2016/17	Female	3	3	0	0	0	0	0	0
	Male	14	10	0	1	1	0	0	2
	% F	18%	23%	-	0%	0%	-	-	0%

Table 26: EEE academic and research leavers by grade and gender.

ELECTRONIC & ELECTRICAL ENGINEERING (ACADEMIC & RESEARCH)		Total	Fixed-Term	Open-Ended
2013/14	Female	1	1	0
	Male	8	7	1
	% F	11%	13%	0%

<b>2014/15</b>	<b>Female</b>	1	1	0
	<b>Male</b>	6	5	1
	<b>% F</b>	14%	17%	0%
<b>2015/16</b>	<b>Female</b>	2	2	0
	<b>Male</b>	19	15	4
	<b>% F</b>	10%	12%	0%
<b>2016/17</b>	<b>Female</b>	3	3	0
	<b>Male</b>	14	12	2
	<b>% F</b>	18%	20%	0%

Table 27: EEE academic and research leavers by contract function and gender.

<b>ELECTRONIC &amp; ELECTRICAL ENGINEERING (ACADEMIC &amp; RESEARCH)</b>		<b>Total (all contracts)</b>	<b>Full-time</b>	<b>Part-time</b>
<b>2013/14</b>	<b>Female</b>	1	1	0
	<b>Male</b>	8	8	0
	<b>% Female</b>	11%	11%	-
<b>2014/15</b>	<b>Female</b>	1	1	0
	<b>Male</b>	6	5	1
	<b>% Female</b>	14%	17%	0%
<b>2015/16</b>	<b>Female</b>	2	1	1
	<b>Male</b>	19	15	4
	<b>% Female</b>	10%	6%	20%
<b>2016/17</b>	<b>Female</b>	3	2	1
	<b>Male</b>	14	10	4
	<b>% Female</b>	18%	17%	20%

Table 28: EEE academic and research leavers by full-time/part-time contract and gender.

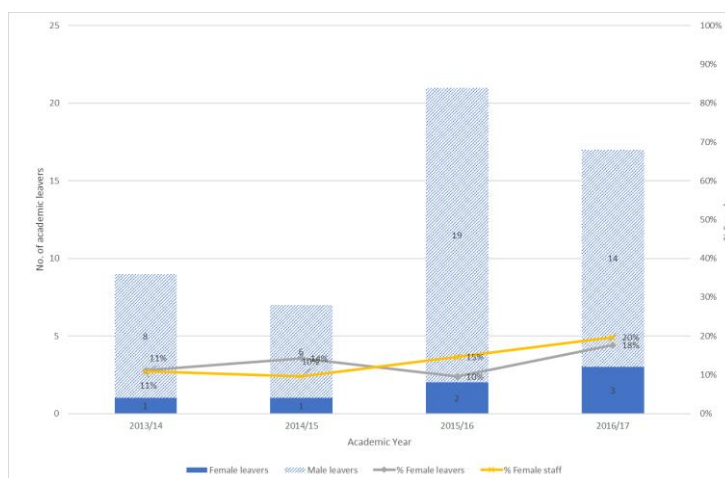


Figure 19: EEE academic and research leavers by gender and respective F:M ratio.

(1678 words)

## 5. SUPPORTING AND ADVANCING WOMEN'S CAREERS (5,632 WORDS)

Recommended word count: Bronze: 6000 words

### 5.1. Key career transition points: academic staff

#### (i) Recruitment

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

In terms of applications for academic posts, typically between 4 and 19% of applicants for lecturer positions (the most advertised academic positions) are female, and between 0 and 33% of the total shortlisted applicants are female. During the period from 2013-2016 the department has expanded significantly, recruiting 11 new academic staff: 1 teaching fellow, 9 lecturers and 1 professor. Of these, 3 are female (**27%**). If we focus on the percentage figures for the female **new lecturer appointments** (which have the most robust statistical representation in the academic staff category), and compare these to the percentage of female shortlisted applications for the same position we see that on average over the 4 year period, the 6% of female shortlisted applicants translate to 20% of new lecturers who are appointed. This reinforces our view that increasing the number of well-qualified females applying for our job vacancies should be a priority for the department. Thus, we have acknowledged the need to proactively seek for the most talented female applicants; to this end we have put in place additional actions for the next years (**Actions E1.1-5**).

#### Actions:

**E1.1:** Create Departmental job advert template, explicitly inviting applications from females and other underrepresented groups, and circulate via e-mail to staff annually

**E1.2:** Highlight our Departmental Bronze Award (if awarded) on future departmental job advertisements

**E1.3:** Monitor departmental shortlisting and interview procedures

**E1.4:** Advertisement of posts on women's networks

**E1.5:** Annual internal e-mail reminder to staff in order to put forward PDRA's with potential for fellowship applications

The percentage of female applicants for research posts ranges from 8% to 20% (with a mean of 16%). Between 0 and 27% of shortlisted applicants are female (mean of 15%). Since no significant difference is obvious between the percentage of females applying for jobs and those shortlisted, this supports the equal treatment culture in EEE at the shortlisting stage. On average over the period of study, 22% of appointed research staff are female, and the proportion of female applicants being shortlisted from applications has increased over the past two years. **The statistic of 22% of research staff in the department being women is higher than the national average of women who make up the engineering workforce** (thought to be ~11% nationally from a survey performed in 2017 by the Women in Engineering Society).

On average over the period of study the proportion of female applicants for research posts is higher (16%) than for new lecturer positions (11%). This suggests that females find it difficult to make the transition from research to academic staff. This clearly

indicates that so more encouragement and career development work is needed for PDRAs. To this end we have planned **Actions E1.3 and E2.1-6.**

**Actions:**

**E1.3:** Monitor departmental shortlisting and interview procedures

**E2.1:** PDRA Departmental Coordinator role created and participating in DSAT

**E2.2:** Create central Departmental procedure for new PDRA induction to the Department

**E2.3:** Mentor assigned to all PDRAs at the induction phase

**E2.4:** Create PDRA welcome pack including:

- key contact persons
- mentorship details
- job requirements
- acceptable behaviour within the Department guidelines
- alternative routes for work-related complaints
- career development information
- training opportunities
- social events
- Maternity/paternity/family-related support information

**E2.5:** Annual e-mail to Department PDRAs highlighting teaching-related opportunities within the Department, at a voluntary basis

**E2.6:** Highlight teaching-related courses available to PDRAs

ELECTRONIC & ELECTRICAL ENGINEERING (ACADEMIC & RESEARCH)		APPLICANTS							
		Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other
2013/14	Female	12	5	0	6	0	0	0	1
	Male	124	57	0	25	10	0	0	32
	% Female	9%	8%	-	19%	0%	-	-	3%
2014/15	Female	21	16	0	2	0	0	3	0
	Male	147	73	0	49	10	0	15	0
	% Female	13%	18%	-	4%	0%	-	17%	-
2015/16	Female	57	21	0	34	0	0	0	2
	Male	397	106	0	274	0	0	0	17
	% Female	13%	17%	-	11%	-	-	-	11%
2016/17	Female	70	30	3	26	0	0	0	11
	Male	448	117	19	263	0	0	0	49
	% Female	14%	20%	14%	9%	-	-	-	18%

Table 29: EEE academic and research post applicant numbers by gender since 2013/14.



ELECTRONIC & ELECTRICAL ENGINEERING (ACADEMIC & RESEARCH)		SHORTLISTED							
		Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other
2013/14	Female	1	0	-	1	-	-	-	0
	Male	11	8	-	2	0	-	-	1
	% Female	8%	0%	-	33%	-	-	-	0%
2014/15	Female	2	2	-	0	-	-	0	-
	Male	21	15	-	4	0	-	2	-
	% Female	9%	12%	-	0%	-	-	0%	-
2015/16	Female	8	5	-	1	-	-	-	2
	Male	46	22	-	20	-	-	-	4
	% Female	15%	19%	-	5%	-	-	-	33%
2016/17	Female	17	11	1	1	0	0	0	4
	Male	63	30	1	18	0	0	0	14
	% Female	21%	27%	50%	5%	-	-	-	22%

Table 30: EEE academic and research post shortlisted applicant numbers by gender since 2013/14.

ELECTRONIC & ELECTRICAL ENGINEERING (ACADEMIC & RESEARCH)		NEW STARTERS							
		Total	Research	Teaching	Lecturer	Senior Lecturer	Reader	Professor	Other
2013/14	Female	3	2	0	1	0	0	0	0
	Male	6	4	0	0	0	0	0	2
	% Female	33%	33%	-	100%	-	-	-	0%
2014/15	Female	1	1	0	0	0	0	0	0
	Male	11	10	0	0	0	0	1	0
	% Female	8%	9%	-	-	-	-	0%	-
2015/16	Female	5	4	0	0	0	0	0	1
	Male	15	12	0	2	0	0	0	1
	% Female	25%	25%	-	0%	-	-	-	50%
2016/17	Female	6	4	1	1	0	0	0	0
	Male	21	14	0	5	0	0	0	2
	% Female	22%	22%	100%	17%	-	-	-	0%

Table 31: EEE academic and research post new starter numbers by gender since 2013/14.

All job applications are submitted via the University of Bath's online system. Applications are reviewed by a panel of academics, which is responsible for shortlisting; this is carried out with reference to the job description and person specification, both of which are provided to applicants within the job advertisement. To ensure fair treatment across

genders, all members of shortlisting and interview panels have completed the University's staff development training on diversity in the workplace, and on unconscious bias. According to University policy, in each shortlisting and interview panel there should be a minimum of one female member. Nonetheless this policy is not centrally monitored by HR for the PDRA recruitments; for this reason we have planned **Action E1.3**.

Also, at the moment we do not have a uniform text for our job advertisements at a Departmental level highlighting our inclusive culture. For this reason we have planned **Actions E1.1-2**, along with **Action E1.4** allowing us to proactively seek talented women via dedicated women's networks.

**Actions:**

**E1.1:** Create Departmental job advert template, explicitly inviting applications from females and other underrepresented groups, and circulate via e-mail to staff annually

**E1.2:** Highlight our Departmental Bronze Award (if awarded) on future departmental job advertisements

**E1.3:** Monitor departmental shortlisting and interview procedures

**E1.4:** Advertisement of posts on women's networks

(ii) **Induction**

Describe the induction and support provided to all new academic staff at all levels.

Comment on the uptake of this and how its effectiveness is reviewed.

The induction process for new research and teaching staff in the department consists of the following:

- New staff are welcomed by the departmental office, where they will then have an initial discussion with their line manager and a tour of the department by a senior member of academic staff.
- A departmental welcome information pack is provided which contains information about IT support, library services, printing, health and safety.
- New staff are introduced to existing staff members and encouraged to attend departmental "catch up and coffee" sessions fortnightly, as well as twice-weekly coffee mornings.
- New staff are appointed a mentor, to whom they can go to for advice about academic and career discussions. The mentor appointed is always at a more experienced level than the new staff member.
- New academic staff receive an invitation to talk with the Dean of the Faculty of Engineering & Design shortly after they start their post.
- All new staff are encouraged to attend the "**Introduction to the University of Bath course for all staff**", which provides an introduction to the working environment at the University and provides information to staff make contacts and use the facilities and services of the University.
- For new lecturers and teaching fellows: the University teaching and academic skills year-long course, entitled **The Bath Course in Enhancing Academic Practice**, is provided for all new academic staff and includes an introduction to available staff development programmes. Successful completion leads to fellowship of the Higher Education Academy. <http://www.bath.ac.uk/guides/bath-course-in-enhancing-academic-practice/>
- New academic staff are typically given a lighter workload for the first few years of their post to enable them to establish their research groups and complete any training courses that may be required.

Although there is general contentment amongst new staff that the induction process covers the essential knowledge required to work in the department, we plan to instigate a number of improvements to our induction process specifically

**PGR/PDRA focus group:**

Less than 10% of PDRAs engaging with non-research project related Departmental activities

for our PDRAs, having identified via our focus groups that they feel isolated and do not really engage with the rest of the Department activities, apart from their research project. To address these issues we are planning to completely redesign the PDRA induction procedure and the welcome packs, via the support of the newly established role of PDRA Departmental Coordinator, also a member of the DSAT (**Actions E2.1-4&7**).

**Actions:**

**E2.1:** PDRA Departmental Coordinator role created and participating in DSAT

**E2.2:** Create central Departmental procedure for new PDRA induction to the Department

**E2.3:** Mentor assigned to all PDRAs at the induction phase

**E2.4:** 4. Create PDRA welcome pack including:

- key contact persons
- mentorship details
- job requirements
- acceptable behaviour within the Department guidelines
- alternative routes for work-related complaints
- career development information

**E2.7:** Circulate invites to PDRAs to Departmental social events

(iii) Promotion

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

Each year, after receiving the promotions deadlines from HR, the HoD invites applications for promotion from all academic staff, sending an email with links to the University of Bath promotions website which details promotion criteria for each level of academic post. All applications are considered by the HoD in consultation with senior academic staff. Written applications are then submitted to a Professorial Advisory Committee (for promotion to Professor) or to the University's Academic Staff Committee (for other academic staff promotions). Staff who aspire to promotion but feel their case is not yet strong enough are encouraged to develop a Personal Action Plan for the development of their promotion case. Discussion of eligibility for promotion should take place during yearly staff development reviews with a member of the Professoriate (or the HoD for probationary staff), and then checked by the HoD. At the moment all staff are supported in their promotion process via their assigned mentors.

The number of applications for promotion within the department during the four year period taken into account in this application is very small, with only four applications in total, two at Reader level and two at Senior Lecturer level. All of these were men, with a 67% success rate. The main reason for this is the low proportionality of female staff within the department during this period, which ranged between 5 in 2013 and 11 in 2017.

What is obvious from these statistics is that the number of applications for promotion across the board is very small. The low percentage of applications for academic staff promotion could be related to the high percentage of new lecturers who, again, are not at a sufficiently advanced stage in their careers to apply for promotion, or knowledge of staff regarding promotion procedures within the department. Our staff survey revealed that indeed there was lack of awareness on the University promotion procedure, and thus we have put in place **Action E5.1**.

**Academic staff survey:**

"Ensure effective mentoring is being implemented"

60% well informed on promotion process

40% happy with promotion process

Following the feedback from staff, some improvement in processes for informing staff about promotional procedures, as well as identifying, encouraging and supporting all eligible staff (not just those who put themselves forward) is required. We have identified that our staff find the role of effective mentorship critical, and thus have also put in place **Actions E3.1-3** to address this.

**Actions:**

**E3.1:** Organization of unconscious bias training-workshop in staff Away Day

**E3.2:** Upgrade online mentoring and unconscious bias training for staff from optional to compulsory

**E3.3:** Add mentoring duties in the workload model

**E5.1:** Periodic promotions workshop

Electronic & Electrical Engineering	Applications				Promotions				Success rate		
	Female	Male	Total	% Female	Female	Male	Total	% Female	Female	Male	Total
<b>Total</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0%</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0%</b>	-	<b>67%</b>	<b>67%</b>
<b>2013/14</b>	0	0	0	-	-	-	-	-	-	-	-
<b>2014/15</b>	0	2	2	0%	-	1	1	-	-	50%	50%
<b>2015/16</b>	0	1	1	0%	-	1	1	-	-	100%	100%
<b>2016/17</b>	0	1	1	0%	-	1	1	-	-	100%	100%

Table 32: Details of EEE departmental promotion candidates.

<b>2014/15</b>	1 male translated to Reader
<b>2015/16</b>	1 male promoted to Reader (FT)
<b>2016/17</b>	1 male promoted to Senior Lecturer (FT)

Table 33: Details of successful EEE promotion cases.

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

Provide data on the staff, by gender, submitted to REF versus those that were eligible.

Compare this to the data for the Research Assessment Exercise 2008. Comment on any gender imbalances identified.

The department encourages a research-active environment. All staff eligible to be submitted for REF2014 were submitted, as the following table shows. In particular both our female members of staff in 2014 were research-active professors, hence were 100% of our female staff was submitted to REF2014. We will continue to monitor REF2021 data by gender and assure no gender imbalance occurs.

REF 2014: Electronic & Electrical Engineering			
Submitted to REF	Submitted to REF	Total eligible	% of eligible staff submitted
Female	2	2	100%
Male	17	24	71%
Total	19	26	73%

Table 34: Gender breakdown of EEE staff data in REF 2014 submission.

## SILVER APPLICATIONS ONLY

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

#### (i) Induction

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

#### (ii) Promotion

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

### 5.3. Career development: academic staff

#### (i) Training

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

All staff are encouraged to develop new skills, with training being a standing issue discussed annually during the SPDR meetings. Training opportunities are clearly advertised across the University via e-mail and the internal website. For female staff in particular, the University funds 10 competitively allocated places per year on the Aurora Leadership Programme. A University-wide expression of interest is circulated via e-mail to all academic staff. Our HoD proactively invites our female members of staff to express their interest in participating and allocates a relevant mentor for the application process. The university offers a wide variety of optional training and development events in addition to compulsory training.

Mandatory training for all academic staff:

- Online bribery act (Departmental uptake in 2017: 61%)
- Fire Safety Awareness (Departmental uptake in 2017: 82%)
- Concordat to Support Research Integrity (Departmental uptake in 2017: 58%)

Strongly recommended training for all academic staff:

- Diversity in the Workplace (Departmental uptake in 2017: 76%)
- Unconscious bias (Departmental uptake in 2017: 55%)
- Information Security Awareness (Departmental uptake in 2017: 58%)

Mandatory for all chairs of interview panels and anyone involved in shortlisting or interviewing for academic appointments:

- Recruitment Training: Panel and Chair (Departmental uptake in 2017: 58%)

The HoD is regularly provided with a record of each of the aforementioned training activities undertaken by each member of staff, updates the record annually and informs personally the relevant member of staff if any training activity is pending. Nonetheless, understanding the importance of unconscious bias in mentorship and recruitment, we have planned to make it compulsory, along with organizing a dedicated training workshop in our next staff away day (**Actions E3.1-2**).

**Actions:**

**E3.1:** Organization of unconscious bias training-workshop in staff Away Day

**E3.2:** Upgrade online mentoring and unconscious bias training for staff from optional to compulsory

Grant writing support is offered to all academics by our University Research and Innovation Service as well as advice on where to apply for research and conference funding; this is facilitated by the departmental research committee, and supported by the mentoring and SPDR frameworks, and sharing of information in research groups.

The Learning and Developing Unit supports the enhancement of learning, teaching and assessment across the University, offering a variety of staff development courses. For new academic staff in particular, support on securing the Fellowship of Higher Education Academy is provided by a University-wide coordinated course on Teaching and Learning (Bath Course) mandatory for all Probationary staff, mapping to the UK Professional Standards Framework. Peer observation of teaching is mandatory for all teaching staff on probation and currently part of the Bath Course. All non-probationary teaching staff take part in a biennial Peer Review.

The University's ED&I team have also recently developed a selection of training offerings that we strongly recommend members of department to attend. These courses include: Bringing in the Bystander Programme, Cultural Awareness training, Microaggressions and Sensitivities training, amongst others.

## (ii) Appraisal/development review

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

The annual Staff Development and Performance Review (SDPR) is mandatory for all non-probationary staff. Academics on the standard 3 years' probation have an annual review with HoD and produce a probationary report that is reviewed by the University's Academic Staff Committee. The HoD performs the SDPR for all professors and Research Fellows and the professoriate are the SDPR reviewers for the other academics, with a final Senior Review undertaken by the HoD. The SDPR is an opportunity for staff to receive feedback on their performance and to explore and support their career aspirations. Training is compulsory for reviewers of academic staff, and is also available for reviewees. Nonetheless, we have put in place **Action E4.2**, in order to ensure that all of our staff with SPDR responsibilities (including PDRA line managers) are adequately trained on the process.

**Actions:****E4.2:** 2. Periodic SPDR training workshop

The SPDR completion rates for academic staff is monitored by the Department Coordinator, see the Table below, and has significantly increased from 2013/14, reaching 95% in 2016/17.

Year	SDPR Completion rates for academic staff
2013-14	50%
2014-15	85%
2015-16	83%
2016-17	95%

Table 35: SDPR completion rate for EEE academic staff.

	2013/14		2014/15		2015/16		2016/17	
	Female	Male	Female	Male	Female	Male	Female	Male
Academic and Research	2	18	2	19	2	17	2	15

Table 36: Number of SPDRs uploaded on University online HR system (iTrent) by gender.

Research staff have a shorter probation period and the expectation is that they are annually appraised by their line manager. However, the completion rate of appraisals for research staff are not monitored centrally and so there is a less clear picture of the completion rates. Addressing this issue we have put in place **Actions E4.1&3**.

**Actions:****E4.1:** Systematically monitor proportion of completed SPDRs within the Department**E4.3:** Personal reminder to staff to do their SPDRs**(iii) Support given to academic staff for career progression**

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

All ECRs have a mentor who, amongst other duties, provides advice on career progression. It is recognised that non-probationary staff would also benefit from mentoring and all staff in the Education and Research job family can request a mentor through their departmental mentoring coordinator (Professor Cathryn Mitchell). Members of staff are also free to seek their own mentors. This scheme is voluntary and not formally connected to career progression. As discussed earlier, we have identified that our current mentorship model could improve, and hence we have put in place **Actions E3.1-3**.

**Actions:****E3.1:** Organization of unconscious bias training-workshop in staff Away Day**E3.2:** Upgrade online mentoring and unconscious bias training for staff from optional to compulsory**E3.3:** Add mentoring duties in the workload model

In terms of our PDRA's, they have been recognised as an undervalued group within the Department and also the University as a whole. Therefore, all departments currently have a Departmental Research Staff Coordinator (DRSC) who, amongst other duties, ensures that all research staff are allocated a suitable career-focused mentor (**Actions E2.1,3-6**). Following a session on mentoring and career development at a departmental away day in September 2017, it was identified that there were potential benefits if the roles of DRSC and PDRA mentors were undertaken by ECRs. The main reason for this was that ECRs have recently been successful in obtaining a permanent academic position and are therefore well placed to advise PDRA's about their career development. All PDRA's have access to the University's Career Development Advisor, who provides individual support with:

- Reviewing progress in current role and reflecting on next steps
- Identifying skills and strengths
- Identifying and discussing career options
- Discussing plans for academic career development
- Finding jobs and identifying job-search strategies
- Feedback on applications and CVs
- Support with interview preparation and the provision of practice interviews
- Signposting to internal and external sources of support and advice

**Actions:**

**E2.1:** PDRA Departmental Coordinator role created and participating in DSAT

**E2.3:** Mentor assigned to all PDRA's at the induction phase

**E2.4:** Create PDRA welcome pack including:

- key contact persons
- mentorship details
- job requirements
- acceptable behaviour within the Department guidelines
- alternative routes for work-related complaints
- career development information

**E2.5:** Annual e-mail to Department PDRA's highlighting teaching-related opportunities within the Department, at a voluntary basis

**E2.6:** Highlight teaching-related courses available to PDRA's

(iv) [Support given to students \(at any level\) for academic career progression](#)

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

The coaching for undergraduate/PGT and Doctoral students is divided into personal support and institutional support structures.

- Undergraduate/PGT - personal support for career progression
  - mentoring scheme where new students are allocated to a more experienced student for informal advice (for undergraduate only due to the PGT courses being only 1 year)
  - personal tutors scheme where each student is allocated to an academic personal tutor for monitoring of studies progression and advice on academic and personal development



- students participate in a group design and business project or placement project in close collaboration with industry with the opportunity for networking with members of the industrial advisory board
- Undergraduate/PGT students - institutional support for career progression
  - the University of Bath operates a professional careers services to assist students with writing a CV, job applications, interview training etc.
  - the Faculty of Engineering & Design at the University of Bath organises career fairs where industry offers insight into their business and offers opportunities for summer placements up to one year long placements and assists with job applications
  - the Faculty of Engineering & Design at the University of Bath offers undergraduate courses with the option for a one year long placement in industry
  - the University and the Department offer PhD studentships to high performing students toward an academic career
- Doctoral - personal support for career progression
  - mentoring scheme where new students are allocated to a more experienced student for informal advice
  - each student is allocated a supervisor and a co-supervisor, both of which provide advice on career choices
  - many PhDs in the Department are conducted in direct collaboration with industrial partners who offer opportunities for students to network with industry
- Doctoral - institutional support for career progression
  - the University of Bath operates a professional careers services to assist students with writing a CV, job applications, interview training etc.
  - many PhD's are embedded in Doctoral Training Programmes in close collaboration with industry
  - academic training is provided through the Departmental seminars for scientific presentations
  - the University offers a wide range of generic skills training courses towards personal and professional development, such as planning a PhD, presenting scientific work, academic writing, literature research, research ethics, entrepreneurship, etc.

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

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

Staff applying for research grants receive support from experienced academics and also from Research and Innovation Services, who organise workshops, writing retreats and such other events to support the development of grant applications. Within the Department, the support provided is in the form of internal peer review feedback, given by senior academics. For ECRs this is generally provided by their mentors and Directors of the research centres, although additional peer reviews are also possible. In addition to the University workshops, the Faculty of Engineering and Design runs a Future Awards scheme aimed at developing the academic leaders of the future.

In addition to support developing grant applications, ECRs are offered generous contributions to support of their EPSRC New Investigator Award applications. These include a fully-funded three-year University Research PhD Scholarship (covering tuition

fees, maintenance at standard EPSRC rates), up to £10k in equipment/consumables funding and additional travel funding.

Strategies for targeting and developing grant applications forms an important component of the annual SDPR and probation review. For ECRs and other academics, a particular focus is given to the development of fellowship applications, using expertise from current and past holders of fellowships.

#### SILVER APPLICATIONS ONLY

##### 5.4. Career development: professional and support staff

###### (i) Training

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

###### (vi) Appraisal/development review

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

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

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

##### 5.5. Flexible working and managing career breaks

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

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

Before taking maternity/adoption leave, the HoD and Research Centre Director 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.

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

During the leave staff use up to 10 paid “Keeping in Touch” (KIT) days; this helps maintain links with their work and colleagues. The one member of staff who had taken leave within the past three years took all ten KIT days, using them for working with colleagues on grant applications. In addition, fortnightly the staff have a social “coffee and cake get together afternoon” and those on leave are invited to attend.

###### (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 Research Centre Director 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.

#### (iv) Maternity return rate

We had one member of academic member of staff take maternity leave in the past three years, during her first year in her lectureship and being already a mother of a 2 year-old. She returned in post after her maternity leave, achieving a major research milestone for her career upon her return (EPSRC New Investigator Award). We interviewed her after her return to understand how our maternity support is working and according to her: **“The department has supported me with my career by not giving me any teaching duty the following semester, reducing my teaching duty in total and giving me the flexibility for the childcare part.** I think the department has considered that I have two children, so they have tried very hard to reduce my teaching load and the department has supported in helping me apply for the fellowship. The department organized the internal review and panels, allocated a female professor, a female mentor to help me prepare for the application of the fellowship and luckily, I got it, which gave me more freedom, much less teaching duty and more flexibility in terms of balancing my research and my childcare duties. And also, I feel the female mentor helped a lot!”.

#### SILVER APPLICATIONS ONLY

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

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

We have only had 1 request for paternity leave within the past 3 years from our Department staff; it happens that this request referred to the husband of the previously reported maternity leave requester, since they were both working within our Department as 1.0 FTE members of academic staff. 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.

#### (vi) Flexible working

It is within the culture of our Department to embrace flexible working and support for those with caring responsibilities, thus the majority of staff employ such options on an informal basis. Nonetheless, the department actively promotes the university’s flexible working arrangements policy through the induction of every new staff member. The past three years there has been only 1 case of staff (male academic) who has formally applied for flexible working arrangements. The Departmental policy is that all applications are submitted to the HoD, 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. For staff with teaching responsibilities in particular, they are encouraged to discuss flexible working arrangements with the HoD and complete the formal process where appropriate in order that individual requirements (e.g. childcare responsibilities) can be incorporated at the

start of the timetabling process. This is then actioned within the central timetabling system.

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

Requests are managed on a case-by-case basis, as the university does not have a formal career break policy. The department has not had the opportunity to support staff wishing to transition back to full time work following a career break but would welcome any requests.

## 5.6. Organisation and culture

### (i) Culture

The Department has fully embraced the principles of the Athena SWAN Charter with a commitment to gender equality and inclusivity. An update on progress on the Athena SWAN actions is a standing item on our Departmental Staff meetings and Away Day. The HoD, Director of Research (co-chair), Director of Studies for Doctoral Students, Academic Director of University Doctoral College and Departmental Diversity Officer are members of the DSAT. As discussed earlier, currently all Departmental committees now have female members. Our Athena SWAN work has raised an awareness of the social scene and the link to the broader culture in the Department. Acting on our first staff survey results, we have started implementing more social activity events amongst our staff **(Action F2.3)**, including twice-weekly coffee mornings and fortnightly catch-up coffee & cake meetings taking place during our core hours. Also, there is an ongoing upgrade of the building aesthetics **(Action F2.4)**. All academic, research and professional staff in the

**Academic staff survey suggestions:**

- Building aesthetics (wall colour, plants, wall decorations)
- More opportunities for informal interaction
- Highlight our existing diverse culture
- Spotlight on fantastic female UG, PGT, PFR RA, staff within Department

department are invited to these events, with calendar invites sent-out at the beginning of each term from the Departmental administrators. Given the large number of new academic appointments over the past few years, a social group including all early career academics within the department has been formed. The group meets for Friday evening drinks after core hours 3-4 times per term, organizing the meetings

themselves via the respective university mailing list they have created.

**Actions:**

**F2.3:** Organization of periodic social activities for staff

**F2.4:** Upgrade Department aesthetics



Figure 20: EEE academic and research staff during Departmental staff meeting.

Our DSAT has also been very active in raising awareness across the Department on inclusivity issues by participating in University and Nation-wide events. The DSAT circulates e-mails amongst staff and students highlighting relevant events and activities organized locally and internationally (e.g. International Women's Day, WISE conferences, Women in Engineering Day). The official Departmental Social media accounts are also heavily exploited for relevant information dissemination. Our DSAT is also represented in our student Women's Engineering society, supporting our female students in their activities.



*Figure 21: DSAT co-chair supporting student Women in Engineering Society social media campaign for International Women in Engineering Day 2018.*

Individual staff successes and achievements are highlighted in regular emails from our HoD to all staff e.g. grant successes, promotions, press releases, external recognition, important family occasions. This new approach recognises all achievements in a more timely way (rather than announcements at staff meetings). By announcing achievements as well as challenges, it helps to foster a positive atmosphere within the department. It is also worth noting that comments from our staff survey highlight a very family friendly environment; nonetheless we believe that we can further improve in this very critical aspect for ECRs, and to this end have planned **Actions F3.1-5**.

#### **Academic staff survey**

##### **Reasons for joining Department:**

"Friendly, informal, collegial, inclusive environment"

"Inspiring members of staff"

##### **Good practice examples within Department:**

- Very strong peer support system
- Friendly environment for young families

Although currently we don't have a culture of sending emails in the evenings and at weekends to ensure no-one feels under undue pressure to respond, we will introduce a policy discouraging all staff from such practice; staff choosing to work at such times will be encouraged to use the delay-send email facility. Staff will be reminded of this policy at the first staff meeting of each academic year.

Despite the very nice working environment described by our staff survey results, we aim to identify early on any issues of concern for the future of our department. To this end we have planned **Actions F2.1,2 and 5**.

**Actions:**

**F2.1:** Department inspection from an external inclusivity professional to suggest improvements

**F2.2:** Develop guide for unacceptable behaviour and internal support mechanisms for staff/students in distress

**F2.5:** Exit interviews from leavers

**F3.1:** Signposting of staff to University family-related University policies on induction and from mentors/line managers

**F3.2:** Organization of annual Departmental family-friendly social event

**F3.3:** Departmental conference childcare-support supplementary fund

**F3.4:** Periodic seminar on University family-friendly policies for staff

**F3.5:** Introduction of “maternity/paternity-buddy” scheme

(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 who 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.

In our Department we have a zero-tolerance policy for all regarding harassment or bullying, 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 Officer; for students this includes the Students’ Union Advice and Representation Centre, Student Services and the Equality and Diversity Officer. In addition, University has just launched an online ‘Report and Support’ tool for reporting any kind of inappropriate behaviour either named or anonymously for staff, students and visitors. Nonetheless, staff feedback suggests that the Department should increase awareness of support channels for those bullied or harassed (**Action F2.2**).

**Actions:**

**F2.2:** Develop guide for unacceptable behaviour and internal support mechanisms for staff/students in distress



### (iii) Representation of men and women on committees

There are 5 departmental committees, in addition to the staff meeting (DSM). Prior to the formation of the DSAT, there was no monitoring of gender balance within them, hence one of them (LTQC) has had no female members for the past three years. Based on this reflection, the membership of all of the departmental committees was reviewed in the DSAT, and **our HoD took action making sure a gender balance reflecting the departmental balance is maintained. As of 2017-18 all committees feature at least 1**

#### Academic staff survey:

45% would like a more influential role within the Department

**female member and the membership gender balance is monitored**, always taking care of not overburdening our eligible female staff with disproportional administrative workload (**Actions F4.1-2**).

#### Actions:

**F4.1:** Ensure gender balance of representation within departmental committees

**F4.2:** Staff from all career levels included in decision making process

Committee		2014-15				2015-16				2016-17			
		M	F	%F	Chair	M	F	%F	Chair	M	F	%F	Chair
Research Committee (RC)		8	2	20	M	11	3	21	M	12	2	14	M
Executive Committee (EC)		5	1	17	M	6	1	14	M	5	1	17	M
Learning & Teaching Quality Committee (LTQC)		11	0	0	M	11	0	0	M	11	0	0	M
Athena SWAN Self-Assessment Team (SAT)		-	-	-	-	-	-	-	-	8	5	38	F&M
Staff/Student Liaison Committee (SSLC)	Staff members	8	4	33	M	9	4	31	M	9	5	36	M
	Student members	15	3	17		13	3	19		14	3	18	

Table 37: Representation of female members of staff on EEE departmental committees.

### (iv) Participation on influential external committees

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

Staff are encouraged to participate in influential and prestigious committees, both within and outside the University, as invitations arise. If funding is not available externally, then an individual's personal devolved budget, provided by the Department, may be used to reimburse expenses. When opportunities for external participation arise, an email is forwarded to all staff to encourage them to contribute.

### (v) Workload model

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

The Department uses a Workload Model (WLM) to record and verify the workloads of academics engaged in research and teaching in each academic year. Support is provided

at a Faculty level, which also helps to ensure consistency in the WLM allocations across the Faculty's four departments. WLM hours are allocated for the following categories: teaching and assessment; teaching support; research grants and contracts; general research; scholarship and professional development; management and administration; consultancy and other income-generating activities. The WLM is applied pro-rata for part-time staff and adjustments can be made for specific circumstances.

Individual staff WLM returns are agreed by academics and form part of the supporting documentation for annual SDPRs. At departmental level, the WLM is used to help the Head of Department plan and manage the equitable use of academic staff time, including the monitoring for biases across research discipline, grade and gender. Inevitably, there are aspects where the WLM could be improved but, through actions such as the sign-off

**Academic staff survey:**

45% consider the Department as having a positive working culture.

Major issues:

- Work/life balance
- Workload imbalance
- Too busy to socialize

45% would like a more influential role within the Department

by individual staff and the circulation of anonymised returns for the whole department, reasonable confidence in the transparency and fairness of the WLM is currently maintained. The University is currently rolling out an online workload system which will be used by the Department in the 2018/19 academic year and will help to increase the transparency, consistency and fairness of the WLM system, as requested by our staff in our last staff survey (**Actions F1.1-3**).

**Actions:**

**F1.1:** Work with University teams on the development of the new universal workload model and ensure our Department-specific requirements are taken into account

**F1.2:** Analyse workload allocation by gender annually

**F1.3:** Avoid committee overload for female staff

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

Our core hours are 10.00-16.00, all meetings and social events must be within these hours. Our regular coffee mornings (twice-weekly 10.15) and fortnightly coffee and cake meetings (Friday 14.15-15.15) also take place within core hours. The Departmental seminars are held on Tuesdays 13.15-14.15. Research centres and groups are encouraged to ensure their meetings occur within core hours. Timetabling is done centrally and automatically, with the core teaching hours being 09.15 to 18.15, Monday-Friday. No teaching activities are taking place on Wednesdays after 13.15 across the University, allowing both staff and students to engage undistracted on alternative activities at least once per week.

**(vii) Visibility of role models**

The Department actively promotes our role models and ensures that there are opportunities (gender balance of speakers and chairpersons in seminars) for all staff. The Department encourages students and staff to pursue and further their careers as Engineers. Our marketing materials including our Website, Department plasma screen displays and leaflets always feature female role models.





Figure 22: a, b) Departmental newsletter articles featuring achievements of our Academic female staff and c) BA2: The magazine for alumni and friends of the University of Bath, Issue 26 (29/08/2018), featuring a dedicated article on our Department's UG role models.



Figure 23: E. MacLennan and H. Crewe, "Electric Vehicle Innovations at the University of Bath, United Kingdom [Women in Engineering]," in IEEE Power Electronics Magazine, vol. 5, no. 2, pp. 72-75, June 2018. doi: 10.1109/MPEL.2018.2821823. Elizabeth MacLennan was a final year student in the Department and the Team Manager for Team Bath Racing Electric, 2018.



Figure 24: Our Women in Engineering Society (WES) student members in the Institution of Engineering and Technology (IET) Presidential Lecture in 2016.

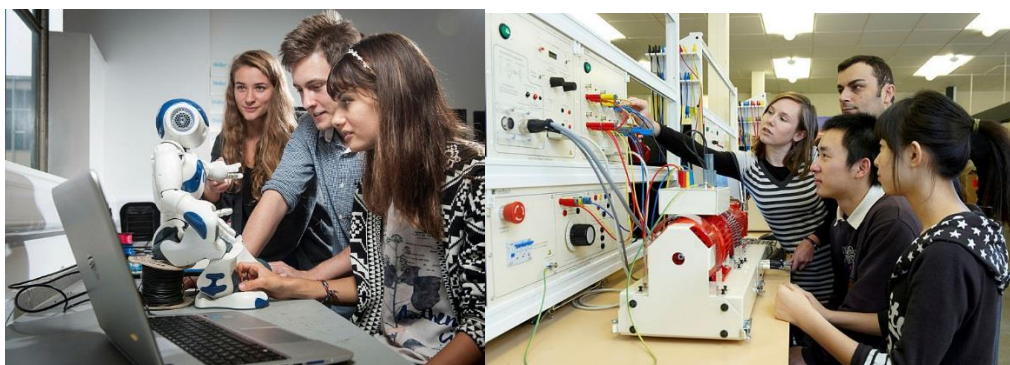


Figure 25: Pictures from updated departmental marketing material (UG IMEE and UG EEE brochures).

We also record and monitor gender balance of seminar speakers. The research seminars are organized at a Departmental level by the Director of Studies for Doctoral Students and currently feature mainly PGRs within the Department as speakers; hence the gender balance recorded in the following table is mainly reflecting our PGR gender balance. This practice has been revised during the past year (**Action F6.1**) and currently at the beginning of each term, members of staff are invited to suggest potential external guest speakers, complementing our PGR speakers (**Actions F6.2-3**). Considering this change of rationale, the gender balance of externally invited speakers will also be monitored and recorded in the following years.

**Actions:**

**F6.1:** Re-organization of Research Seminar

**F6.2:** Inaugural lecture by recently appointed/promoted members of staff

**F6.3:** Invitation of female external seminar speakers

Year	Male Speaker	Female speaker	Total
2016/17	12 – 66.7%	6 – 33.3%	18
2015/16	5 – 50%	5 – 50%	10
2014/15	13 (81.25%)	3 (18.75%)	16

Table 38: Departmental research seminar speakers by gender.

(viii) Outreach activities

Electronic & Electrical Engineering has taken a lead role in promoting STEM subjects; hosting Engineering Summer Schools and other outreach events including hosting outreach for the Girls Day School Trust in 2016 and 2017 at which a female post graduate student hosted a session focussing on why girls should study engineering.

WESBath is affiliated to the Women's Engineering Society and was set up in 2014 with the aims of supporting and empowering current female students in the Faculty of Engineering & Design and to engage in outreach to encourage young women to choose engineering as a career. The Department participates in WESBath and at STEM events. Female students in the department have been engaged with WESBath and each year

Electronic & Electrical Engineering students have joined the WESBath Committee as well as holding key roles of responsibility. In 2018, 53% of female students are members of the society (46 out of 92). For the academic year 2018/19 the two Co-chairs are students in the department, promoting Electronic & Electrical Engineering through WESBath outreach to Brownie and Guide groups in the local area. The Department have also been involved in NWED celebrations each June. We have also participate in the local WISE Bristol Hub, to share knowledge and experience of STEM industries.



*Figure 26: Our student Women in Engineering Society (WES) members during an outreach event for “Bath taps into Science 2017”.*



*Figure 27: The EEE outreach team during “Widening Participation Summer School 2017”.*





*Figure 28: EEE outreach team members during an outreach activity for a visit from the Girls Day School Trust in 2017.*

Staff are involved in student recruitment activities, which take place during the day on weekdays and at weekends (Saturdays). Participation at weekends is shared out among staff, and the dates are set in advance allowing all staff, particularly those with family commitments, the opportunity to swap dates or make any necessary childcare arrangements. Those engaging on Saturday activities get time off in lieu. Our undergraduate ambassadors are an important part of these events and help on student recruitment days, we encourage representation from male and female students.

Prior to 2017 outreach data were not routinely collected and monitored; going forward, a Departmental Outreach officer role has been created, organizing centrally at a Departmental level our outreach and Widening Participation Activities, implementing a robust data-collection system and evaluating and monitoring positive changes in engagement (**Actions F5.1-6**).

**Actions:**

**F5.1:** Establishment of Departmental Outreach coordinator role

**F5.2:** Coordination at a Departmental level of outreach activities by Departmental outreach officer

**F5.3:** Monitoring of inclusivity on our outreach activities

**F5.4:** Monitoring of gender balance in outreach activity engagement

**F5.5:** Include staff outreach-related activities in new workload model

**F5.6:** Make outreach standing item of the Departmental Academic Staff meetings and Away Day agendas.

(5,632 words)

## SILVER APPLICATIONS ONLY

### 6. CASE STUDIES: IMPACT ON INDIVIDUALS

**Recommended word count: Silver 1000 words**

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

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

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

### 7. FURTHER INFORMATION (391WORDS)

**Recommended word count: Bronze: 500 words**

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

It should be noted that within the past three years our Department has been undergoing significant expansion in terms of academic staff, resulting in a large proportion of our staff being in probation period. At the same time this has affected significantly the culture within the Department. The Department very recently expanded also its teaching activities in the area of Robotics; we are still unaware how this new area will influence the current gender balance in our UG and PGT in the future. Our Department's web presence has also been upgraded by the University since last year, hence our DSAT web-page has not yet been incorporated in the new web-site. Finally, our University is planning to transition to a University-wide workload model within the next 1-2 years, thus the actions planned in this application might change according to the details to be new workload model. The future actions on workload model will be determined within the framework of the new system, whose details are still unknown to us at the time of this submission. It is also worth noting that it is our aim to achieve a fully-inclusive environment for work and study which embraces an intersectional approach to equality and diversity. In EEE intersectionality is central in our inclusivity policies; to this end our DSAT is in contact and collaborating with the University of Bath Staff and PGR LGBT+ group (Kaleidoscope), promoting their events and activities to our staff and signposting the group to newly hired staff. It is also worth noting that since last year we have been rolling out a new PGT strategy across the Department, restructuring our previously existing programmes and expanding with new programmes. We are monitoring our student data for PGTs from our first intakes as they evolve over time and will diversify our marketing and recruitment strategy accordingly.

It is also worth mentioning that external data about undergraduate students used are from the Higher Education Statistics Agency (HESA) electronic and electrical engineering cost centre with year ending July 31st. Where indicated, internal data from the Department or, e.g., the Faculty of Engineering and Design, are included. HESA data, including benchmark data for the Electronic and Electrical Engineering Higher Education sector, represent Full Time Equivalents (FTE) rounded to the nearest 5, explaining minor differences with respect to the internal data based on academic year headcounts.

(391words)

## 8. ACTION PLAN

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

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

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

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




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## LANDSCAPE PAGE



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No	Rationale	Proposed Action (s)	Timeframe	Responsibility	Success criteria
<b>A. Self-assessment team and process</b>					
<b>1</b>	Get Department-specific insight on culture, not covered by the generic University wide-surveys	1. Biennial Departmental staff survey	Started 2017/18, biennially thereafter	DSAT chairs	Survey results collected and presented in DSAT and staff meetings
		2. Biennial Departmental PDRA and PGR focus group		DSAT PDRA/PGR representatives	
		3. Biennial Departmental student survey		DSAT UG/PGT WG	
<b>2</b>	Increase staff and student engagement and awareness of AS & EDI in the Department	1. Web-page establishment	By December 2019	DSAT chairs	Updated DSAT online presence
		2. DSAT update standing item on Academic Staff meetings and Away Days	Started in January 2017	HoD	AS included in staff meeting agendas
		3. Coordinate actions with Faculty DSATs and University AS network	Started in June 2017	DSAT chairs	100% participation of DSAT chairs in Faculty and University AS meetings
<b>3</b>	Assure DSAT diversity and efficiency in action implementation and cultural change	1. Rotate DSAT membership for diversity in expertise	Annual membership revision	DSAT chairs	At least one representative from each Departmental stakeholder group in the DSAT
		2. Ensure co-chair succession through shadowing	September 2021	DSAT chairs	2 DSAT co-chair members

		3. Create working groups (WGs) corresponding to respective actions	September 2018	DSAT chairs	100% of DSAT member allocated to at least one WG
		4. 5 DSAT meetings per year reporting progress on actions	Started November 2016	DSAT chairs	Minutes and agendas for at least 5 DSAT meetings
		5. DSAT membership in workload model	December 2019	HoD	50 hours allocated to each DSAT member annually
4	Analyse effect of actions on student and staff population diversity	1. Collect and analyse UG, PGT, PGR, PDRA and staff data annually	Annual DSAT meeting analysis	DSAT chairs	Annual report on departmental data and presentation during staff meetings
<b>B. Undergraduate students</b>					
1	Personal tutor response rates and communication variable	1. Signpost students to alternative routes for individual support during Welcome Week (named female non-academic member of staff, openness of academic staff)	September 2019	HoD	Alternative support routes within the Department included in student Welcome Week presentation
		2. Add slide on Departmental inclusivity policies and acceptable behaviour within the Department in HoD Welcome Week talk	September 2019	HoD	Inclusivity and acceptable behaviour Departmental policies included in student Welcome Week presentation
2	Communicate inclusivity and friendliness of department better in open days/AVDs	1. Revision of Departmental marketing material biennially	Started 2017/18, biennially thereafter	DSAT	Achieve perception of Department inclusivity >80% in Open Days/AVD participants questionnaire
		2. Ensure female role models (staff, student ambassadors) in AVDs without overburdening female staff	Started 2017/18, biennially thereafter	HoD	At least 20% of Department participants in each event female



3	Increase visibility and perceived significance of inclusivity among students	1. Participate and advertise WES events	Started February 2017	DSAT chairs and Departmental Equality and Diversity Officer	Achieve UG student awareness of WES to 80% in student survey
4	Increase appeal of EEE programmes to female candidates	1. Review gender-biased language in course descriptions	2020/2021 marketing material	DSAT	All of our course descriptions achieving neutral scores in gender-bias calculator
		2. Outreach events targeted to girls-only schools	Started March 2017	Departmental Outreach Officer	At least 1 event per year organized with girls-only school
		3. Add outreach/open days/AVD EEE activities appealing to female candidates	Started September 2018	HoD, Departmental Outreach Officer	Recording >80% satisfaction on at least one activity from female participants
		4. Revise IMEE recruitment strategy	May 2019	DSAT, IMEE DoS	Reduce the IMEE UG F:M ratio recruitment gap with EEE programmes to 10%
C. PGT students					
1	PGT female:male ratio currently below sector average	1. Focus group/interviews on current PGT students	May 2019	DSAT UG/PGT WG	Survey results analysed in DSAT and presented in staff meetings
		2. Review language in course/programme descriptions	2020/21 marketing material	DSAT and PGT Departmental Coordinator	All of our course/programme descriptions achieving neutral scores in gender-bias calculator
		3. Analyse current recruitment channels for PGTs and diversify our marketing and recruitment strategy	June 2019	DSAT and PGT Departmental Coordinator	Increase in female:male ratio of PGT students to at least national benchmark by 2020
		4. Add slide on Departmental inclusivity policies and acceptable behaviour within the Department in welcome week talk	September 2019	PGT Departmental Coordinator	Inclusivity and acceptable behaviour Departmental policies included in PGT welcome week talk

D. PGR Students					
1	Identify and promote good practice in PGR recruitment/supervision within the Department	1. More detailed research on female:male ratios per research area	January 2019	PGR WG	Achieve at least national average PGR female:male ratios across all research centres
		2. Interview individual members of staff with high female:male PGR ratios over time and promote their good practice in staff Away Days	March-September 2019	DSAT PGR WG	Compilation of a Departmental good practice guide circulated to members of staff annually
2	PGR career development	1. Promote teaching opportunities for PGRs systematically via Departmental administration process	Embedded by September 2019	HoD	Increase PGR awareness on Departmental teaching opportunities to >80%
		2. Upgrade communication of non-research related Departmental activities available (e.g. lab demonstrations, outreach activities, departmental representation) and importance for future career development	Implemented by September 2019 and repeated biennially	DSAT PGR WG	Increase PGR perception on non-research related activity importance in their career development to >80%
		3. Connect Departmental activities with Doctoral College PGSkills requirements	Implemented by September 2020	Director of Doctoral Students and Director of Doctoral College	Inclusion of Departmental activities in PGSkills training list
		4. Establish career options discussion with supervisor at least once per year	Embedded by October 2019	Director of Doctoral Students	Increase uptake of annual career option discussion with supervisor to >80%
E. Supporting and advancing women's careers					
1	Increase female staff recruitment	1. Create Departmental job advert template, explicitly	December 2018	DSAT SAC WG	Exploitation of the renewed Departmental Template in

		inviting applications from females and other underrepresented groups, and circulate via e-mail to staff annually			>80% of our job advertisements
		2. Highlight our Departmental Bronze Award (if awarded) on future departmental job advertisements	April 2019	DSAT SAC WG	Athena SWAN bronze logo added on Departmental job advertisement template
		3. Monitor departmental shortlisting and interview procedures	Embedded by June 2019 and reviewed annually	DSAT chairs and Faculty HR officer	Achieve compliance with University shortlisting and interview gender-balance guidelines in >90% of Departmental recruitments
		4. Advertisement of posts on women's networks	April 2019	DSAT SAC WG	>80% of our job advertisements included in Women in Engineering job website
		5. Annual and in response to specific calls internal e-mail reminder to staff in order to put forward PDRA's with potential for fellowship applications	Started in September 2018	Director of Research	At least 1 PDRA per year applying for a fellowship within the Department
2	PDRA's isolated from Departmental activities	1. Departmental Research Staff Coordinator role created and participating in DSAT	Started in September 2018	HoD	Acknowledgement of role in workload model
		2. Create central Departmental procedure for new PDRA induction to the Department	Started in May 2018	Departmental Research Staff Coordinator	Departmental procedure adhered to in >80% of new PDRA appointments
		3. Mentor assigned to all PDRA's at the induction phase	Embedded by September 2019	Departmental Research Staff Coordinator	Mentors assigned to all PDRA's in the Department

		4. Create PDRA welcome pack including: <ul style="list-style-type: none"> <li>• key contact persons</li> <li>• mentorship details</li> <li>• job requirements</li> <li>• acceptable behaviour within the Department guidelines</li> <li>• alternative routes for work-related complaints</li> <li>• career development information</li> <li>• training opportunities</li> <li>• social events</li> <li>• maternity/paternity/family-related support information</li> </ul>	Started in May 2018	DSAT SAC WG	Increase PDRA awareness on all related subjects to >80%
		5. Annual e-mail to Department PDRAs highlighting teaching-related opportunities within the Department, at a voluntary basis	Embedded by September 2019	DSAT SAC WG	At least 20% of PDRAs annually involved in teaching related activities
		6. Highlight teaching-related courses available to PDRAs	Embedded by September 2019	DSAT SAC WG	At least 20% of PDRAs each year undertaking teaching related courses
		7. Circulate invites to PDRAs to Departmental social events	Embedded by September 2019	DSAT SAC WG	PDRA perception on integration within the Department >80%
<b>3</b>	Currently offered staff mentorship within the Department inconsistent and often ineffective	1. Organization of unconscious bias training-workshop in staff Away Day	September 2019	DSAT Chairs	At least 50% of academic staff attending unconscious bias training workshop
		2. Upgrade online mentoring and unconscious bias training	December 2019	HoD	At least 90% of academic staff completing online unconscious bias training

		for staff from optional to compulsory			
		3. Add mentoring duties in the workload model	December 2019	HoD	10 hours annually per mentee allocated
4	PDRA SPDR uptake unmonitored	1. Systematically monitor proportion of completed SPDRs within the Department	Embedded by April 2019	DSAT chairs and HR faculty officer	PDRA SPDR completion rate >80%
		2. Periodic SPDR training workshop for PDRA line managers	Started in September 2018, to be repeated every 4 years	HoD and HR Faculty Officer	Staff perception on SPDR competence >80%
		3. Personal reminder to staff to do their SPDRs	Embedded by June 2019	HR Faculty Officer	PDRA SPDR completion rate >80%
5	Low awareness on promotion process	1. Periodic promotions workshop	Started in May 2018, to be repeated every 4 years	HoD and University Academic Staff Development Team	Staff awareness on promotion routes >80%
<b>F. Organisation and Culture</b>					
1	Transparency of workload model	1. Work with University teams on the development of the new universal workload model and ensure our Department-specific requirements are taken into account	Started September 2018	HoD and DSAT chairs	Staff satisfaction with workload model accuracy >70%
		2. Analyse workload allocation by gender annually	Started September 2018	HoD and DSAT chairs	Achieve equal average workload between male and female staff
		3. Avoid committee overload for female staff	Started June 2017	HoD and DSAT chairs	Female member of staff satisfaction with participation in decision making process >80%

2	Working environment improvement	1. Department inspection from an external inclusivity professional to suggest improvements	July 2019	DSAT chairs	Implementation of at least three actions arising from external feedback
		2. Develop guide for unacceptable behaviour and internal support mechanisms for staff/students in distress	December 2018	DSAT EC WG	Increase staff awareness on unacceptable behaviour and available support routes >80%
		3. Organization of periodic social activities for staff	Started January 2017	DSAT EC WG	Staff satisfaction with social activities within Department >70%
		4. Upgrade Department aesthetics	Started September 2016	HoD and DSAT EC WG	Year-on-year increase of staff satisfaction with Department aesthetics
		5. Exit interviews from leavers	Started September 2018	DSAT chairs	More than 50% of departmental leavers provide feedback to the Department
3	Improvement of Departmental family-friendly culture	1. Signposting of staff to University family-related University policies on induction and from mentors/line managers	Started June 2017	Academic Staff	Awareness of family-related policies to >80%
		2. Organization of annual Departmental family-friendly social event	Embedded by July 2019	DSAT EC WG	At least 1 family-friendly social event per year
		3. Departmental conference childcare-support supplementary fund	Embedded by October 2019	HoD	At least £500 per year available from the Department every year for child-support during conference participation
		4. Periodic seminar on University family-friendly policies for staff	First one implemented by July 2019	HoD	Awareness of family-related policies to >80%

		5. Introduction of “maternity/paternity-buddy” scheme	Deployed by November 2019	DSAT SAC WG	All members of staff in maternity/paternity assigned to a “buddy” within the Department
4	Transparency in Departmental decision-making process	1. Ensure gender balance of representation within departmental committees	Started March 2017	HoD and DSAT chairs	All committees achieving a minimum of 20% female participation by 2021
		2. Staff from all career levels included in decision making process	Started March 2017	HoD and DSAT chairs	At least 1 member per committee from each academic grade
5	Re-organization of Departmental Outreach activities	1. Establishment of Departmental Outreach coordinator role	Started in April 2017	HoD	Acknowledgement of role in workload model
		2. Coordination at a Departmental level of outreach activities by Departmental outreach officer	Implemented by October 2019	Departmental Outreach coordinator	Departmental Outreach officer becomes a member of the DSAT
		3. Monitoring of inclusivity on our outreach activities	Implemented by July 2019	Departmental Outreach officer	Satisfaction from our outreach activities by female participants >80%
		4. Monitoring of gender balance in outreach activity engagement	Implemented by July 2019	Departmental Outreach officer	Recorded engagement gender balance of outreach events >20%
		5. Include staff outreach-related activities in new workload model	December 2019	HoD	20 hours allocated per outreach event per member of staff
		6. Make outreach standing item of the Departmental Academic Staff meetings and Away Day agendas	March 2019	HoD	Perception of outreach importance among academic staff >60%
6	Visibility of female role models	1. Re-organization of Research Seminar	Started October 2017	Director of Doctoral Students	Recording of Departmental external speakers

		2. Inaugural lecture by recently appointed/promoted members of staff	Started October 2016	Director of Doctoral Students	At least 80% of recently appointed/promoted staff delivering inaugural lecture
		3. Invitation of female external seminar speakers	Started March 2018	Director of Doctoral Students	At least 1 external female speaker per year

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