Name of institution	Imperial College London
Department	Department of Civil and Environmental Engineering
Focus of department	**STEMM**
Date of application	30 November 2017
Award Level	**Bronze**
Institution Athena SWAN award	**Date: April 2016** **Level: Silver**
Contact for application Must be based in the department	Professor Nick Buenfeld
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1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT

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.

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18th November 2017

Professor Nick Buenfeld
PhD MSc BSc DIC CEng FICE FIStructE HonFICT FREng
Head of Department of Civil & Environ. Engineering
Professor of Concrete Structures

Dr Ruth Gilligan
Athena SWAN Manager
Equality Challenge Unit
First Floor, Westminster Tower
3 Albert Embankment
London
SE1 7SP

Dear Dr Gilligan,

Athena SWAN Bronze Award Application – Department of Civil and Environmental Engineering

I am delighted to submit the Department of Civil and Environmental Engineering's application for a Bronze Athena Award. The Department expects all staff to perform or support excellent teaching and research and this requires a very supportive, inclusive and friendly culture. Imperial is fully committed to the Athena Charter principles and I wholeheartedly support this application. I also confirm that the information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of my Department.

I have been Head of Department since 2011 and have initiated and supported a range of actions to promote gender equality and increase our female population while maintaining or improving quality. I chair all academic appointment panels and the success of female applicants has been around 50% higher than for male applicants. Over this period the number of female Professors in the Department has increased from one to four. The twelve main committees in the Department have an equivalent or greater proportion of female members than in the Department as a whole. Five female Academics have taken maternity leave since 2013 and all have been provided with a postdoc/teaching fellow to enable them to focus principally on their research for 12 months following their return from maternity leave. I also created an outreach role in the Department primarily focussed on attracting more female students. Nevertheless, there is much more that we can do and Athena has been a useful framework for assessment and planning.

I am an active member of our SAT and asked Professor Richard Jardine, Deputy Head of Department, to chair it. He was recently Dean/Consul for the Faculty of Engineering and has an excellent grasp of the best practices across College Departments; I knew that he would not feel inhibited in highlighting areas needing attention and encouraging colleagues to do the same.

The responses to our 2017 Departmental Athena on-line staff survey have been particularly enlightening and, taken with other data, provide a sound basis for identifying where we need to make changes. The greatest challenge is increasing the number/proportion of female applicants for staff and student positions since we are already above sector averages. Equally important is our aim to increase substantially the proportion of

staff choosing to have a formal annual review, increasing transparency through improved communications and providing greater support for staff.

Our Action Plan will deliver the changes necessary to address these and other issues. It involves around 50 actions which were proposed, considered and agreed by a large body of staff and endorsed by our Departmental Management Committee, providing the buy-in necessary for rapid implementation. We are revising our Departmental strategy to reflect these changes and to place more emphasis on gender equality. Our SAT will develop into an Equality, Diversity and Departmental Culture Committee (EDDC) that will monitor, discuss and ensure the effective implementation of our Athena Action Plan and advance other EDDC matters.

Please do not hesitate to contact me should you require any further information.

Yours sincerely

Nick Buenfeld

Professor Nick Buenfeld

Total text: 513 words

List of abbreviations

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BEng	Bachelor of Engineering
CivSoc	Civil Engineering Society (Student Society)
DHoD	Deputy Head of Department
DOM	Department Operations Manager
EA	Executive Assistant
EDU	Educational Development Unit
EDDC	Equality, Diversity and Departmental Culture Committee
EU	European Union
FAD	Female Academic Development
HEIDI	Higher Education Database for National Picture
HoD	Head of Department
HoS	Head of Section
KIT	Keeping in Touch
LDC	Learning and Development Centre
M.Ed.	Master of Education
MEng	Master of Engineering
MSc	Master of Science
P+S	Professional and Support Staff
PFDC	Postdoc and Fellows Development Centre
PDCh	Postdoc Champion
PG	Postgraduate
PG Tutor	Postgraduate Tutor
PGR	Postgraduate Research
PGR Admin	Postgraduate Research Administrator
PGT	Postgraduate Taught
PhD	Doctor of Philosophy
PI	Principal Investigator
PRDP	Personal Review and Development Plan
PRES	Postgraduate Research Experience Survey
QS Survey	QS World University Rankings
R+T	Research and Teaching Staff (non-postdoc)
REF	Research Excellence Framework
SALP	Senior Academic Leadership Programme
SAT	Self-Assessment Team
SAT Admin	Self-Assessment Team Administrator
SAT Coordinator	Self-Assessment Team Coordinator
SRI	Senior Research Investigator
TG	Task Group (of SAT)
TSM	Technical Services Manager
UG	Undergraduate
UROP	Undergraduate Research Opportunities Programme

_____

2.   DESCRIPTION OF THE DEPARTMENT
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.

Our Department runs large undergraduate, MSc and PhD programmes from a purpose-designed building in the South Kensington campus, with a total of almost 800 students. It has been both highly international and world leading in research and teaching since it was established in 1913. As set out in Figure 2.1, our five academic Sections run their own specialist MSc and PhD programmes; the Heads of Section act as academic line managers. Our research ranges from remote field studies to large scale experiments in our well-equipped laboratories and through to purely analytical or computational projects. Our Head of Department (HoD) is supported by a core team, a Departmental Management Committee (DMC) and twelve specialist Committees, including our Athena SAT (Figure 2.2).

Image 2.1 PhD students at work in one of our soil mechanics laboratories; October 2017
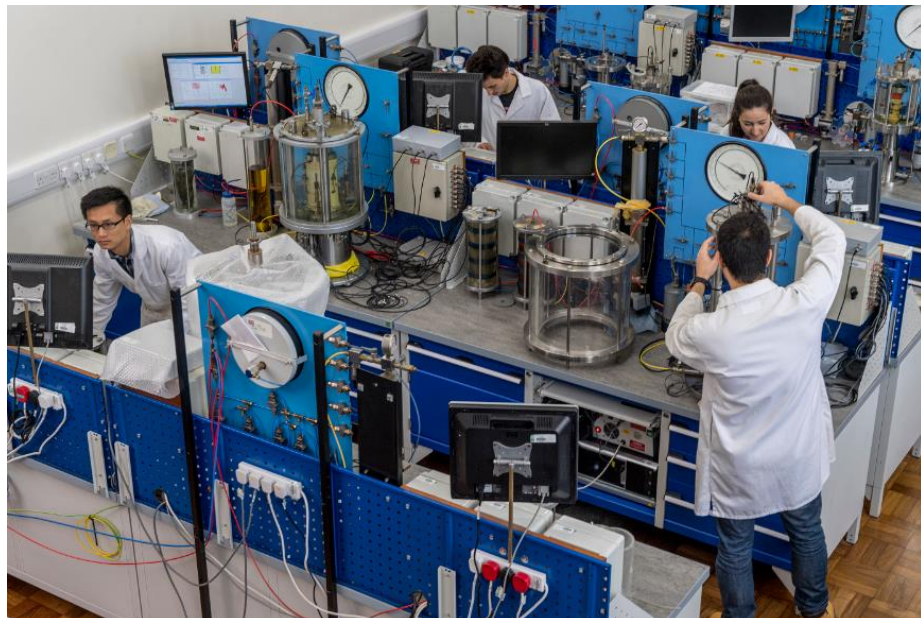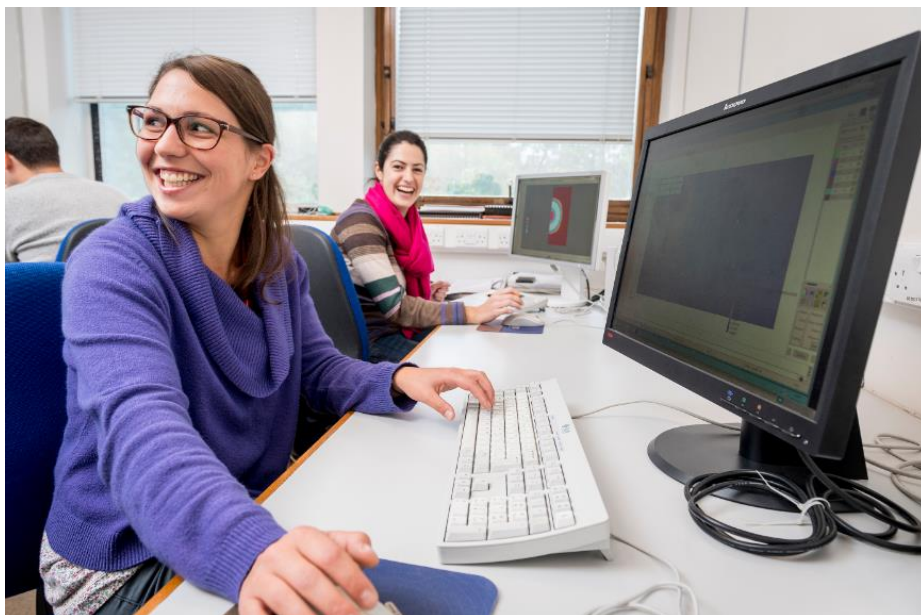
Image 2.2 Students making use of study space in Departmental library, which houses the second largest Civil Engineering collection in the UK; October 2017

Image 2.3 PhD students from one of our several numerical mathematical modelling groups; October 2017

The Department had extremely low levels of female representation, except in professional support services, until the 1980s. Female representation has improved greatly since then as our combined staff group has grown to 152 members, 52 of whom are academics. As summarised in Table 2.1 below, around one third of student population is now female with a similar rate among both our research staff and teaching and learning staff. Women continue to make up the majority of our professional services staff, although our technician team remains overwhelmingly male.

**Table 2.1 Overview of gender balance within the Department of Civil & Environmental Engineering 2016/17**

Student/Staff Type	Number of Women	Number of Men
Undergraduate – 2 courses	113 (33%)	227 (67%)
Postgraduate Taught – 14 courses	97 (36%)	176 (64%)
Postgraduate Research	54 (34%)	105 (66%)
Research Staff	14 (32%)	30 (68%)
Academic Staff	10 (19%)	42 (81%)
Learning & Teaching Staff	1 (33%)	2 (67%)
Professional Services	23 (58%)	17 (42%)
Technical Services	0	13 (100%)

Progress has also been made in our academic staff group. While most academic staff remain in post until they retire, the Department has been increasingly successful when recruitment opportunities have arisen in appointing very able female staff over recent years. With slow staff turnover, our female representation is inevitably taking time to catch up with our student and research staff proportions, but has doubled over the last decade. London living costs can make it hard to recruit mid-to-late career staff and our new appointments (both male and female) are often relatively junior. Nevertheless, our female staff fare at least as well, on average, as their male counterparts in promotion applications and we have an increasing proportion of female senior academic and managerial staff.

Image 2.4 A PhD student at work in our main structural engineering laboratory; October 2017

Image 2.5 Second year undergraduates undertaking laboratory class in porous media flow; October 2017
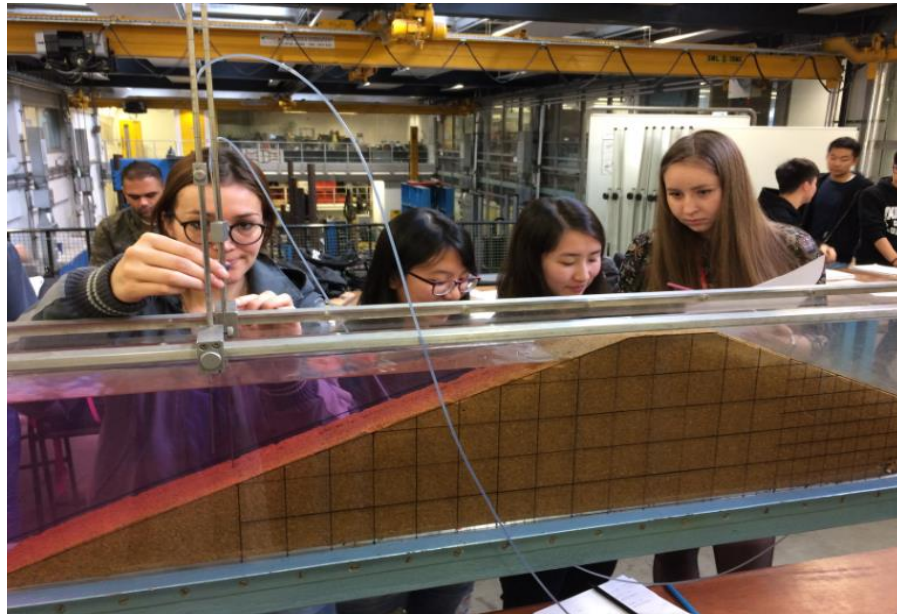
In the same way that our Department's gender balance has changed dramatically over recent decades, our staff and student groups now represent a far wider spread of countries of origin and more diverse ethnicities. Multiple steps have been taken to encourage, facilitate and recognise these evolving trends. However, our statistics show slowing rates of change in our gender balances and our Staff Surveys identify ways in which we need to improve our operations and culture. We are also aware of a need to recognise and celebrate diversity and to develop towards more generally inclusive and representative student and staff groups. Our Athena SAT's Self-Assessment and the Action Plan set out in our application form the basis of our strategy for progressing our Departmental operations and culture in all these respects.

Image 2.6 Third year undergraduate year group at end of their design projects; June 2014

Total excluding tables and figure captions: 468 words

Figure 2.1. Departmental academic structure, showing five Sections, including Heads of Section

Head of Department – Professor Nick Buenfeld

Deputy Head of Department – Professor Richard Jardine

Departmental Operations Manager- Ms Lindsey Anne Cumming

Technical Services and Facilities Manager – Mr Brian Whiting

Departmental Safety Officer – Dr Geoff Fowler

Departmental Management Committee

Attended by Core Departmental Staff

Environment and Water Resources Engineering

Professor Steven Smith

Fluid Mechanics

Professor Christopher Swan

Geotechnics

Professor Lidija Zdravkovic

Structures

Professor Ahmed Elghazouli
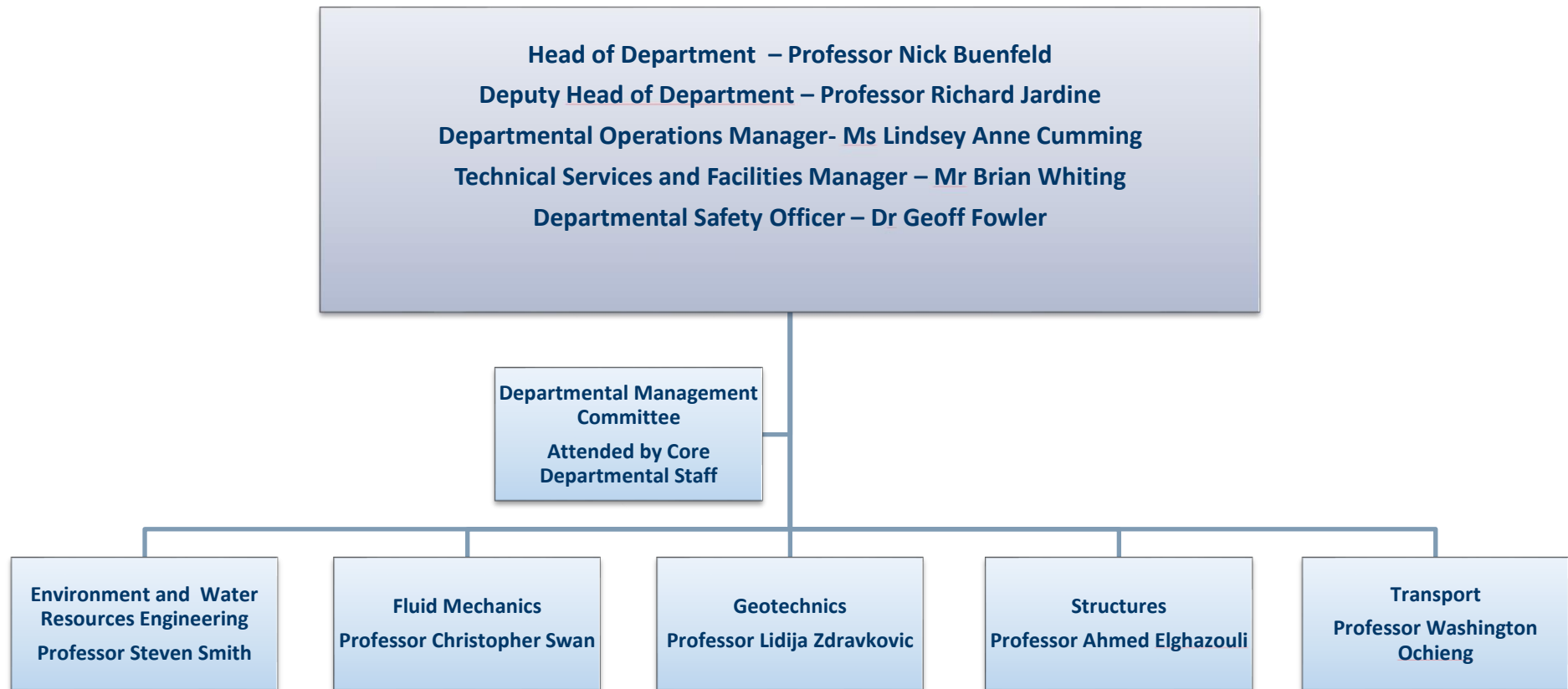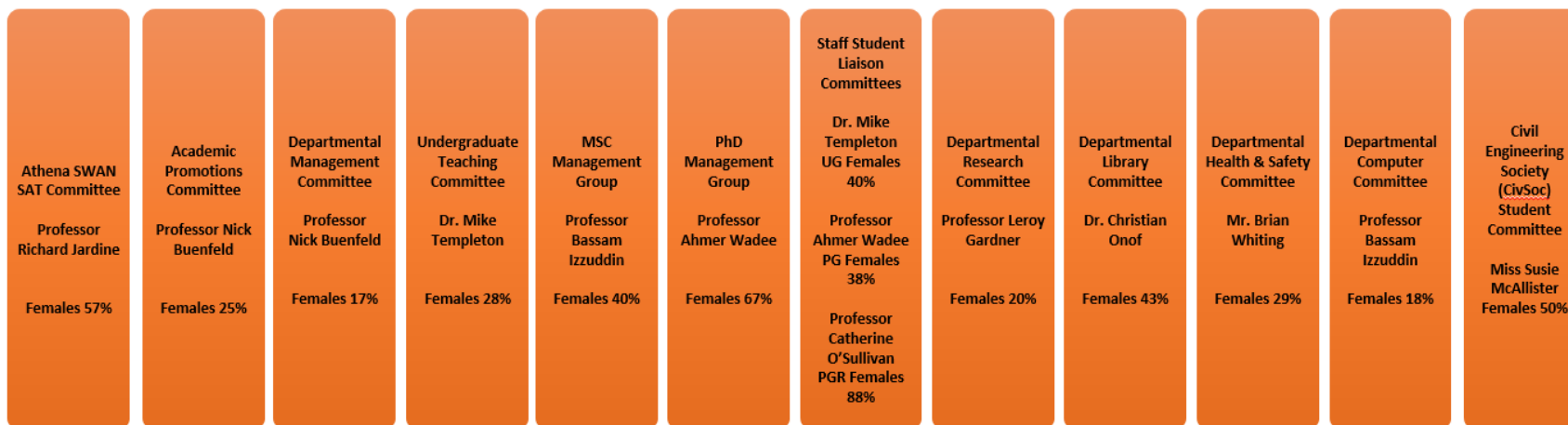
Transport

Professor Washington Ochieng

Figure 2.2. Departmental administrative structure of twelve main committees, showing current committee Chairs and gender balance

Athena SWAN SAT Committee	Academic Promotions Committee	Departmental Management Committee	Undergraduate Teaching Committee	MSC Management Group	PhD Management Group	Staff Student Liaison Committees	Departmental Research Committee	Departmental Library Committee	Departmental Health & Safety Committee	Departmental Computer Committee	Civil Engineering Society (CivSoc) Student Committee
Professor Richard Jardine	Professor Nick Buenfeld	Professor Nick Buenfeld	Dr. Mike Templeton	Professor Bassam Izzuddin	Professor Ahmer Wadee	Dr. Mike Templeton UG Females 40%	Professor Leroy Gardner	Dr. Christian Onof	Mr. Brian Whiting	Professor Bassam Izzuddin	Miss Susie McAllister
Females 57%	Females 25%	Females 17%	Females 28%	Females 40%	Females 67%	Professor Ahmer Wadee PG Females 38%	Females 20%	Females 43%	Females 29%	Females 18%	Females 50%
						Professor Catherine O'Sullivan PGR Females 88%					

3.   THE SELF-ASSESSMENT PROCESS
Recommended word count: Bronze: 1000 words

Describe the self-assessment process. This should include:

(i)   a description of the self-assessment team

An initial SAT was convened in August 2014. The team, which was representative of the Department's staff, worked with a range of ECU and Imperial guidance documents to identify areas requiring attention including:

- The lack of an Action Plan
- A need for better monitoring and communication of the annual female participation trends
- Ensuring suitable female representation in the Promotions Committee
- Greater participation in, and monitoring of, training, including unconscious bias
- Further recognition of staff contributions and better feedback through Personal Review and Development Plans (PRDP) and other routes
- Additional support during the promotions process and facilitation of flexible working
- More outreach work to attract female students and staff

However, progress was affected by the Coordinator's partial retirement. The SAT reconvened in July 2016 with a new Coordinator (Professor R Jardine, Deputy HoD) and a 0.2 FTE Administrator (Ms A Williams). Working with the HoD and Departmental Management Committee (DMC), the SAT team invited six, mostly female, colleagues with specific relevant experience to join the group. They agreed readily and, as detailed in Table 3.1, the expanded SAT now represents all the Department's main staff groups and job families, including:

- Academic staff from all grades, including the Department's Head and Deputy Head, who teach and supervise Undergraduate, Postgraduate and Research students
- Support staff from our Technical and Administrative groups
- A Postdoc staff representative

The expanded group has 8 female and 6 male members. It has been highly active and the additional work placed on its team members has been recognised during individuals' annual PRDPs, workload and salary reviews. External input has been provided by the College's Athena Coordinator (Mr R Bell) and Dr Cleo Kontoravdi from Chemical Engineering, who led her Department's successful Silver Athena application.

Table 3.1 – Department of Civil and Environmental Engineering SAT Composition, showing each individual's Task Group (TG) assignment

Name	Gender	Responsibilities	Task Group (TG)	Experience relevant to SAT work
Professor R Jardine (Coordinator)	Male	• Deputy Head of Department • Professor in Geomechanics • Former College Consul	TG1	Experience at Imperial College from UG in 1970s to College-wide Dean/Consul role covering, amongst other tasks, recruitment, promotions, disciplinary and appeal panels. Parent of three children who attended College Nursery
Ms A Williams, (Administrator)	Female	• Centre Support Manager & Industrial Liaison — TG1 • College Disabilities Communications Rep — TG4		Administrator supporting a team of 25 and engaging in HR Processes. Experience of maternity leave, College Nursery and as carer to her elderly mother
Mr R Bell	Male	• College Athena SWAN Coordinator		Sits on Departmental Athena SATs across College and related College Committees. Volunteers as Athena assessor and Chair. Works flexibly
Professor N Buenfeld	Male	• Head of Department	TG1	Chair of Department's Management Committee and Appointment, Probation and Promotion Panels. Parent of two children now at university
Mrs L Green	Female	• Undergraduate Office Manager & Admissions Tutor • Department Disability Liaison officer	TG2	Many years' experience of administrative processes and College regulations. Manages team providing student support and guidance. Supports UG/PG disabled students, assists with widening participation & outreach
Professor S Grimes	Female	• Director of Environmental MSc Cluster • Year Coordinator, 'Have Your Say' Champion	TG4	Academic and management experience at 3 UK Universities. First female Royal Academy of Engineering Research Chair. Mentor to junior female academic staff
Mr G Herbert	Male	• Design and manufacture of laboratory equipment, instrumentation and data systems	TG4	Technical staff volunteer to Department's Athena SWAN action group
Professor B Izzuddin	Male	• Lead for MSc Programme, Computing Committee & Computational Structural Mechanics	TG2	Extensive academic experience and understanding of recruitment, promotions and management. Experience with raising two children to university age
Dr S Kontoe	Female	• Senior Lecturer, Dept. Tutor for Women, Dept. Rep on Faculty Equality, Diversity & Culture Committee • Director of Geotechnics MSc Cluster	TG4	More than 10 years' academic experience. Mother of two children attending Imperial Nursery, one maternity leave supported by Elsie Widdowson Fellowship. No family support in the UK
Dr C Kontoravdi	Female	• Reader and Advisor to Civil & Environmental SAT from Chemical Engineering Department		Athena SWAN co-ordinator and SAT Chair in Chemical Engineering, led 2014 Silver renewal & implementation of Action Plan. Full-time academic and mother of two
Dr M Micallef	Female	• Nominated SAT Postdoc representative	TG3	Postdoctoral Research Associate in the Structures Section (since 2015) following MSc and PhD studies in the same group (starting September 2010)
Dr A Mijic	Female	• Senior Lecturer in Water Resource Engineering. • Graduate School Research Skills Tutor • Departmental Outreach Coordinator	TG4	Experience in Department from MSc & PhD student life to academic positions. Raised three primary/secondary school children while advancing PhD
Professor C O'Sullivan	Female	• Professor in Geotechnics • Departmental Senior Postgraduate Tutor	TG3	Joined Department in 2004, from academic position in Ireland. Student support and administration as 1st year coordinator and PG Senior Tutor. Personal experience as academic with a pre-school aged child at Imperial nursery
Dr P Stafford	Male	• Reader in Structures, Department Careers Adviser • Director of Structural Engineering MScs	TG3	Father to two children at Imperial nursery, one with permanent disability. Awareness of external family demands through recent illness and loss of mother

(ii)   an account of the self-assessment process

In 2016 the expanded SAT completed a comprehensive self-assessment and sought advice from the College and successful Departments. This led to a 17-point interim Action Plan that was discussed by, and agreed (after minor modifications) by, the DMC in December 2016 and presented to all staff in a Departmental assembly. The plan was endorsed and assimilated into Departmental policy, as reflected in our application and the newly developed Departmental strategy. Examples of points that have been agreed and implemented fully include a requirement for all Section Heads and other relevant DMC members to undertake unconscious bias training before April 2017 and the use of comprehensive surveys and focus groups to address specific and relevant areas of concern.

The SAT then worked to complete the Athena application, assigning members to the four Task Groups (TGs) as identified in Table 3.1:

TG1 –   Preparation of background/introductory material and overall editing

TG2 -   Data gathering and analysis

TG3 -   Self-assessment of our Department's current practices and culture

TG4 -   Major staff survey to address data gaps (with input from TG3) and the formulation of a robust future Action Plan and monitoring system.

The TG leaders (two of whom were female) drafted relevant text for the application form which the Coordinator edited into compiled drafts for review by the DMC and College for our final submission. The SAT held 25 well-attended plenary and TG group meetings involving the Coordinator and/or Administrator. SAT members have also had regular communication with Faculty and Departmental HR, as well as senior and administrative staff from the College's central Athena Committee. The SAT's most intense activities involved developing its self-assessment and Action Plans through its own major Athena survey and analysis of the 2017 College Staff Survey. The survey analysis was supplemented by a Focus Group involving nine PhD researchers and facilitated by the College Learning and Development Centre.

Our Departmental Survey was designed, launched, managed and interpreted by SAT members to address specific points raised in the Athena application form. It differed considerably from the College-wide Staff Survey (completed by 61% of our Department's staff) that was undertaken in March 2017 and greatly strengthened our work in assessing and understanding our members' views on how our Department works and its current culture. The College and Departmental Staff Surveys were open to all job families.

The Departmental survey, which posed over 50 questions, was carried out in May 2017 through an automated and fully anonymous web-based process. Ninety-eight staff members (69% of the total registered) completed the survey, which was analysed rigorously to inform the SAT and DMC discussions. The results were presented at a Departmental Assembly in September 2017, prompting further discussion and feedback.

The Action Plan developed by the SAT was refined through discussions with our DMC and College colleagues leading to the final plans set out in our application. The Athena process has had a major impact on the evolution of the Departmental strategy referred to in the HoD's supporting letter.

Table 3.2 Ten main SAT milestones

Date	Milestone
27 August 2014	SAT's first scoping discussions
21 July 2016	First draft SAT self-assessment document
28 November 2016	SAT reassembles with new co-ordinator and additional members
21 February 2017	Formation of 4 dedicated Task Groups.
10 May 2017	Staff Survey launched at full Departmental Staff Assembly, followed by later Departmental Focus Group and PRES survey
16 June 2017	Output from the Departmental Staff Surveys and Focus Group discussed and initial Action Plan developed
17 July 2017	Initial Action plan approved by DMC after minor adjustment by DMC
15 August 2017	Draft application submitted for internal review
28 September 2017	Staff Assembly presenting Staff Survey and Athena SWAN Action Plan
10 November 2017	Application modified after feedback from reviewers and staff. Revisions developed through workshops involving TG leaders, SAT Coordinator, Administrator and HoD

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

Our SAT will reconvene after our submission as an Equality, Diversity and Departmental Culture (EDDC) Committee. It will monitor pro-actively, discuss and ensure the effective implementation of the Action Plan and advance other relevant EDDC matters encapsulated in the new Departmental Strategy, including the aim of making a successful Athena Silver Application in 2021. The EDDC membership will evolve as staff representing the key Departmental Committees rotate their roles, and if any members move on or retire. The EDDC will include the core membership outlined in Table 3.3, plus other members as required. We will seek greater student involvement and maintain a representative proportion of female members. Senior staff engagement, including the HoD, will continue to ensure that the group's aims and work can be pursued and represented effectively at each DMC meeting and Departmental Assembly, where EDDC and Athena matters will be raised as standing agenda items. Responsibilities will be allocated between specific members as outlined in Table 3.4 to ensure the Action Plan delivery is both monitored and effective. The EDDC will meet in Quarters 1, 2, 3 and 4. Table 3.5 identifies the main items that will need to be considered at each main meeting.

Action Item General.   Form new EDDC Committee from December 2017 to subsume tasks of SAT with generic membership as outlined in Table 3.3. To meet Quarterly and undertake tasks outlined in Tables 3.4 and 3.5. EDDC reports to be standing order DMC and Departmental assembly agenda items

Table 3.3 Proposed core EDCC Committee Membership

Member	Role
Chair	Ensure effective running of Committee
Head of Department	Liaise with Dept. Management Committee
Departmental Operations Manager	Consider data on research grants and income
SAT Administrator	Provide administrative support and represent administrative staff perspective
Delegate from PhD Management Group	Liaise with PhD Management Group and manage relevant data
Delegate from MSc Management Group	Liaise with MSc Management Group and manage relevant data
Delegate from UG Office/UG Teaching Committee	Liaise with UG teaching and support team and manage relevant data
Technical staff representative	Represent technical staff perspective
Departmental PhD representative	Represent PhD student perspective
Departmental postdoc representative	Represent postdoc perspective
Departmental postdoc champion	Inform on postdoc support and provide relevant data
Departmental workload/ promotion lead	Inform on developments and provide relevant data
Departmental communications lead	Inform on developments
Departmental outreach coordinator	Inform on activities and provide relevant data
Departmental careers coordinator	Inform on activities and provide relevant data

Table 3.4 Management of Action Plan monitoring and delivery

Action Plan Section	Action Plan topic	Responsible EDCC representative
1	Undergraduate (MEng) Course	Delegate from UG Office/UG Teaching Committee
2	Taught Postgraduate (MSc) Course	Delegate from MSc Management Group
3	Research Postgraduate (PhD) Programme	Delegate from Departmental Research Committee
4	Career support, Appointments and Promotions	Departmental workload/promotion lead
5	Culture, Communication and Departmental Organization	Departmental Communication lead
6	Career breaks and flexible working	Departmental Operations Manager

Table 3.5 Summary of proposed standing items on agenda of EDCC Committee meetings

Meeting	Standing agenda items	Action Plan
Spring meeting (Q1)	Data review (annual, including breakdown by gender) Staff training data for previous academic year Research grant data for previous academic year PhD admissions and completions for previous academic year Athena SWAN Staff survey (Biennial – odd years) Finalize staff survey for circulation	Address all tasks in Sections 1 to 6
Summer meeting (Q2) and Autumn meeting (Q3)	Data review (annual, including breakdown by gender) Graduates 1st destination data for previous academic year Athena SWAN Staff survey (Biennial – odd years) Review survey data and consider any gender biases College Staff survey (Biennial – odd years) Review survey data and consider any gender biases Biennial Postgraduate Research Experience Survey (PRES) (odd years) Review survey data and consider any gender biases	Address all tasks in Sections 1 to 6
Winter meeting (Q4)	Data review (annual, including breakdown by gender) Student applications/acceptances for current academic year Staff appointments for previous academic year Student degree classifications for previous academic year PDRP completion rates for previous academic year Staff training data for previous academic year Athena SWAN Staff survey (Biennial – even years) Review survey questions	Address all tasks in Sections 1 to 6

Total excluding tables and figure captions: 1024 words

4. A PICTURE OF THE DEPARTMENT
Recommended word count: Bronze: 2000 words

> **Summary of gender trends within the Department**
> **Students:**
> - Female applicants are more likely to receive offers than male applicants, because we attract particularly well-qualified female students at all levels
> - The proportion of female UG students is increasing steadily and is consistently well above the national average
> - The proportion of female PGT (MSc) students is consistently well above the national average, but shows some fluctuation
> - The proportion of female PGR (PhD) students appears to be stable at a level just above national average
> - Action Plan focuses on achieving a higher proportion of female students, especially at PGR level
>
> **Academic and research staff:**
> - The proportion of female academic and research staff is rising steadily
> - The proportion of female staff at level E (Professor) has increased substantially in the past 7 years and is well above the national average

4.1. Student data

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

N/A**.**

(ii)   Numbers of undergraduate students by gender

The Department offers two Undergraduate MEng courses: Civil Engineering, and Civil Engineering with a Year Abroad, which attract a total of around 350 (all) Full-Time students for four years of study.

Female representation in our undergraduate population has increased to reach around 33% over the past two years, well above the 16-18% national average; see Table 4.1.1 & and Figure 4.1.1. This balance is probably due in part to the Department employing female students and graduates as role models in our Open Days and Outreach activities, including Headstart (a residential course for school children supported by the Royal Academy of Engineering), the Engineering Summer School and our regular Recruitment days. We will increase the involvement of female students in these activities (Action Plan Item 1.1a). Another factor that supports our rising female population is the increasing number of women who are achieving prominent positions in Civil Engineering both in industry and academia, demonstrating to young women that they can have successful careers in in this field. The Department will build on these positive trends by promoting female role models in the wider context of diversity (Action Plan 1.1b, 1.2b).

Action Item 1.1 (a)   Engage more female UG third and fourth students and research students in outreach activities, including the Open Day.

Action Item 1.1 (b)   Promote female role models in the wider context of diversity via i) the Departmental recruitment video ii) Departmental social media (twitter) iii) Department website, ensuring positive gender representation.

Action Item 1.2 (b)   Increase percentage of female speakers to provide role models, reflecting the rising proportion of women in engineering. Engage with the alumni network and industry contacts to facilitate this.

Table 4.1.1 Number of Undergraduate students by gender. Note HEIDI is the HESA Higher Education Database for Institutions. National data is for JACS Principal Subject (H2) Civil engineering.

Academic Year	Undergraduates				National Picture (HEIDI data)
	F	M	Total	F%	First Degree, F %
2009-10	101	296	397	25%	16%
2010-11	100	296	396	25%	16%
2011-12	87	278	365	24%	16%
2012-13	86	255	341	25%	16%
2013-14	89	249	338	26%	16%
2014-15	106	254	360	29%	17%
2015-16	113	227	340	33%	18%
2016-17	121	239	360	34%	Not Yet Available

Figure 4.1.1 Comparison of numbers of female MEng and BEng students in the Department and Nationally. National data is for JACS Principal Subject (H2) Civil engineering.
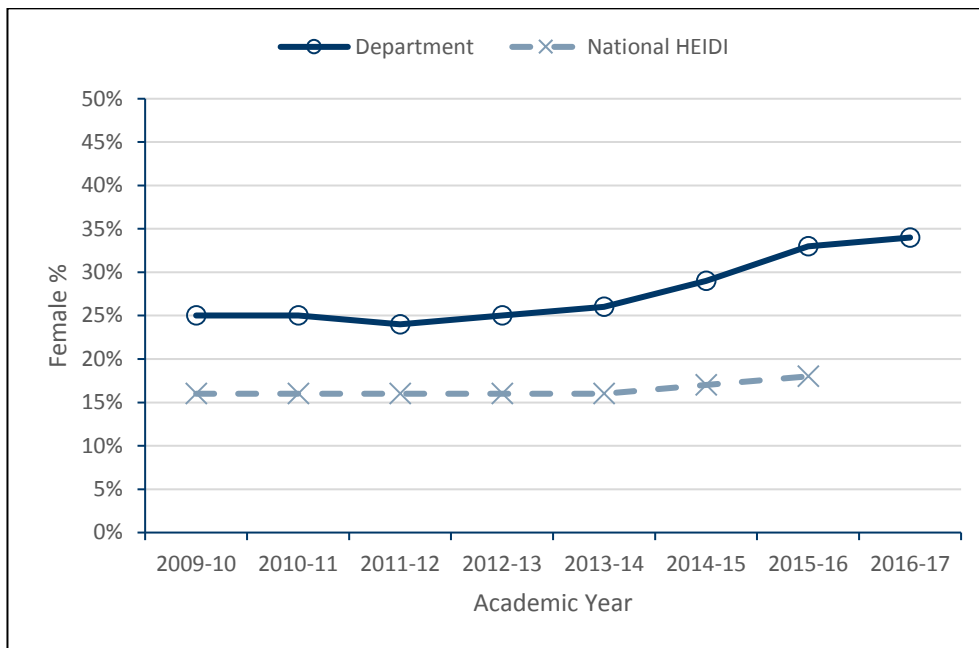
Review of Table 4.1.2 shows that the total number of Home students dropped shortly after 2012, the year tuition fees were raised substantially. Fortunately, more overseas students enrolled, and the number of EU students remained relatively stable. It is not clear why Home student numbers might be affected more negatively by fee rises than those from the EU. The Brexit process is likely to affect recruitment significantly and we will monitor developments over the next four years to achieve a better understanding of evolving trends. While the combined male Home/EU (HEU) student population has dropped significantly since 2012, the proportion of female HEU students has risen. Our fee status breakdown shows that our undergraduate programme has its highest female representation (exceeding 40%) among EU students.

Table 4.1.2 Number of Undergraduate students by fee status and gender.
Undergraduate Course Application Numbers, Offer and Acceptance Numbers

| Academic Year | Undergraduates | | | | | | | | | | | |
| | Home | | | | EU | | | | Overseas | | | |
	F	M	Total	F%	F	M	Total	F %	F	M	Total	F %
2009-10	51	168	219	**23%**	12	52	64	**19%**	38	76	114	**33%**
2010-11	48	159	207	**23%**	20	54	74	**27%**	32	83	115	**28%**
2011-12	37	132	169	**22%**	17	63	80	**21%**	33	83	116	**28%**
2012-13	33	102	135	**24%**	19	63	82	**23%**	34	90	124	**27%**
2013-14	22	90	112	**20%**	24	62	86	**28%**	43	97	140	**31%**
2014-15	23	90	113	**20%**	30	47	77	**39%**	53	117	170	**31%**
2015-16	29	69	98	**30%**	32	36	68	**47%**	52	122	174	**30%**
2016-17	31	75	106	**29%**	31	45	76	**41%**	61	120	181	**34%**

Applications are judged, at all levels, on merit alone. However, proportionally more offers were made to female applicants over the period considered in Table 4.1.3. An average of 33% of all offers were made to the female applicants who made up only 27% of the total applications. This imbalance reflects the higher average quality of the female students' applications. The acceptance rate is similar for both female and male applicants over the past 4 years (see Table 4.1.4).

Many schools now encourage female students actively to consider careers in engineering. We were encouraged by the strong interest relating to potential female students in the Heads of Science teachers event we held in March 2017. The participating teachers were particularly keen to hear about our students' project work so that they could develop similar school exercises. We plan to run more such events to inform students and teachers about Civil Engineering opportunities and will place emphasis on profiling successful female engineers (Action Plan 1.2b) to encourage more young women to apply.

Table 4.1.3 Numbers of Undergraduate applications, offers and acceptances by gender

Academic Year	Applications				Offers				Acceptances			
	F	M	Total	F %	F	M	Total	F %	F	M	Total	F %
2009-10	219	607	826	27%	95	164	259	37%	41	95	136	30%
2010-11	195	545	740	26%	65	141	206	32%	29	74	103	28%
2011-12	162	509	671	24%	59	155	214	28%	24	98	122	20%
2012-13	152	443	595	26%	66	130	196	34%	24	60	84	29%
2013-14	151	430	581	26%	64	136	200	32%	35	77	112	31%
2014-15	200	453	653	31%	78	147	225	35%	39	76	115	34%
2015-16	171	458	629	27%	71	135	206	35%	37	72	109	34%
2016-17	180	392	572	32%	63	150	213	30%	31	78	109	28%

Table 4.1.4 Percentage of Undergraduate degree offers accepted by gender

Academic Year	Acceptances, as Percentage of Offers	
	F	M
2009-10	43%	58%
2010-11	45%	53%
2011-12	41%	63%
2012-13	36%	46%
2013-14	55%	57%
2014-15	50%	52%
2015-16	52%	53%
2016-17	49%	52%

Undergraduate Degree Attainment

Our female and male UG students achieve similar distributions of degree outcomes. Tables 4.1.5 and 4.1.6 show how the averages for 1st and 2nd class degree classifications over the last 7 years suggest slightly better results for females.

Table 4.1.5 Classification of Undergraduate degrees awarded by gender

Academic Year	1st		2:1		2:2		3rd		Total	
	F	M	F	M	F	M	F	M	F	M
2009-10	4	11	13	28	7	15	-	1	24	55
2010-11	6	23	15	50	4	13	-	-	25	86
2011-12	7	30	11	32	-	6	-	-	18	68
2012-13	12	31	16	37	-	6	-	-	28	74
2013-14	8	23	7	28	1	2	-	-	16	53
2014-15	11	31	10	42	-	3	-	-	21	76
2015-16	12	23	6	21	1	3	-	-	19	47

Table 4.1.6 Percentage of Undergraduate degree classifications awarded by gender

Academic Year	1st		2:1		2:2		3rd	
	F	M	F	M	F	M	F	M
2009-10	17%	20%	54%	51%	29%	27%	-	1%
2010-11	24%	27%	60%	58%	16%	15%	-	-
2011-12	39%	44%	61%	47%	-	8%	-	-
2012-13	43%	42%	57%	50%	-	8%	-	-
2013-14	50%	43%	44%	53%	6%	4%	-	-
2014-15	52%	41%	48%	55%	-	4%	-	-
2015-16	63%	49%	32%	45%	5%	6%	-	-

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

The Department has the largest suite of Civil and Environmental Engineering MSc programmes in the UK, with over 14 courses offered by four Sections that run over 12 months (Full-Time) and attract around 250 students each year. Our fifth section, Fluid Mechanics, has run a new specialist MSc course from October 2017.

Our female PGT population has averaged 39% of the total over the past 8 years, consistently well above the 25-28% national average (see Tables 4.1.7-8 and Figure 4.1.2). The wide scopes of our programmes have helped achieve this outcome, with the Environmental Engineering and Transport clusters' courses proving the most attractive to female students (see Table 4.1.9).

A distinct, but temporary, drop in female student numbers occurred in 2012, with numbers recovering later and re-stabilising at around 35%; see Table 4.1.8. This 'blip' coincided with the introduction of higher tuition fees for Home and EU students and also impacted on the total HEU student numbers (see Table 4.1.10). In contrast to the Undergraduate level trends (see Table 4.1.2), the higher tuition fees appear to have triggered a reduction in EU Postgraduate student numbers with a disproportionate effect on female applicants. This not fully understood and we will monitor trends to better understand the underlying factors that influence applicant numbers. Although the overall PGT female percentage has been broadly stable, and well above the national average over the past four years, we plan to increase our female population by a range of measures (Action Plan 2.1d).

Action Item 2.1 (a): Introduce examples on the website of successful female UG students at College and their progression after graduation, taking cases from all Sections.

Action Item 2.1 (b): Liaise with female alumni and invite them to participate in the annual open-day event.

Action Item 2.1 (c): Involve current MSc & PhD students with positive female representation in the PGT Open Day.

Action Item 2.1 (d): Use of case study profiles of female MSc graduates on the website.

Table 4.1.7 Number of Postgraduate Taught students by gender

Academic Year	Postgraduates Taught, Full-Time				Postgraduates Taught, Part-Time			
	F	M	Total	F%	F	M	Total	F%
2009-10	84	112	196	**43%**	21	48	69	**30%**
2010-11	98	120	218	**45%**	19	35	54	**35%**
2011-12	105	133	238	**44%**	12	24	36	**33%**
2012-13	78	125	203	**38%**	11	24	35	**31%**
2013-14	78	159	237	**33%**	8	26	34	**24%**
2014-15	81	154	235	**34%**	13	21	34	**38%**
2015-16	85	145	230	**37%**	12	28	40	**30%**
2016-17	85	157	242	**35%**	9	18	27	**33%**

Table 4.1.8 Total Number (FT+PT) of Postgraduate Taught students by gender compared to HEIDI. National data is for JACS Principal Subject (H2) Civil engineering

Academic Year	Postgraduates Taught, Full-Time and Part-Time				National Picture (HEIDI data)
	F	M	Total	F%	PGT, F %
2009-10	105	160	265	**40%**	**26%**
2010-11	117	155	272	**43%**	**25%**
2011-12	117	157	274	**43%**	**25%**
2012-13	89	149	238	**37%**	**26%**
2013-14	86	185	271	**32%**	**26%**
2014-15	94	175	269	**35%**	**26%**
2015-16	97	173	270	**36%**	**28%**
2016-17	94	175	269	**35%**	Not yet available

Table 4.1.9 Number of Postgraduate Taught students per MSc cluster (excluding occasional students)

Academic Year	Adv. Structural Engineering			Environmental Engineering			Geotechnics			Transport		
	F	M	F%	F	M	F%	F	M	F%	F	M	F%
2009-10	18	45	**29%**	31	24	**56%**	14	29	**33%**	39	61	**39%**
2010-11	19	41	**32%**	47	47	**50%**	12	32	**27%**	38	35	**52%**
2011-12	26	60	**30%**	48	34	**59%**	17	37	**31%**	24	23	**51%**
2012-13	20	62	**24%**	30	22	**58%**	13	29	**31%**	23	26	**47%**
2013-14	16	50	**24%**	30	40	**43%**	19	44	**30%**	20	41	**33%**
2014-15	16	58	**22%**	45	29	**61%**	11	37	**23%**	20	42	**32%**
2015-16	17	59	**22%**	39	29	**57%**	12	38	**24%**	28	44	**39%**
2016-17	16	60	**21%**	34	33	**51%**	12	33	**27%**	31	49	**39%**

Figure 4.1.2 Comparison of female Postgraduate Taught degree students in the Department and Nationally. National data is for JACS Principal Subject (H2) Civil engineering
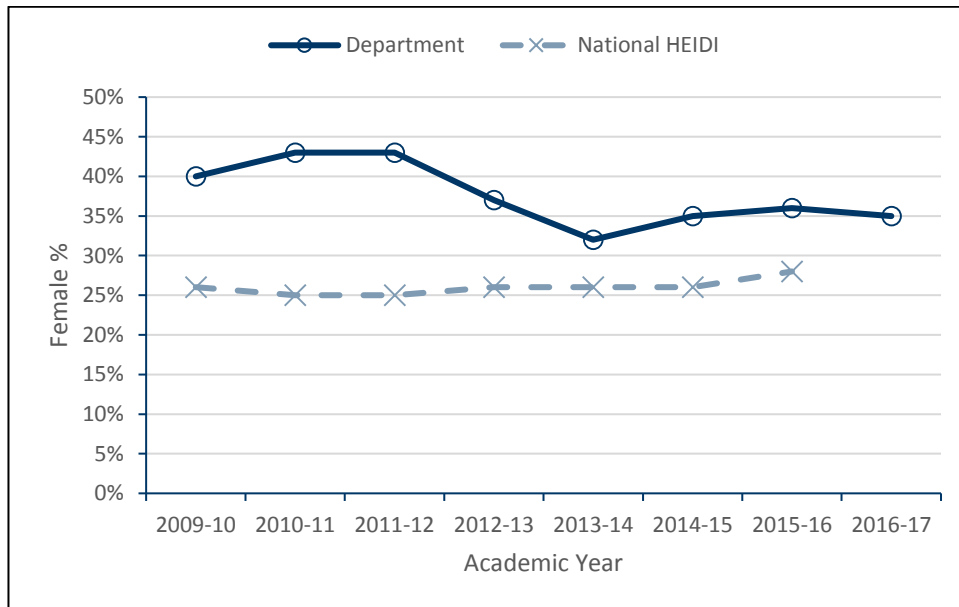
Table 4.1.10 Numbers of Postgraduate Taught students by gender and fee status

Academic Year	Postgraduates Taught, Total											
	Home				EU				Overseas			
	F	M	Total	F %	F	M	Total	F %	F	M	Total	F %
2009-10	34	59	93	37%	40	67	107	37%	30	34	64	47%
2010-11	25	44	69	36%	51	67	118	43%	41	44	85	48%
2011-12	20	37	57	35%	47	64	111	42%	50	56	106	47%
2012-13	12	29	41	29%	33	71	104	32%	44	49	93	47%
2013-14	11	43	54	20%	32	67	99	32%	43	75	118	36%
2014-15	20	43	63	32%	16	42	58	28%	58	90	148	39%
2015-16	10	34	44	23%	20	62	82	24%	67	77	144	47%
2016-17	14	33	47	30%	16	50	66	24%	64	92	156	41%

Postgraduate Taught Degree application, offer and acceptance numbers

Female postgraduate applicants have been more likely to receive offers than their male counterparts over the past 8 years, which we attribute (as with undergraduates) to their better average quality of applications; see Table 4.1.11. The acceptance rate has been largely similar for both female and male applicants over the past 8 years (see Table 4.1.12). Both the male and female acceptance rates fell tangibly over 2016-17, which could be due to Brexit-related uncertainties.

Table 4.1.11 Number of Postgraduate Taught degree applications, offers and acceptances by gender

Academic Year	Applications				Offers				Acceptances			
	F	M	Total	F %	F	M	Total	F %	F	M	Total	F %
2009-10	420	955	1375	31%	147	253	400	37%	95	135	230	41%
2010-11	561	1040	1601	35%	168	221	389	43%	112	136	248	45%
2011-12	646	1151	1797	36%	166	241	407	41%	112	155	267	42%
2012-13	585	1088	1673	35%	136	232	368	37%	82	140	222	37%
2013-14	615	1165	1780	35%	130	263	393	33%	86	177	263	33%
2014-15	588	1288	1876	31%	140	214	354	40%	91	164	255	36%
2015-16	696	1309	2005	35%	144	234	378	38%	94	161	255	37%
2016-17	778	1428	2206	35%	154	277	431	36%	81	153	234	35%

Table 4.1.12 Percentage of Postgraduate Taught degree offers accepted by gender

Academic Year	Acceptances, as Percentage of Offers	
	F	M
2009-10	65%	53%
2010-11	67%	62%
2011-12	68%	64%
2012-13	60%	60%
2013-14	66%	67%
2014-15	65%	77%
2015-16	65%	69%
2016-17	53%	55%

Postgraduate Taught Degree Attainment

Male and female students perform comparably well on our PGT programmes. Tables 4.1.13 and 4.1.14 show the distributions of female students in the Distinction and Merit categories as being generally in proportion with the overall female student numbers over the past 7 years.

Table 4.1.13 Number of Postgraduate Taught degrees awarded by Classification and gender

Academic Year	Distinction		Merit		Pass		Fail		Total	
	F	M	F	M	F	M	F	M	F	M
2009-10	17	24	30	42	33	53			80	119
2010-11	16	26	46	61	34	45	6	16	102	148
2011-12	16	32	60	71	28	38	6	11	110	152
2012-13	31	33	54	67	19	39	5	14	109	153
2013-14	28	40	32	44	22	39	7	16	89	139
2014-15	20	57	38	68	19	48	8	9	85	182
2015-16	24	45	31	73	24	36	12	14	91	168

Table 4.1.14 Percentage of Postgraduate Taught degree Classifications awarded by gender

Academic Year	Distinction		Merit		Pass		Fail	
	F	M	F	M	F	M	F	M
2009-10	21%	20%	38%	35%	41%	45%		
2010-11	16%	18%	45%	41%	33%	30%	6%	11%
2011-12	15%	21%	55%	47%	25%	25%	5%	7%
2012-13	28%	30%	50%	44%	17%	25%	5%	9%
2013-14	31%	29%	36%	32%	25%	28%	8%	12%
2014-15	24%	31%	45%	37%	22%	26%	9%	5%
2015-16	26%	27%	34%	43%	26%	21%	13%	8%

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

Our PGR female percentage has been relatively stable over the past 5 years for Home, EU and Overseas students and averaged 35% over the past 8 years, consistently above the 30-31% national average; see Tables 4.1.15-17 and Figure 4.1.3.

Table 4.1.15 Number of Postgraduate Research students – Full-Time and Part-Time by gender

Academic Year	Postgraduates Research, Full-Time				Postgraduates Research, Part-Time			
	F	M	Total	F %	F	M	Total	F %
2009-10	52	78	130	**40%**	5	9	14	**36%**
2010-11	50	89	139	**36%**	6	10	16	**38%**
2011-12	50	92	142	**35%**	8	8	16	**50%**
2012-13	52	102	154	**34%**	5	7	12	**42%**
2013-14	48	97	145	**33%**	6	6	12	**50%**
2014-15	43	98	141	**30%**	8	6	14	**57%**
2015-16	47	98	145	**32%**	7	7	14	**50%**
2016-17	57	111	168	**34%**	3	10	13	**23%**

Table 4.1.16 Total Number of Postgraduate Research students by gender compared to HEIDI. National data is for JACS Principal Subject (H2) Civil engineering

Academic Year	Postgraduates Research, Total				National Picture (HEIDI data)
	F	M	Total	F %	PGR, F %
2009-10	57	87	144	40%	30%
2010-11	56	99	155	36%	30%
2011-12	58	100	158	37%	31%
2012-13	57	109	166	34%	31%
2013-14	54	103	157	34%	31%
2014-15	51	104	155	33%	30%
2015-16	54	105	159	34%	31%
2016-17	60	121	181	33%	Not yet available

Figure 4.1.3 Comparison of female Postgraduate Research degree students in Department and Nationally. National data is for JACS Principal Subject (H2) Civil engineering
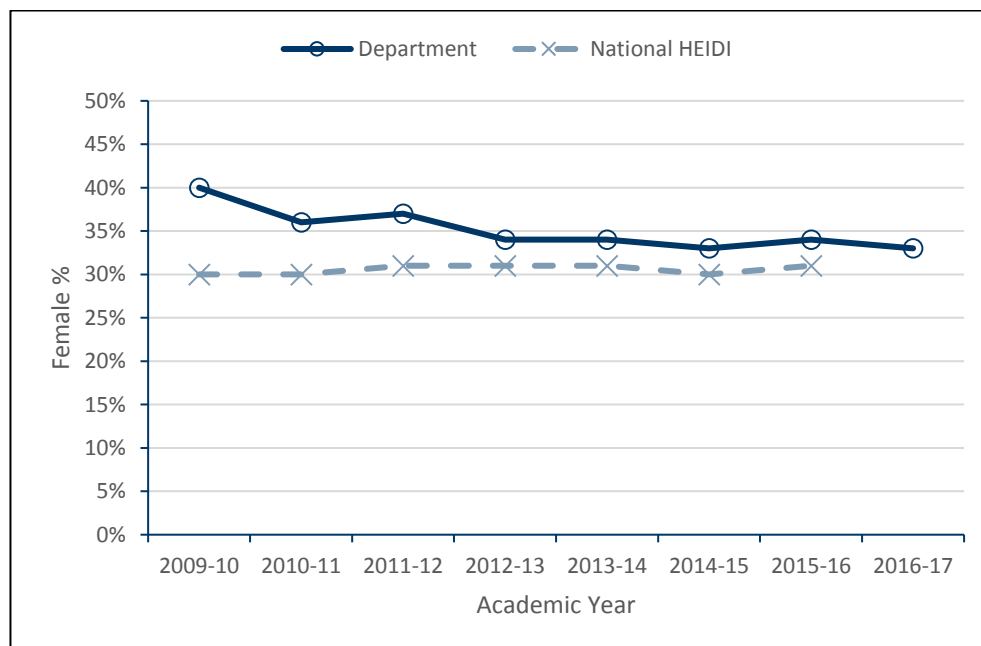
Table 4.1.17 Number of Postgraduate Research students by gender and fee status

Academic Year	Postgraduates Research, Total											
	Home				EU				Overseas			
	F	M	Total	F%	F	M	Total	F %	F	M	Total	F %
2009-10	9	22	31	29%	22	28	50	44%	26	37	63	41%
2010-11	13	24	37	35%	13	30	43	30%	30	45	75	40%
2011-12	11	30	41	27%	19	31	50	38%	28	39	67	42%
2012-13	11	34	45	24%	19	34	53	36%	27	41	68	40%
2013-14	9	31	40	23%	25	35	60	42%	20	37	57	35%
2014-15	8	26	34	24%	22	40	62	35%	21	38	59	36%
2015-16	8	29	37	22%	22	36	58	38%	24	40	64	38%
2016-17	11	34	45	24%	20	36	56	36%	29	51	80	36%

Postgraduate Research Degree Application Numbers, Offer and Acceptance Numbers

As our applications are based on merit alone, the trends in Table 4.1.18 reflect the higher average quality of applications from females. Our PGR applications data also show a slightly higher female acceptance rate (at 80% over the past 8 years) than for male applicants (76%) (see Table 4.1.19). We plan to maintain and build on this positive picture through activities aimed at our Undergraduate and Postgraduate Taught student populations (Action Plan Items 1.1, 1.2 and 2.1) and the promotion of female PGR role models (Action Plan 3.1).

> Action Item 3.1: Promote female role models in the research pages of the Departmental website and in invited talks and other public interfaces, as appropriate.

Table 4.1.18 Number of Postgraduate Research degree applications, offers and acceptances by gender

Academic Year	Applications				Offers				Acceptances			
	F	M	Total	F %	F	M	Total	F %	F	M	Total	F %
2009-10	67	143	210	32%	30	63	93	32%	21	37	58	36%
2010-11	50	110	160	31%	28	46	74	38%	19	36	55	35%
2011-12	52	107	159	33%	25	37	62	40%	21	29	50	42%
2012-13	49	152	201	24%	17	46	63	27%	13	38	51	26%
2013-14	45	142	187	24%	19	37	56	34%	18	30	48	38%
2014-15	57	142	199	29%	19	51	70	27%	17	41	58	29%
2015-16	43	145	188	23%	20	43	63	32%	16	35	51	31%
2016-17	52	138	190	27%	27	58	85	32%	21	39	60	35%

Table 4.1.19 Percentage of Postgraduate Research degree offers accepted

Academic Year	Acceptances, as Percentage of Offers	
	F	M
2009-10	70%	59%
2010-11	68%	78%
2011-12	84%	78%
2012-13	77%	83%
2013-14	95%	81%
2014-15	90%	80%
2015-16	80%	81%
2016-17	78%	67%

Postgraduate Research Degree Attainment

Our PhD progression data shows no gender bias, with around 35% of graduates being female over the past 7 years, correlating well with the female percentage in the overall PGR population (see Table 4.1.20). The completion data in Tables 4.1.21 and 4.1.22 indicate relatively small numbers of female and male students either submitting their theses late or failing to complete their PhD studies.

Table 4.1.20 Postgraduate Research degree attainment by gender

Award Year	Full-Time & Part-Time			
	F	M	Total	F %
2010	12	19	31	39%
2011	9	23	32	28%
2012	12	17	29	41%
2013	9	21	30	30%
2014	15	31	46	33%
2015	12	17	29	41%
2016	10	21	31	32%

Table 4.1.21 Postgraduate Research degree completions by gender

| | Full-Time & Part-Time | | | | | | | | | |
| | Completed On time | | Completed Late | | Failed | | Planned | | Total | |
Academic Year	F	M	F	M	F	M	F	M	F	M
2010-11	2	8	1	0	0	1	0	0	3	9
2011-12	5	7	1	1	1	0	4	1	11	9
2012-13	10	20	0	1	0	4	0	3	10	28
2013-14	12	22	3	3	0	0	1	0	16	25
2014-15	12	38	3	1	0	0	6	5	21	44
2015-16	7	14	0	4	0	0	2	4	9	22
2016-17	15	19	1	2	0	0	3	6	19	27
Total	63	128	9	12	1	5	16	19	89	164

Table 4.1.22 Postgraduate Research degree percentage completions by gender

| | Full-Time & Part-Time | | | | | | | |
| | Completed On time | | Completed Late | | Failed | | Planned | |
Academic Year	F	M	F	M	F	M	F	M
2010-11	67%	89%	33%	0%	0%	11%	0%	0%
2011-12	45%	78%	9%	11%	9%	0%	36%	11%
2012-13	100%	71%	0%	4%	0%	14%	0%	11%
2013-14	75%	88%	19%	12%	0%	0%	6%	0%
2014-15	57%	86%	14%	2%	0%	0%	29%	11%
2015-16	78%	64%	0%	18%	0%	0%	22%	18%
2016-17	79%	70%	5%	7%	0%	0%	16%	22%
Total	71%	78%	10%	7%	1%	3%	18%	12%

(v)   Progression pipeline between undergraduate and postgraduate student levels

Our UG students all graduate with MEng 'Masters level' degrees and very few proceed to MSc studies in our Department. A small number pursue Postgraduate studies elsewhere, often in Business or Finance, and there is no distinct pipeline between our Undergraduate and Postgraduate populations. Nevertheless, Figure 4.1.4 shows that Undergraduate, Postgraduate and Research female representation levels have converged to around 35% (see Figure 4.1.4). The greatest contrast with the national picture is at the Undergraduate level (see Figure 4.1.5). This may reflect the increasing level of College and Departmental Outreach activities aimed at UK school students having less influence on our largely overseas or EU Postgraduate or Research populations. Another interesting observation is

the recent increase in the percentage of female EU students at Undergraduate level, contrasting with the opposite trend at Postgraduate Taught level. The introduction of higher tuition fees for Home/EU students in 2012 without (until recently) any compensating Postgraduate Masters loan scheme may be responsible, although it is not clear why this should have a greater impact on the EU student population. Nevertheless, we anticipate that the upward trend of female participation at PGT and PGR levels will continue in response to our ongoing work (Action Plan 2.1 and 3.1).

Figure 4.1.4 Comparison of female student percentages at Undergraduate, Postgraduate Taught and Postgraduate Research Level
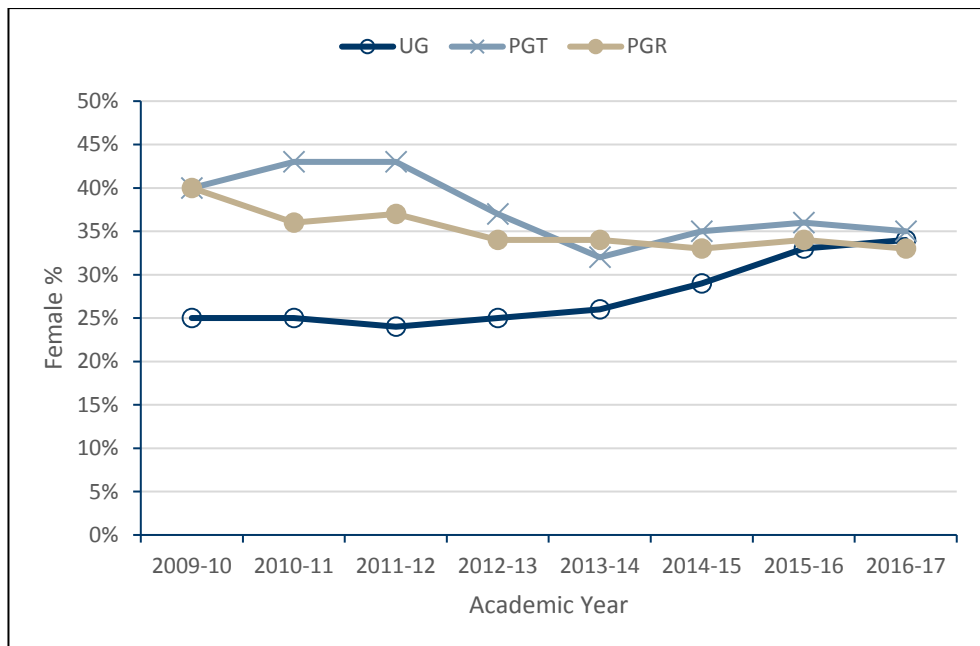
Figure 4.1.5 Comparison of ratios of female student percentages at Undergraduate, Postgraduate Taught and Postgraduate Research Levels to National HEIDI Data. National data is for JACS Principal Subject (H2) Civil engineering
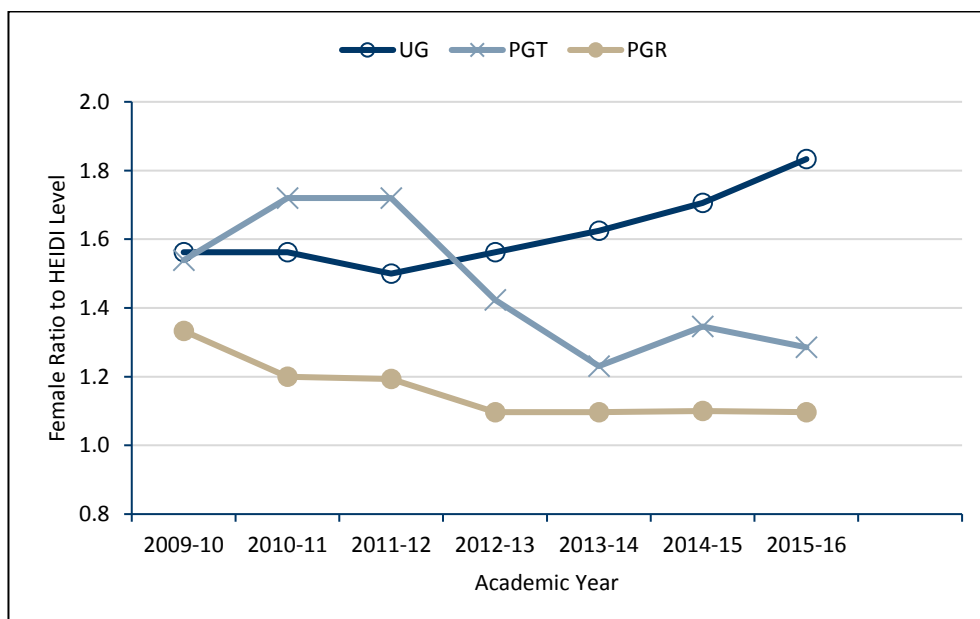
Image 4.1.1 Second year UG students completing one of their 'Constructionarium' challenges, building a scaled replica of the London City Gherkin; June 2016

Image 4.1.2 MSc students with staff, undertaking geotechnical field work in the Gulf of Corinth, Athens

4.2   Academic and research staff data

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

The data for our large academic staff group are presented in Tables 4.2.1 and 4.2.2 and in Figure 4.2.1. Overall, female representation has increased from 12% to around 20% over the past seven years. The percentage at the Professorial Level E has risen to 16%, reflecting mostly the promotions of female colleagues. The Elsie Widdowson Fellowship, described in Section 5, plays a particularly positive role in enabling female academic staff who take maternity leave to focus on research when they return to work.

The female percentage of research staff has remained relatively static between 30%-35%, except for a probably random temporary 'blip' in 2013 (see Figure 4.2.1 and Tables 4.2.1 & 4.2.3). While female representation at the higher Research Levels C-E appears relatively low, the overall numbers are too low to be significant statistically and far more research appointments are made at Levels A-B. A similar observation can be made for learning and teaching staff, where the overall numbers are insufficiently large to be statistically stable and the female percentage fluctuates between 33%-100% (see Tables 4.2.4 & 4.2.5).

Figures 4.2.2-4.2.4 show generally favourable percentages of female staff at all levels compared to the National picture. In particular, the consistently greater percentage of female Professors in the Department highlights a positive culture regarding the progression of female academic staff.

In order to maintain and improve our gender balance we will ensure that all key personnel involved in recruitment and promotion complete Unconscious Bias Training, and also provide a one-page summary of relevant training on the Departmental website (Action Plan 4.1b).

Figure 4.2.1 Female staff levels in Academic and Research posts
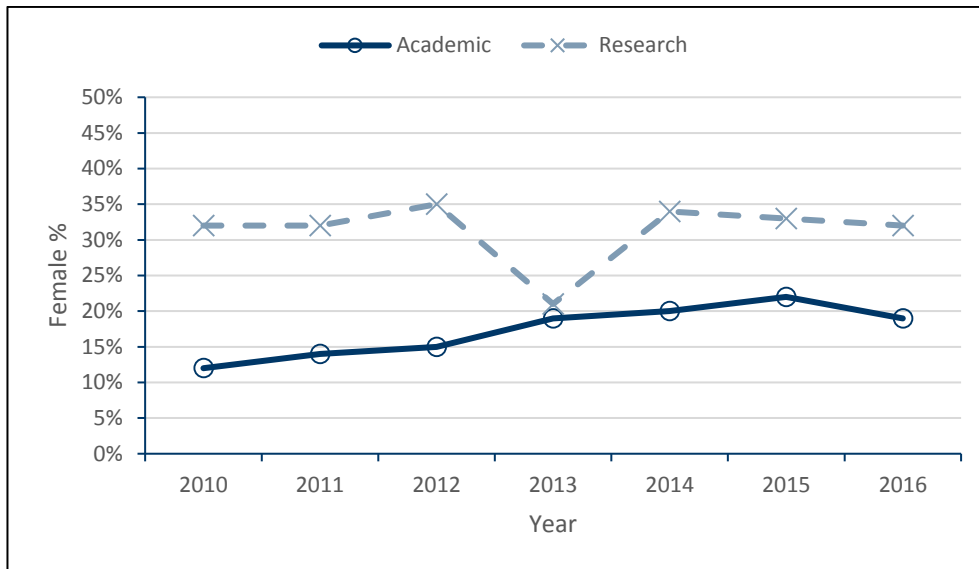
Tables 4.2.1 Number of Academic and Research staff by gender and grade

Staff Grade	2014				2015				2016			
	F	M	Total	F %	F	M	Total	F %	F	M	Total	F %
Professor - Level E	2	14	16	**13%**	3	15	18	**17%**	3	16	19	**16%**
Reader - Level D	1	5	6	**17%**	1	6	7	**14%**	1	7	8	**13%**
Senior Lecturer - Level D	1	8	9	**11%**	2	7	9	**22%**	2	10	12	**17%**
Lecturer - Level C	6	14	20	**30%**	5	11	16	**31%**	4	9	13	**31%**
ACADEMIC STAFF TOTAL	**10**	**41**	**51**	**20%**	**11**	**39**	**50**	**22%**	**10**	**42**	**52**	**19%**
Research - Level E *Professorial Research Fellow*	0	1	1	**0%**	0	1	1	**0%**	0	1	1	**0%**
Research - Level D *Senior Research Fellow*			0	**-**			0	**-**	0	1	1	**0%**
Research - Level C *Research Fellow*	0	4	4	**0%**	1	6	7	**14%**	1	4	5	**20%**
Research - Level B *Post-doctoral Research Assistant*	11	19	30	**37%**	8	16	24	**33%**	8	21	29	**28%**
Research - Level A *Research Assistant*	5	7	12	**42%**	5	5	10	**50%**	5	3	8	**63%**
RESEARCH STAFF TOTAL	**16**	**31**	**47**	**34%**	**14**	**28**	**42**	**33%**	**14**	**30**	**44**	**32%**

Table 4.2.2 Number of Academic staff by gender

Academic Year	Academic staff total			
	F	M	Total	F %
2010	5	37	42	12%
2011	6	37	43	14%
2012	7	39	46	15%
2013	10	43	53	19%
2014	10	41	51	20%
2015	11	39	50	22%
2016	10	42	52	19%

Table 4.2.3 Number of Research staff by gender

Academic Year	Research staff total			
	F	M	Total	F %
2010	11	23	34	32%
2011	11	23	34	32%
2012	13	24	37	35%
2013	8	30	38	21%
2014	16	31	47	34%
2015	14	28	42	33%
2016	14	30	44	32%

Table 4.2.4 Number of Learning and Teaching staff by gender and grade

Staff Grade	F	M	Total	F %
Levels 3a/3b/4/5/6 - 2014			0	-
Total - 2014	**0**	**0**	**0**	**-**
Levels 5/6 -2015			0	-
Level 4 - 2015	1	1	2	50%
Levels 3a/3b- 2015			0	-
Total - 2015	**1**	**1**	**2**	**50%**
Levels 5/6 - 2016			0	-
Level 4 - 2016	1	2	3	33%
Levels 3a/3b - 2016			0	-
Total - 2016	**1**	**2**	**3**	**33%**

Table 4.2.5 Total number of Learning and Teaching staff by gender

Academic Year	LEARNING & TEACHING STAFF TOTAL			
	F	M	Total	F %
2011	1	0	1	100%
2012	1	0	1	100%
2013	1	0	1	100%
2014	0	0	0	-
2015	1	1	2	50%
2016	1	2	3	33%

Figure 4.2.2 Comparison of female percentage of Academic staff in the Department and Nationally. National data is for Civil Engineering Cost Centre.
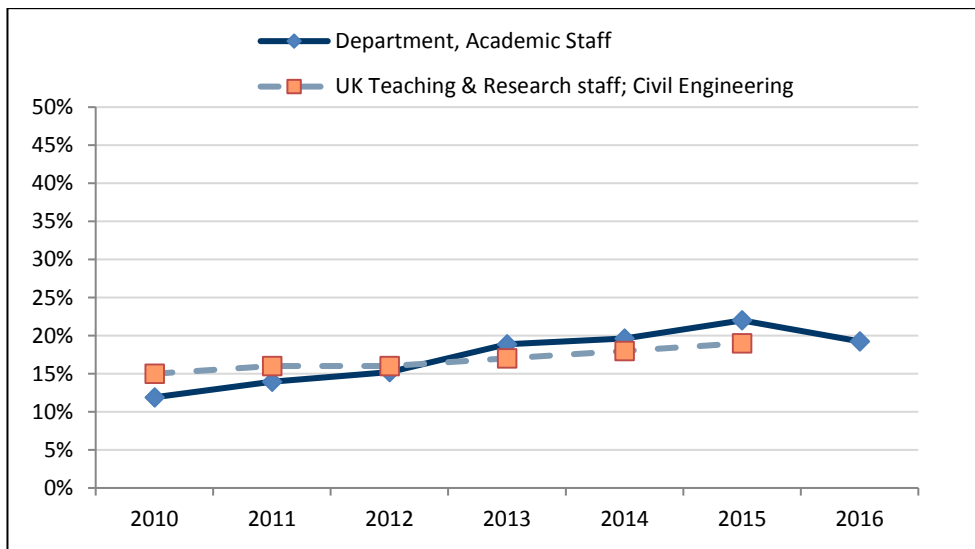
Figure 4.2.3 Comparison of female percentage of Professors in the Department and Nationally. National data is for Civil Engineering Cost Centre.
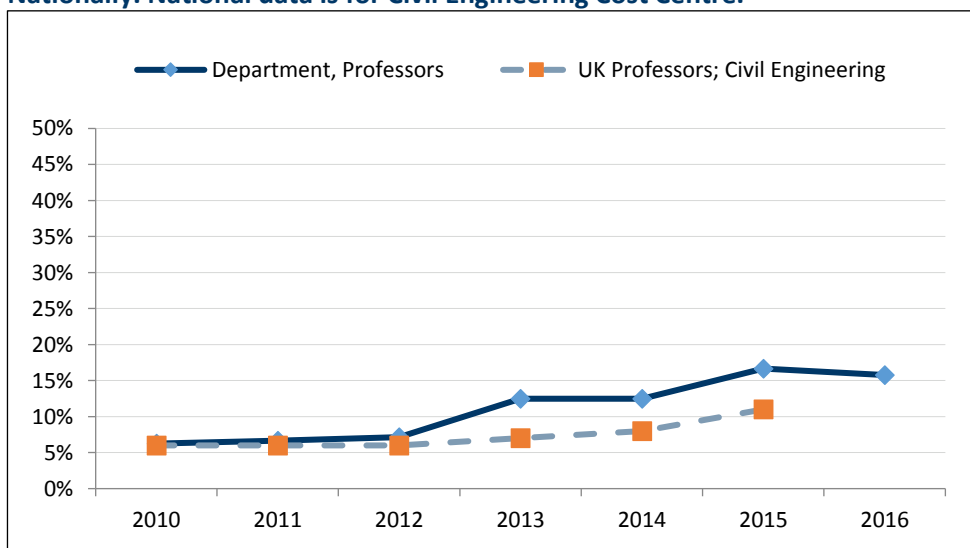
Figure 4.2.4 Comparison of female percentage of Research staff in the Department and Nationally. National data is for Civil Engineering Cost Centre.
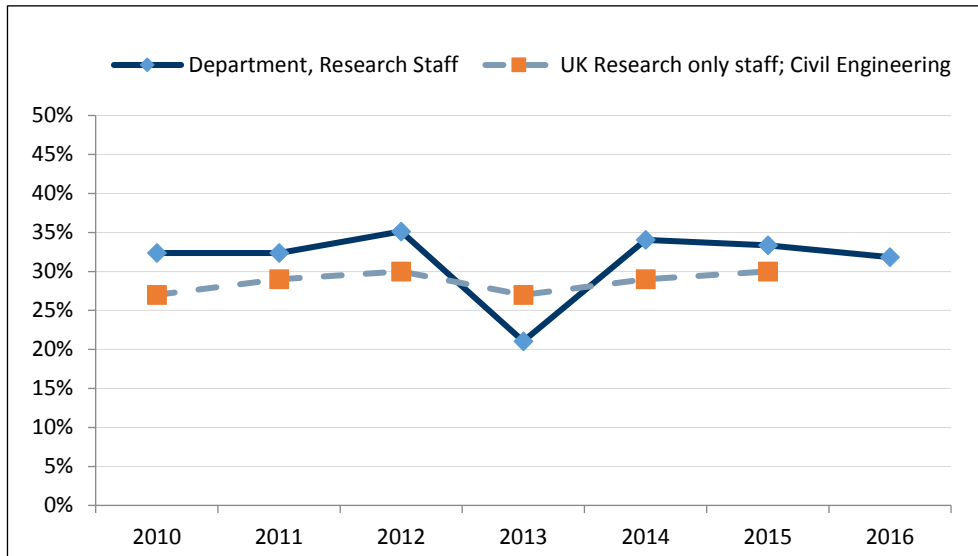
(ii) Academic and research staff by grade on fixed-term, open-ended/permanent and zero-hour contracts by gender

Academic staff are usually appointed on open-ended contracts, apart from a very small number of transitional cases made, for example, to provide maternity cover (see Table 4.2.6a-c). Most Level A-E Research staff have fixed-term contracts as their posts are funded by specific research grants with defined end dates. However, after 4 years of continuous service these staff are also transferred to open-ended contracts. Finally, Learning and Teaching staff are appointed on open-ended contracts, except again for transitional cases (see Table 4.2.7). Our numbers in this category are too low to be statistically significant.

Tables 4.2.6 a, b, c Number of Academic and Research staff by gender and contract type

Table 4.2.6a 2014	Women on Fixed Term Contracts	Women on Open-ended Contracts	% of Women on Open-ended Contracts	Men on Fixed Term Contracts	Men on Open-ended Contracts	% of Men on Open-ended Contracts
Professor		2	100%		14	100%
Reader		1	100%		5	100%
Senior Lecturer		1	100%		8	100%
Lecturer		6	100%	1	13	93%
ACADEMIC TOTAL	**0**	**10**	**100%**	**1**	**40**	**98%**
Research - Level E			-		1	100%
Research - Level D			-			-
Research - Level C			-		4	100%
Research - Level B	10	1	9%	18	1	5%
Research - Level A	4	1	20%	5	2	29%
RESEARCH TOTAL	**14**	**2**	**13%**	**23**	**8**	**26%**
Table 4.2.6b 2015	Women on Fixed Term Contracts	Women on Open-ended Contracts	% of Women on Open-ended Contracts	Men on Fixed Term Contracts	Men on Open-ended Contracts	% of Men on Open-ended Contracts
Professor		3	100%		15	100%
Reader		1	100%		6	100%
Senior Lecturer		2	100%		7	100%
Lecturer		5	100%		11	100%
ACADEMIC TOTAL	**0**	**11**	**100%**	**0**	**39**	**100%**
Research - Level E			-		1	100%
Research - Level D			-			-
Research - Level C	1		0%		6	100%
Research - Level B	7	1	13%	16		0%
Research - Level A	4	1	20%	3	2	40%
RESEARCH TOTAL	**12**	**2**	**14%**	**19**	**9**	**32%**
Table 4.2.6c 2016	Women on Fixed Term Contracts	Women on Open-ended Contracts	% of Women on Open-ended Contracts	Men on Fixed Term Contracts	Men on Open-ended Contracts	% of Men on Open-ended Contracts
Professor		3	100%		16	100%
Reader		1	100%		7	100%
Senior Lecturer		2	100%		10	100%
Lecturer		4	100%		9	100%
ACADEMIC TOTAL	**0**	**10**	**100%**	**0**	**42**	**100%**
Research - Level E			-		1	100%
Research - Level D			-	1		0%
Research - Level C	1		0%		4	100%
Research - Level B	8		0%	19	2	10%
Research - Level A	5		0%	2	1	33%
RESEARCH TOTAL	**14**	**0**	**0%**	**22**	**8**	**27%**

Table 4.2.7. Number of Learning and Teaching staff by gender and contract type

Staff Grade	Women on Fixed Term Contracts	Women on Open-ended Contracts	% of Women on Open-ended Contracts	Men on Fixed Term Contracts	Men on Open-ended Contracts	% of Men on Open-ended Contracts
Levels 3a/3b/4/5/6			-			-
Learning and Teaching Total 2014	**0**	**0**	**-**	**0**	**0**	**-**
Levels 5/6			-			-
Level 4		1	100%		1	100%
Levels 3a/3b			-			-
Learning and Teaching Total 2015	**0**	**1**	**100%**	**0**	**1**	**100%**
Levels 5/6			-			-
Level 4		1	100%	1	1	50%
Levels 3a/3b			-			-
Learning and Teaching Total 2016	**0**	**1**	**100%**	**1**	**1**	**50%**

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

Academic turnover in the Department is relatively low, amounting to 3.5% per year since 2010. Most of the eleven males who departed over this period moved to more attractive positions elsewhere, while others retired or left for family reasons. The two departing female academics both left to accommodate family relocations.

Table 4.2.8 Academic staff reason for leaving

Year	Leaving Reason	Grade	Gender
2010-11	Resignation	Professor - Level E	Male
2010-11	Retirement	Professor - Level E	Male
2011-12	Early Retirement (voluntary)	Professor - Level E	Male
2011-12	Resignation	Professor - Level E	Male
2012-13	Resignation	Professor - Level E	Male
2012-13	Resignation	Reader - Level D	Male
2013-14	Partial Retirement	Professor - Level E	Male
2013-14	Resignation	Lecturer - Level C	Male
2014-15	End of Contract	Lecturer - Level C	Male
2014-15	Resignation	Senior Lecturer - Level D	Male
2015-16	Resignation	Lecturer - Level C	Female
2015-16	Resignation	Lecturer - Level C	Female
2016-17	Resignation	Lecturer - Level C	Male

Reasons for research staff leaving are evenly spread between redundancy related to end of fixed-term funding and resignation; see Table 4.2.9. Resignation is typically prompted by an Academic/Postdoctoral Research appointment, moving to a research organisation or employment in the private sector. Turnover is not gender biased. Female research staff leavers averaged 35% of the total over the past 7 years, broadly in keeping with the percentage of female Research staff (see Table 4.2.3).

Senior Academic staff often continue to work in the Department after their retirement dates as Senior Research Investigators (SRI's) on a Part-Time basis. Their work with the Department usually continues for as long as the arrangement is mutually beneficial. Up to now all SRIs have been male; this is expected to change as female academic members of the Department reach retirement.

Table 4.2.9 Research Staff reason for leaving: Breakdown by gender

	Leaving Reason							
	End of Contract		Redundancy		Resignation		Total	
Academic Year	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**
2010-11	2	4	3			2	5	6
2011-12	2	2		1		2	2	5
2012-13	3	3		2	2	3	5	8
2013-14				2	1	3	1	5
2014-15	4	5	1	2	1	4	6	11
2015-16	1	2	4	8	2	3	7	13
TOTAL	**12**	**16**	**8**	**15**	**6**	**17**	**26**	**48**

Image 4.2.1 Postdoc staff member preparing a structural experiment in main structures laboratory; 2017
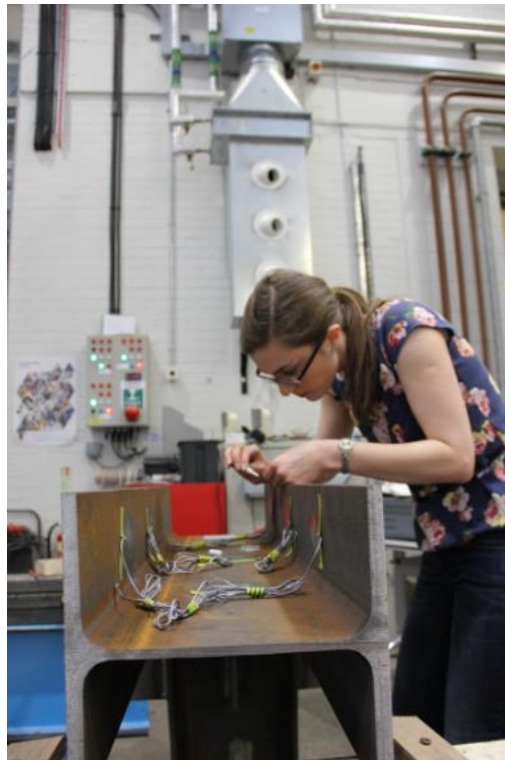
Image 4.2.2 College President Professor Alice Gast awarding Research Medal to academic staff from ICFEP numerical modelling research group: Dr S Kontoe, Prof D Potts, Dr D Taborda, Prof L Zdravkovic and Dr T Tsiampousi; December 2015

Total excluding tables and figure captions: 1816 words

5.   SUPPORTING AND ADVANCING WOMEN'S CAREERS
Recommended word count: Bronze: 6000 words

Section 5 draws on evidence from the major College and Departmental Surveys listed in Table 5.0, a PhD Focus Group, highly focussed meetings with the Postdoc Champion and Postdoc Representatives and comprehensive discussions within the SAT.

Table 5.0 Data sources informing description in Section 5. (PNS=prefer not to say, F=Female staff, M=Male staff)

Survey	Survey Date	Administrator	Cohort	Response Rate	Response by Gender
The Departmental Athena SWAN Survey	10 – 26 May 2017	Department of Civil and Environmental Engineering, Imperial College London	All staff in the Department	69% (98 out of 143 Departmental Staff)	24 F (25%) 71 M (72%) 3 PNS (3%)
The College Staff Survey	27 February – 17 March 2017	ORC International, appointed by Imperial College London	All staff in the Department	61% (87 out of 143 Departmental staff)	21 F (24 %) 57 M (66%) 9 PNS (10%)
The Departmental Postgraduate Research Experience Survey (PRES)	25 April – 18 May 2017	Higher Education Academy	All PhD students in the Department	74% (129 out of 174 PhD Students)	42 F (33%) 87 M (67%)
PhD Focus Group	12th June 2017	Learning and Development Centre, at request of Department	All PhD students in the Department invited	9 participants	Not applicable

5.1. Key career transition points: academic staff

> **Summary of Career Transition Points**
> **Highlights:**
>
> - Increasing proportions of female applicants for academic positions
> - The proportion of females appointed to academic and research posts exceeds the proportion who apply
> - Female candidates fare at least as well as their male counterparts in promotions
>
> **Areas for improvement:**
> - The proportion of female applicants for postdoc positions is static
> - Staff are not completely happy with current induction arrangements
> - Staff who have not yet been through a promotion have concerns about the transparency of the process

(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 Section 4 we showed that the average gender balance of our academic staff is improving and, along with that of our research staff, exceeds our discipline's national averages. The processes that have facilitated this progress in our appointment of top quality staff, is outlined below.

Advertising: Recruitment advertisements are based on the standard Imperial template. Positions are advertised on, at least, the Imperial job opportunities webpage, the Departmental web page and jobs.ac.uk. Heads of Sections (HoSs) and Principal Investigators (PIs) typically advertise positions through their own professional networks. Academics in the relevant Sections are also encouraged to disseminate advertisements when academic positions are advertised. Potential candidates are often identified through Section meetings or informal discussions with either the HoS or a nominated staff member approaching individuals directly.

> Action Item 4.2(a)   Review wording of job advertisement template to increase appeal to a wider range of potential staff
>
> Action Item 4.2(b)   Make Head of Sections and Line Managers aware of the recently proposed "Know your pool" guidelines
>
> Action Item 4.2(c)   Circulate notice of all academic and research posts to all researchers and academics in the Department

Shortlisting: Candidates are assessed against job specification criteria using quantitative metrics entered into a spreadsheet which is submitted to HR. For academic positions, shortlisting is overseen by the relevant HoS and Head of Department (HoD) taking advice from other staff with the relevant discipline-specific expertise. Shortlisting for research positions is carried out by the PI in consultation with one other staff member who also sits on the interview panel.

Interviews: Academic appointment panels include the HoD, a Faculty Consul (who is an elected senior Professor) and an HR Representative. The Faculty Dean and External Expert Advisers also join senior appointment panels. The panels include members of the relevant research Section, as well as a member of the four-person Departmental Panel (DP) from another Section. The DP rotates every 3 years and has reflected the gender balance of academic staff in the Department over the past 7 years by including at least one female member. Aiming to avoid placing excessive administrative loads on female academic staff, the Department has not required female academic representation on all panels. However, the Departmental HR liaison representative who documents the interviews is female.

Panels for research assistants, postdocs and learning/teaching staff usually consist of two academic staff members. The Departmental HR liaison representative does not usually sit on these panels. College policy that at least one member of each panel should be trained in recruitment will be followed more rigorously in future cases, as outlined below. In the same way, all HoSs have now completed unconscious bias training and other staff are being encouraged to undertake both types of training.

> Action Item 4.1(a)   Ensure that at least 40% of appointment panel membership completes College HR recruitment & selection course
>
> Action item 4.1(b)   Ensure that all key personnel involved in, admissions, recruitment and promotion panels complete Unconscious Bias Training
>
> Action item 4.8(b)   Ensure all new Academic staff complete training within 3 years of appointment on Recruitment & Selection, Unconscious Bias, Equality & Diversity and PRDP training

Fellowships: About 10% of research staff are funded via Fellowships that are usually developed in collaboration with an academic who subsequently acts as the Fellow's sponsor/line manager. The Research Support Team can provide help including proposal review, mock interviews and costing assistance. Often the applicants are Departmental PhD students, in other cases sponsors and potential Fellows connect with academic staff via their discipline-related research networks.

Recruitment data: The 2010-16 academic, research, teaching and learning staff recruitment data are presented in Tables 5.1.1 to 5.1.3. Quality ultimately underpins all appointment decisions. There are regularly cases where no appointment is made because no shortlisted candidate is deemed sufficiently strong after interview, as in 2010, 2011 and 2012. Female applicants, who make up 10 to 25% of those seeking academic appointments, are proportionally more successful than male applicants: 24% of academic staff appointed over the period were female. Most appointments are made at Lecturer level, although one female and one male Professor were appointed over the past five years (Table 5.1.4); the Department will monitor gender trends more regularly from 2018.

Female research applicants also achieve a good success rate; on average 39% of those appointed were female compared to 23% of applicants. While the dataset of Teaching and Learning staff is small, the gender balances for applications and appointments are broadly comparable. The annual numbers of research staff appointments are variable and currently we interpret this as being due to the small numbers involved making the data trends sensitive to randomly varying individual cases.

| Action Item 4.2(d) | Monitor recruitment data regularly for gender balance |

Table 5.1.1 Academic staff recruitment data 2010-2016

Academic Year	No Data/ DND	Total Applicants			Shortlisted/ Interviewed			Accepted		
		F	M	% F	F	M	% F	F	M	% F
2010	1	3	19	13%	0	4	0%	0	0	-
2011	1	10	50	16%	0	0	-	0	0	-
2012	1	24	118	17%	0	1	0%	0	0	-
2013	3	17	101	14%	4	13	24%	3	5	38%
2014	2	6	57	9%	0	7	0%	0	3	0%
2015	2	20	80	20%	4	11	27%	1	4	20%
2016	0	7	21	25%	1	5	17%	0	1	0%
TOTAL	10	87	446	16%	9	41	18%	4	13	24%

(DND=did not disclose)

Figure 5.1.1 Academic staff: proportion of female applicants 2010-2016
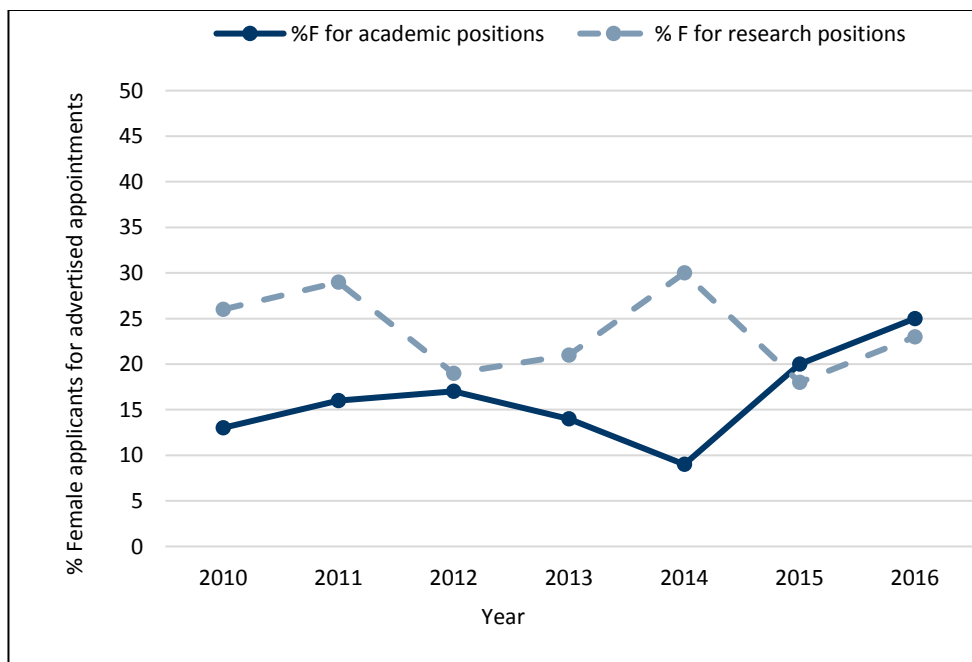
Table 5.1.2 Research staff recruitment data 2010-2016

Academic Year	Total Applicants				Shortlisted/ Interviewed				Accepted		
	No Data /DND	F	M	% F	No Data /DND	F	M	% F	F	M	% F
2010	6	60	163	26%	0	4	3	57%	3	1	75%
2011	2	28	67	29%	0	2	2	50%	0	0	-
2012	1	30	125	19%	0	1	9	10%	0	4	0%
2013	5	50	187	21%	3	18	35	32%	8	16	33%
2014	1	15	34	30%	0	6	9	40%	4	3	57%
2015	2	21	93	18%	0	10	6	63%	4	3	57%
2016	7	68	225	23%	0	19	39	33%	7	14	33%
TOTAL	24	272	894	23%	3	60	103	36%	26	41	39%

(DND=did not disclose)

Table 5.1.3 Teaching and Learning staff recruitment data 2010-2016

Academic Year	Total Applicants				Shortlisted/ Interviewed			Accepted		
	No Data /DND	F	M	% F	F	M	% F	F	M	% F
2010	0	0	0	-	0	0	-	0	0	-
2011	0	0	0	-	0	0	-	0	0	-
2012	0	0	0	-	0	0	-	0	0	-
2013	0	0	0	-	0	0	-	0	0	-
2014	0	3	12	20%	0	5	0%	0	3	0%
2015	1	12	30	28%	4	1	80%	1	0	100%
2016	0	0	0	-	0	0	-	0	0	-
TOTAL	1	15	42	26%	4	6	40%	1	3	25%

(DND=did not disclose)

Table 5.1.4 Academic staff appointment levels: Gender breakdown 2013-2015

Year	Appointment Level	F	M	Total	% F
2013	Lecturer C	3	5	8	38%
2014	Lecturer C	0	1	1	0%
2014	Research Fellow/Lecturer C	0	1	1	0%
2014	Chair E	0	1	1	0%
2015	Lecturer C	0	2	2	0%
2015	Senior Lecturer D	0	2	2	0%
2015	Chair E	1	0	1	100%

The Departmental Staff Survey data summarised in Table 5.1.5 indicate 79% of academic staff and 75% of postdocs either agreeing, or strongly agreeing, that recruitment is transparent and fair. However, female academics and postdocs considered the process to be less transparent than male counterparts. Postdoc representatives proposed that better circulation of potential positions would improve transparency.

> **Action Item 4.2(c)**   Circulate notice of all academic and research posts to all researchers and academics in the Department

Table 5.1.5 Departmental Athena SWAN Staff Survey responses to questions on recruitment: Academic and Research staff responses *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T = Research staff (excluding postdocs) and Teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
The recruitment process is transparent and fair.	3.79 (92)	3.88 (8)	4.02 (41)	4.00 (49)	4.00 (2)	3.57 (7)	3.67 (9)	3.50 (2)	3.67 (6)	3.63 (8)

(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 Departmental HR Liaison Representative takes each new staff member through a package of induction materials on their first day and completes their safety induction. New academic staff are introduced to the wider Department at the first available staff assembly. The Departmental Staff Survey (Table 5.1.6, Q1 and Q2) reveals mixed staff views on these arrangements. Only 30% of academics agree/strongly agree that the processes are helpful, with female academics appearing less satisfied than their male counterparts. We will take the three corrective steps outlined below. However, the subsequent mentoring scheme is well received; 76% of academic staff either agree/strongly agree that the allocation of mentors to provide advice and local support during their probation period is beneficial (Q3 Table 5.1.6).

There is greater satisfaction with induction amongst research staff; 75% agreed/strongly agreed that adequate information and resources were provided on starting work. However, further steps will be taken to ensure that postdoc staff connect at an early stage with the Postdoc Champion (PDCh), a formally nominated member of the academic staff, one of whose responsibilities is to send a welcome email that connects new postdocs with the Postdoc and Fellows Development Centre (PFDC).

Action Item 4.3 (a)   Introduce more social events to meet colleagues in the Department

Action Item 4.3 (b)   Introduce "buddy scheme" to support settling into new working environment

Action Item 4.3 (c)   Introduce email updates announcing arrival of all new staff, including short biographies

Action Item 4.3 (d)   Streamline postdoc induction and distribute Postdoc and Fellows Development Centre's handbook

Action Item 4.10 (a)   Improve liaison between HR rep in the Department and Postdoc champion

Table 5.1.6 Departmental Athena SWAN staff survey responses to questions on induction: Academic and Research staff responses (*Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T= Research staff (excluding postdocs) and Teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
Q1 The current process of introducing and welcoming new staff to the Department is appropriate.	3.21 (98)	2.88 (8)	3.36 (42)	3.28 (50)	4.00 (2)	2.86 (7)	3.11 (9)	3.67 (3)	3.67 (6)	3.67 (9)
Q2 If you were recruited within the last three years, you were provided with adequate information and resources to start work when you commenced employment.	3.35 (31)	-	3.20 (10)	3.20 (10)	4.00 (2)	2.50 (2)	3.25 (4)	3.50 (2)	4.20 (5)	4.00 (7)
Q3 Do you agree with the statement; The mentorship scheme for newly appointed academic staff within the Department is beneficial	3.89 (80)	4.14 (8)	3.67 (42)	3.74 (50)	4.00 (1)	4.16 (6)	4.14 (7)	4.00 (2)	4.25 (4)	4.17 (6)

(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.

Promotion data: The Department enjoys a strong record of successful academic progression; all 29 staff who went forward for promotion over 2012-2017 were successful. The detailed data presented in Tables 5.1.7 & 5.1.8 show 24% of promotions involved female staff. This total does not directly translate to 7 out of 29 individual female staff, as some were promoted more than once. Over this period the average proportion of female academic staff was 17%, growing from 15% to circa 20%. However, females comprised 28% of the (non-Professorial grade) staff group eligible for promotion. Noting the small numbers involved, the proportion of females promoted broadly matches the proportion of female staff eligible for promotion. We will monitor future promotions data more regularly for any gender bias.

Action Item 4.11(d)   Monitor promotion data for gender balance

Table 5.1.7 Promotion data 2012-2017 – breakdown by level

Promotion Type	Female Candidates			Male Candidates		
	Promotion Approved	Promotion Not Approved	Success Rate	Promotion Approved	Promotion Not Approved	Success Rate
Professor	2	0	100%	3	0	100%
Reader	1	0	100%	6	0	100%
Senior Lecturer	4	0	100%	13	0	100%
Total	**7**	**0**	**100%**	**22**	**0**	**100%**

Table 5.1.8 Promotion data for the last 6 years – breakdown by year

Year	Female Candidates			Male Candidates		
	Promotion Approved	Promotion Not Approved	Success Rate	Promotion Approved	Promotion Not Approved	Success Rate
2012	1	0	100%	3	0	100%
2013	1	0	100%	3	0	100%
2014	1	0	100%	2	0	100%
2015	1	0	100%	5	0	100%
2016	0	0	-	4	0	100%
2017	3	0	100%	5	0	100%
Total	**7**	**0**	**100%**	**22**	**0**	**100%**

Promotions process: Each autumn the Department's Academic Promotions Committee reviews the progress of **all** non-professorial staff on Levels C and D to identify potential candidates and give guidance both to those who are ready to progress, and those who may require advice on their progression. The Committee, which meets twice, consists of the Department's Professors, all HoSs, two less senior Departmental Panel representatives and the Departmental HR liaison representative. The Committee's M/F representation reflects the proportion of female Professors and while female members have attended all the promotions meetings over the last five years, we are introducing a new minimum gender balance requirement.

> Action Item 4.1 (b) Ensure that all key personnel involved in, admissions, recruitment and promotion panels complete Unconscious Bias Training
>
> Action Item 4.11(b) Promotion panels to include at least one female Professor

All staff are invited by e-mail to submit tabular "Academic Profile" summaries of their CVs prior to the first promotions meeting. The committee reviews the profiles and also considers staff who did not provide profiles. It agrees which staff meet a significant number of its promotion criteria, and invites them to complete the standard College form for review at the second meeting. Staff are also made aware of the personal route for potential promotion that applies to candidates who are not supported by the committee. The College form invites staff to declare any circumstances that may have affected their career progression, including periods of maternity leave.

Those staff who are recommended to go forward to the Faculty Promotions Panel are notified and internal deadline reminder emails are sent to all. The Faculty Panel comprises the Faculty Dean, two College Consuls and an HR staff member. Interviews are held for all Reader and Professorial cases; the Assistant Provost for Academic Promotions also joins all panels considering Professorial candidates. With the permission of the candidate, the HoD attends promotion interviews as an observer.

Most postdocs have fixed-term contracts that do not cater for promotion. However, in 2016 one researcher was promoted to Senior Research Fellow.

Promotions criteria
Historically, the DMC has found applying metric criteria to be insufficient when judging an individual's quality of work and overall contribution. Instead, all aspects of each individual's circumstances have been considered, including any career breaks. Noting the staff questionnaire views, the DMC will consider again whether this approach is correct.

> Action Item 4.11(c) Departmental Management Committee (DMC) to review current promotion criteria and potential alternatives

Training and Mentoring for Promotion
Staff who are put forward to the Faculty promotion panel by the Department are given guidance on how to maximise their chances of success by their HoS/HoD. The Departmental HR Liaison Representative reminds candidates of College deadlines and highlights College briefing sessions on the promotion process.

Staff are offered guidance on their progress through ongoing feedback from line managers. Whether or not they put themselves forward, staff who have not been recommended for promotion are provided feedback by their HoS (and if appropriate the HoD), with specific objectives being set for future rounds.

The data for Q1 and Q2 on Table 5.1.9 show that staff are less concerned about promotions once they have experienced the process; 54% of academic staff who have been promoted agree/strongly agree that it is fair and transparent. However, promoted female academic staff are less positive in their average response to Q1 (Table 5.1.9) than their male counterparts. Based on the evidence, the Athena Action Plan steps outlined below should improve the transparency of, and satisfaction with, the promotion process.

Action Item 4.9(a)   Formally discuss the readiness for promotion as part of the PRDP

Action Item 4.9(b)   Use PRDP to encourage qualified applicants to apply for promotion

Action Item 4.11(a)   Assign two senior staff (not HoD or other line managers) to provide independent guidance on promotion (and workload, see 5.4 below) for academics and support staff. Rotate these assignments on a 3-year cycle, link to 5.4 below

Action Item 4.12(a)   Line manager, HoS or other nominated person to support and guide colleagues going through promotion process.

Action Item 4.12 (b)   Extend academic mentoring scheme duration up to the time of the first promotion application.

**Table 5.1.9 Departmental Athena SWAN Staff Survey responses to questions on promotion: Academic and Research staff responses (*Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T= Research staff (excluding postdocs) and Teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
Q1. If you have not yet been through the promotion process do you agree with this statement: The promotions process is transparent and fair?	2.97 (36)	2.00 (1)	3.18 (11)	3.08 (12)	3.00 (2)	3.00 (6)	3.00 (8)	4.00 (1)	3.50 (4)	3.60 (5)
Q2. If you have been through the promotion/job level review process do you agree with this statement: The promotion/job level review process is transparent and fair?	3.45 (60	3.43 (7)	3.65 (31)	3.61 (38)	-	3.50 (2)	3.50 (2)	-	4.00 (2)	4.00 (2)

The Departmental Postdoc Champion (PDCh) provides advice to postdocs on the available development training and connects them to the PFDC. However, our survey data indicate that only 44% of postdocs agree that there is adequate support for their career progression.

Action Item 4.10(d)   Encourage career mentoring by the Departmental Postdoc Champion (PDCh)

Action Item 4.10(e)   Run focus group with postdocs to explore issues raised in Bronze Application 2017, monitor progress and plan further actions

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(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.

All academic staff present at the survey date were included in the Department's REF 2014 submission, as was the case for RAE 2008. Staff are being made aware of all relevant REF 2021 deadlines. A mid-term review has also been undertaken in which staff submitted 2 papers and a corresponding 100-word statement. Feedback will be provided on the submitted papers and statements and this will be repeated for the outputs submitted in 2020.

5.2. Career development: academic staff

> **Summary Table regarding Career Development Highlights:**
>
> - Academic staff are generally very positive about the support provided by their line managers (HoSs) regarding career development
> - All postdocs who responded to the Departmental Survey agreed/strongly agreed that their line managers are supportive
> - More female than male PhD students aspire to develop careers in research or academia
>
> **Areas for improvement:**
> - Raise considerably participation in the Department's annual appraisal (PDRP) process

(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?

New staff are directed during induction to the Learning Development Centre (LDC) and the Postdoc and Fellows Development Centre (PFDC) as appropriate. Both centres circulate regular emails and have extensive websites. Representative examples of specific programmes for academics within the Faculty of Engineering are listed in Table 5.2.1.

Table 5.2.1 Imperial College London Learning and Development Centre (LDC) programmes for Academic staff, as presented on LDC website

Staff Group	Training Activity	Training Aim
Early career academics Faculty of Engineering	Faculty of Engineering academic communications master-class programme	Supports academic communication skills with four independent master-classes
Leaders from Medicine, Engineering and Natural Sciences	Senior Academic Leadership Programme (SALP)	Helps embed a strong and healthy leadership culture across the Faculties. Participants are invited.
Female Academics (Lecturer-Reader)	Female Academic Development Centre (FAD)	Supports personal development and provides knowledge exchange and network.
All Academic Staff	Working with Industry Masterclass	For academics who are beginning to develop industrial connections, are interested in exploring opportunities, or who would like to know more about Imperial's approach and support to working with industry.

The survey data indicate that more can be done to promote training (Q1 Table 5.2.2), although 60% of staff agreed/strongly agreed with Q2 and confirmed that the available training programmes are valuable. The Department actively nominates staff for the Senior Academic Leadership Programme (SALP) and Academic Development Centre courses. Staff are also able to participate in the Imperial Leadership and Management Development Programme offered by the LDC. The Educational Development Unit (EDU) offers workshops on teaching and formal training leading to a postgraduate certificate/diploma and a M.Ed. degree and supports staff and PhD students to gain Higher Educational Academy Fellowships.

However, the Female Academic Development Centre (FAD, Table 5.2.1) attracted just one member of our Department. The postdoc representatives report that while the workshops and one-to-one support offered by the PFDC are very good, there is a low level of awareness of the entitlement of postdocs to 10 days of training each year.

Action Item 4.8 (c)   Distribute to Principal Investigators monthly Postdoc Development Centre (PDC) newsletter highlighting upcoming training courses.

Action Item 4.10(b)   Raise awareness of the responsibilities of PIs in terms of supporting the professional development and progression of postdocs.

Action Item 4.10(c)   Encourage postdocs to utilise the 10 days training per annum.

In addition to its formal training, the Department develops leadership skills amongst academic staff by assigning administrative roles with increasing levels of responsibility as their career develops. Typically, the first administrative roles are assigned around the end of probation.

Action Item 4.8 (a)   Provide a one-page summary of available training on the Departmental website

Action Item 4.8(b)   All new academics to complete Recruitment & Selection, Unconscious Bias, Equality & Diversity and PRDP training within 3 years

Table 5.2.2 Departmental Athena SWAN Staff Survey responses to questions on training: Academic and Research staff responses *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T= Research staff (excluding postdocs) and Teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
Q1. You can access adequate information regarding training programmes.	3.87 (98)	3.88 (8)	3.90 (42)	3.9 (50)	3.50 (2)	4.00 (7)	3.89 (9)	4.00 (3)	3.83 (6)	3.89 (9)
Q2. The training programmes offered may be of value to my career development	3.56 (98)	3.25 (8)	3.57 (42)	3.52 (50)	4.00 (2)	3.57 (7)	3.67 (9)	4.00 (3)	4.00 (6)	4.00 (9)

Tables 5.2.3 to 5.2.6 give information from College records of training participation for academic and research staff in the Department. Discussions among the Athena SAT suggest these data should be considered as indicative, rather than precise. Regular monitoring of Departmental training data will be undertaken from 2017 onwards.

Action Item 4.8 (e)   Monitor ICIS (Imperial College Information Systems) data on training

Table 5.2.3 Training participation for Academic staff: 2012-13 to 2016-17, by provider

Training Provider	F	M	Total	% F
Educational Development Unit	14	41	55	25%
Equality Diversity and Inclusion Centre	1	1	2	50%
Faculty of Engineering	3	11	14	21%
IT Services Training	2	2	4	50%
Learning and Development Centre	7	17	24	29%
Safety Training	9	43	52	17%
Senior Academic Leadership Programme (SALP)	1	1	2	50%
Female Academic Development Programme	1	-	1	100%
Imperial Insights (College induction)	4	9	13	31%
Total	**42**	**125**	**167**	**25%**

Table 5.2.4 Academic staff participation in training 2012-2017, breakdown by year

Academic year	F	M	Total	% F
2012-13	15	48	63	24%
2013-14	9	27	36	25%
2014-15	6	10	16	38%
2015-16	8	16	24	33%
2016-17	4	24	28	14%
Total	42	125	167	25%

Table 5.2.5 Summary of training participation for Research staff 2012-2017, by training provider

Training Provider	F	M	Total	% F
Educational Development Unit	14	31	45	31%
Equality Diversity and Inclusion Centre	1	2	3	33%
Faculty of Engineering		1	1	0%
Human Resources Division		1	1	0%
Learning and Development Centre	10	7	17	59%
Postdoc and Fellows Development Centre	24	18	42	57%
Safety Training	11	22	33	33%
Total	**60**	**82**	**142**	**42%**

Table 5.2.6 Research staff participation in training 2012-2017 total attendance by year, across all training providers

Academic year	F	M	Total	% F
2012-13	7	9	16	44%
2013-14	15	31	46	33%
2014-15	29	19	48	60%
2015-16	7	17	24	29%
2016-17	2	6	8	25%
Total	**60**	**82**	**142**	**42%**

Recalling that 17% of academic staff were female over 2012-17, Table 5.2.3 indicates that female staff are slightly more likely to take on training than males, although this may reflect the higher proportions of female staff in the less senior grades, where training participation is more likely. There is a clearer positive gender bias towards training participation amongst research staff. On average 42% of research staff participating in training were female, while 31% of research staff were female.

(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.

PRDP participants complete the standard Imperial form in advance of a one-hour meeting with their line manager, during which they discuss and amend the form and agree a plan for the coming year. Work-life balance is often discussed in these meetings. Each specific conversation is confidential and details are not monitored.

The Department is not satisfied with the current degree of engagement with the annual PRDP process. Our records indicate that 34% of staff completed PRDPs in 2016, falling below the average of 75% reported from the College 2017 Staff Survey. The counter-signed PRDP forms should be submitted to the Department, however HoSs/line managers sometimes neglect to do this and such slips may contribute to our poorer than expected statistics. Discussions with the postdoc representatives has revealed that their line managers are not always proactive in setting up PRDP meetings. Actions are being taken to improve the return rates.

The answers to Q1 & Q2 in Table 5.2.7 show that circa 60% of academic staff agree/strongly agree that the PRDP process is useful to career progression and that sufficient guidance/training provision is given. The satisfaction level amongst postdocs is lower, with only 44% strongly agreeing/agreeing with Q1 and 33% strongly agreeing/agreeing with Q2. The College Staff Survey research staff data are broadly similar (see Table 5.2.8, Q1 and Q2). All staff have access to PRDP training workshops through the LDC and twelve staff members undertook the training over the last five academic years. While senior line managers are often directed towards this training, other members of staff, including many postdoc's line managers, currently only undertake the training on their own initiative. Around half of those who report undertaking the training (at some point) found it useful.

Action Item 4.7 (a)   Encourage PRDP completion by sending regular reminders to Heads of Sections/Line Managers

Action Item 4.7(b)   HR liaison to monitor closely completion rates and follow-up non-completions when appropriate. HoD to review completion details twice a year

Action Item 4.6 (a)   Raise staff awareness by email and departmental newsletter and organise PRDP training for all staff.

Action Item 4.6(b)   Ensure that all Head of Sections/Line Managers complete PRDP training

Action Item 4.8(b)   All new academics to complete Recruitment & Selection, Unconscious Bias, Equality & Diversity and PRDP training within 3 years

Table 5.2.7 Departmental Athena SWAN Staff Survey responses to questions on PDRP: Academic and Research staff responses *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T= Research staff (excluding postdocs) and Teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
Q1. The PRDP is beneficial for my career progression and issues raised are taken on board by my line manager?	3.48 (98)	3.75 (8)	3.67 (42)	3.68 (50)	4.00 (2)	3.14 (7)	3.33 (9)	3.00 (3)	3.83 (6)	3.56 (9)
Q2. As an outcome of my PRDP process, sufficient guidance on suitable training provisions were given.	3.37 (98)	3.25 (8)	3.52 (42)	3.48 (50)	4.00 (2)	2.86 (7)	3.11 (9)	3.00 (3)	3.67 (6)	3.44 (9)
Q3. Training about the PRDP process is available to all staff. If you have completed this training, was it effective?	3.51 (37)	4.00 (4)	3.71 (14)	3.78 (18)	4.00 (2)	3.00 (1)	3.67 (3)	4.00 (1)	3.00 (2)	3.33 (3)

Table 5.2.8 Departmental response to PRDP Questions in 2017 College Staff Survey: Academic and Research staff.

Question	Academic & Research % Positive	Academic % Positive	Research % Positive	Academic & Research Female % Positive
(Number of responses)	*(52)*	*(40)*	*(12)*	*(11)*
Q1. The PRDP with my line manager (objective setting and performance review) is useful	58%	67%	27%	55%
Q2. My line manager takes the PRDP process seriously	68%	79%	27%	64%

(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.

Academic staff are generally very positive about the career development provided by their HoS, who 86% of staff agree/strongly agree is supportive. Female academic staff are more satisfied than their male counterparts (Table 5.2.9, Q1 and Q2). Guidance to staff on probation is given on an informal ongoing basis by HoSs and mentors, and in a more formal mid-probation review involving their mentor, HoS, the HoD and a representative from the Departmental panel. As already noted, the academic mentor scheme for staff on probation is well received.

All postdocs who responded to the Department Survey agreed/strongly agreed that their line managers are supportive (Table 5.2.9, Q1). When compared with academic staff, they are less satisfied both with the guidance given regarding promotion (Table 5.2.9, Q2) and with the opportunities for development, growth and career progression (Table 5.2.10, Q1 and Q2). The current arrangements for support of postdocs are listed in Table 5.2.11; actions to improve support are outlined below.

Action Item 4.10 (a)   Improve liaison between Departmental HR Rep and Postdoc Champion.

Action Item 4.10 (b)   Raise awareness of the responsibilities of PIs in supporting professional development and progression of postdocs.

Action Item 4.10 (d)   Encourage career mentoring by the Departmental Postdoc Champion

Action Item 4.10 (e)   Run focus group with postdocs to explore issues raised in Bronze Application 2017, monitor progress and plan further actions.

Action Item 4.12 (b)   Extend academic mentoring scheme duration up to the time of the first promotion application.

Table 5.2.9 Departmental Athena SWAN Staff Survey responses to questions on development support within the Dept.: Academic and Research staff responses *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T= Research staff (excluding postdocs) and Teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
Q1. Interaction with your Head of Section or Line Manager is supportive to your needs.	4.10 (98)	4.38 (8)	4.19 (42)	4.22 (50)	4.50 (2)	3.43 (7)	3.67 (9)	4.33 (3)	4.50 (6)	4.44 (9)
Q2. My Head of Section/Line Manager offers support and guidance on readiness for promotion/passing probation/job level review.	3.79 (98)	4.25 (8)	4.05 (42)	4.08 (50)	4.50 (2)	2.86 (7)	3.22 (9)	3.67 (3)	4.17 (6)	4.00 (9)

Table 5.2.10 Departmental response to development Questions in 2017 College Staff Survey: Academic and Research staff responses

Question	Academic & Research % Positive	Academic % Positive	Research % Positive	Academic & Research Female % Positive
(Number of responses)	*(52)*	*(40)*	*(12)*	*(11)*
Q1. I am satisfied with the learning and development I receive for my present job	68%	69%	64%	91%
Q2. I have the opportunity for development and growth at the College	80%	89%	50%	100%
Q3. I know what career progression opportunities are available to me at the College	73%	82%	42%	91%

Table 5.2.11 Departmental postdoc support system

Departmental Level Postdoc Coordination
Postdoc Champion: formally nominated member of academic staff Postdoc representatives: 2-3 selected postdocs
Communication
Postdoc Champion maintains mailing list. Postdoc Champion represents postdocs at staff assembly and safety meetings. Postdoc Champion and postdoc reps formally meet once per term
Events
2 seminars per year- in 2017 one was technical, one focussed on fellowships 1 social event per year financially supported by the Dept. 1-2 meetings per year with the Head of Department

(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 Department tasks one academic member of staff with a student careers advice remit and provides administrative support for their liaison with the College Careers Service. Students are referred to two professional careers advisers dedicated specifically to Civil Engineering. The advisers deliver Departmental workshops and seminars which highlight the services available, including CV workshops and appointments to discuss their future career aspirations. Career development events are also coordinated by the student CivSoc society and supported by the Department, as listed on Table 5.2.12.

Table 5.2.12 Career development activities coordinated by the student Civil Engineering Society (CivSoc) and Department

Event	Overview
Annual careers fair	10-15 civil engineering companies participate.
Site visits in London	About 3 each year. Enable observation of often high-profile projects (such as Crossrail) and provide opportunities to talk to practising civil engineers.
CivSoc and Departmental Lunch time talks	Technical focus, civil engineering related, and sometimes include information on how to apply for jobs. Often approachable younger graduate engineers participate
Annual CivSoc tour	4-5 day visit to a European city which includes site visits and a visit to a local university, including talks and a meeting with students there.
Staff seminar series	Roughly 5-6 talks per year in which academics explain their research to the student body.

The careers progression data presented in Tables 5.2.13 & 5.2.14 are based on responses to a range of surveys sent to all graduates. The PhD response rate was too small to be considered meaningful. The MEng and MSc students' response rates are lower than we would like and gender breakdown is only available from 2016. While our students appear to progress well professionally or academically after graduation, the data are too sparse to identify any gender trends. Considering the breakdown over a longer period may prove more instructive.

Table 5.2.13 Available data for first destinations of MEng graduates, including gender breakdown for 2016

First Destination	2012	2013	2014	2015	2016
Graduates	86	102	70	97	66
Academic Study	9	8	3	11	10 (2F, 8M)
Civil Engineering Other	12	13	9	2	1 (1M)
Consultancy	13	19	19	10	11 (6F, 5M)
Civil Engineering Contracting	4				
Finance	1	9	4	2	4 (4M)
Other	5	3		2	1 (1M)
Seeking Employment	7	1	2	3	6 (6M)
Teaching	2	8	1		
Travelling	3		1	1	1 (1M)
Responses	56	61	39	31	34
No Reply	30	41	31	66	32
Total	**86**	**102**	**70**	97	**66**

Table 5.2.14 Available data for first destinations of MSc graduates

Destinations 2016-2017	F	M	Total	% F
Explicit Refusal		1	1	0%
Full time Employment	16	56	72	22%
Full Time Further Study	5	6	11	45%
Part Time Employment		1	1	0%
Start in 1 Month		2	2	0%
Travel	1	1	2	50%
Unemployed		2	2	0%
Grand Total 2016-2017	**22**	**69**	**91**	**24%**
Destinations 2015-2016	**F**	**M**	**Total**	**% F**
Full Time Employment	13	41	54	24%
Full time Further Study		1	1	0%
No Return		2	2	0%
Part time Further Study		2	2	0%
Something Else	1		1	100%
Time Out	1		1	100%
Unemployed	1		1	100%
Grand Total 2015-2016	**16**	**46**	**62**	**26%**
Destinations 2014-2015	**F**	**M**	**Total**	**% F**
Full Time Employment	34	79	113	30%
Full Time Further Study	3	9	12	25%
NULL		1	1	0%
Part Time Employment	1		1	100%
Part Time Further Study	1		1	100%
Start Within 1 Month		1	1	0%
Time Out/Travel	1	1	2	50%
Unemployed	1	3	4	25%
Unreported (blank)	37	81	118	31%
Grand Total 2014-2015	**78**	**175**	**253**	**31%**

PhD students interested in pursuing academic careers often receive good support and guidance from their supervisors, who may proof-read Fellowship/Academic job applications and sometimes help convene practice seminars. The 2017 PRES survey data (Table 5.2.15) indicate that PhD students are generally satisfied with their training/skills development. Some problems with supervision were noted, and while these affect a minority of students (comments in PRES survey and Focus Group Table 5.2.16) the Department will address this. No gender bias was apparent among those providing negative responses in PRES. The Focus Group highlighted the need to improve understanding of funding opportunities, for female students in particular, to enable conference participation.

Action Item 3.2 (b)   Include conference funding information in induction pack; circulate funding opportunities by regular emails

Action Item 3.3(a)   Department to undertake further analysis to assess gender bias in available survey data (Graduate School Well Being Survey, PRES)

Action Item 3.3(b)   Streamline induction of PhD students (induction meeting, starter checklist, improved handbook)

Action Item 3.3(e)   Run workshop on PhD supervision in the Department

Table 5.2.15 2017 PRES (Postgraduate Research Experience Survey) data relating to PhD training and skills development

Question	Overall Score	Female Score
Q1. I received an appropriate induction to my research degree programme	4.22	4.14
Q2. My supervisor/s have the skills and subject knowledge to support my research	4.51	4.43
Q3. I have regular contact with my supervisor/s, appropriate for my needs	4.41	4.38
Q4. My supervisor/s provide feedback that helps me direct my research activities	4.26	4.33
Q6. My supervisor/s help me to identify my training and development needs as a researcher	3.98	4.17
Q7. My skills in applying appropriate research methodologies, tools and techniques have developed during my programme	4.38	4.48
Q8. My skills in critically analysing and evaluating findings and results have developed during my programme	4.38	4.38
Q9. My confidence to be creative or innovative has developed during my programme	4.13	4.27
Q10. My ability to manage projects has developed during my programme	4.06	4.21
Q11. My ability to communicate information effectively to diverse audiences has developed during my programme	4.09	4.16
Q12. If you teach, to what extent do you agree that you have been given appropriate support and guidance for your teaching?	3.86	4.16

Table 5.2.16 PhD Focus Group conclusions on career transition and development

Career Transitions:
Recruitment is generally viewed as fair and appropriate
Range of induction experiences; lack of consistency in contact prior to joining, and support in the first 3-6 months, both for newcomers and those who have already studied at Imperial.
Intranet support is good but sometimes confusing. Need to clarify expectations around support, including supervisor support as part of induction.
Career Development
High degree of variation between levels of supervisory support and response. The focus group estimated that around 50% of supervisors were good and responsive, while around 15% were known as being unhelpful. This lack of support negatively impacts well-being.
Perception that the male students tended to ask to attend conferences, while the female students might be more reticent. Making the budgets more transparent might encourage women.

The Imperial College Graduate School offers courses for PhD students that focus on transferable skills such as communication, team working, academic writing, research impact and career planning, including a workshop on postdoc positions/Fellowships. The training data summarised in Table 5.2.17 indicate that female participation in these courses matches the proportion of female students. Graduate School staff participate in Department led workshops and hold bespoke versions of their courses for our students. For example, a focussed Fellowship application workshop was run in July 2017 for civil engineering PhD students with input from the Graduate School; the workshop will be repeated.

> Action Item 3.3(c)   Continue to run a PGR information session for research progress and career planning in year 2, introduce a similar session in year 3
>
> Action Item 3.3(f)   Run a seminar series for PhD students in year 2 across the Department. Each session to last 1 hour to include 3-4 10min presentations, discussion & refreshments.

Table 5.2.17 Participation in Imperial College Graduate School training sessions by PhD students from the Department

Academic year	F	M	Total	% F	% of F PhD students
2012-2013	15	33	48	31%	**34%**
2013-2014	72	119	191	38%	**34%**
2014-2015	110	241	351	32%	**33%**
2015-2016	104	261	365	28%	**34%**
2016-2017	109	199	308	35%	**33%**
Total	410	853	1263	33%	**34%**

Table 5.2.18 summarizes the career aspirations of PhD students recorded in the 2017 PRES survey; it is clear that female PhD students are more likely than male PhD students to aspire to continue in research/academia. PhD students interested in academic careers can access the guidance notes on research funding and external engagements provided by the Departmental Research Office (Table 5.2.20, below).

Table 5.2.18 PhD student career aspirations as recorded from 2017 PRES Survey

What type of career do you have in mind for when you complete your research degree?	All Civil		Female Civil	
	Count	%	Count	%
Academic career in higher education (either research and teaching, or teaching only)	38	29%	19	45%
Research career in higher education	10	8%	3	7%
Research career outside higher education (e.g. in a private research organisation, a charity or in an industrial environment)	24	19%	5	12%
Any other professional career	16	12%	3	7%
Self-employment (including setting up own business)	10	8%	2	5%
Not sure or not decided yet	22	17%	5	12%
Returning to or remaining with employer who is sponsoring your degree	5	4%	3	7%
Returning to or remaining with employer who is not sponsoring your degree	1	1%	1	2%
Teaching (at a level below higher education)	1	1%	1	2%
Other	2	2%	0	0%
Total	**129**	**1**	**42**	**1**

Undergraduates can explore research in summer projects run via the College UROP (Undergraduate Research Opportunity Programme) which is supported administratively by the Department. UROP data provided in Table 5.2.19 show annual fluctuations, but on average the proportion of female UROP researchers matches the proportion of female UG students.

Four-month duration final year MEng research projects are undertaken after completing all taught modules that enable all students to experience life as a researcher. This activity finishes with a students' conference. There is also a poster session designed to engage year 3 students and encourage their own thinking about MEng research project choices.

PhD opportunities within the Department are routinely circulated to both (undergraduate) fourth year MEng and (taught postgraduate) MSc students.

Table 5.2.19 Participation of Undergraduate Students in UROP (Undergraduate Research Opportunities Programme) Academic Years 2010-11 to 2016-17

Academic Year	F	M	Total	% F
2010-11	1	7	8	13%
2011-12	2	5	7	29%
2012-13	4	10	14	29%
2013-14	4	9	13	31%
2014-15	1	8	9	11%
2015-16	9	11	20	45%
2016-17	10	15	25	40%
Total	**31**	**65**	**96**	**35%**

(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.

In 2016 the Department created a Research Support Team with two full-time staff members. The team offers tailored support at different stages of research grant applications, including postdoc Fellowship applications. Table 5.2.20, which summarises the support provided, is circulated to research and academic staff each fortnight along with a list of current funding opportunities. The team is also developing on-line guidance notes on applying for funding, as well as on research impact, has built new research intranet support resources that are accessible to Departmental staff, is organising a Pilot Research Showcase and, as outlined below, will monitor the impact of its support. These developments have been well-received; 75% of academic staff agreed/strongly agreed in the Departmental Staff Survey that they have adequate information to help prepare research grant applications. Junior staff often approach more senior colleagues (often their HoS) for feedback on proposals before submitting applications for external review. The research team and HoD are looking to formalise this process, and make it available to all.

Action Item 4.4 (c)   Pilot Research Showcase; monitor impact to decide whether to run it regularly

Action Item 4.8 (d)   Monitor the impact of recently introduced Research Support Team

Table 5.2.20 Summary of support offered by Department at various stages of research proposal development

When	Who can provide input or support at this stage and why?
Funding call published (typically 1-2 months before deadline)	**Research Programmes Manager** - To maximise industry involvement engagement with potential industry partners. Facilitation of new partnerships will require the most amount of time (>1 month). Support also available to maximise industry input where relationships already exist, e.g., exploring additional engagement or funding opportunities. **Departmental Research Administrator** - To add to the log of Departmental submissions, notify Faculty Research Services, and answer any initial questions on funding implications.
Two weeks before the sponsor deadline	**Peers** Review of proposal **Research Programmes Manager** - To review proposal documents, in particular assisting with the Summary, Pathways to Impact, management, stakeholder engagement and risk management sections. - Able to build on existing relationships only at this late stage. **Departmental Research Administrator** - To help with/check internal costings, application forms/submission portals before submission to Head of Department and Faculty Research Services, advise on amendments, answer queries on eligible/ineligible costs, check the JoR, liaise with external partners re-funding, conduit between the Department and Research Services. - Arrange approval with the Head of Department.
One week before the deadline	**Departmental Research Administrator** - Works with Research Services on the final finance check and approval, helping with amendments, queries as required. **Faculty Research Services** - To check the financial aspects of the proposal, compliance of attachments, ensuring maximum resources are requested. Final submission to the funder is made

Table 5.2.21 summarises the outcomes of recently submitted research proposals; 16% of which were submitted by female staff, who comprised approximately 20% of the academic staff over the specified period. Referring to Table 5.2.22, there was a 26% success rate amongst both male and female applicants, although information on some proposal outcomes is incomplete. While no gender bias is noticeable in Table 5.2.23, Table 5.2.24 gives a gender breakdown for the funding sought in research grant applications. High value applications are mostly led by very senior academics and the 14 applications exceeding £1 million all came from (around 5) male PIs. However, female staff played active roles in some of the latter applications and others led consortium bids where the overall grant value (awarded to the combined institutions) exceeded £1 million. Female colleagues will be encouraged to lead further high value applications.

Table 5.2.21 Summary research proposals submitted from 1/1/2014 to 23/3/2017: breakdown by gender of PI

Gender	No. of Proposals Submitted	% of Proposals Submitted
F	38	16%
M	196	84%
Total	**234**	

Table 5.2.22 Summary of outcomes of research proposals submitted from 1/1/2014 to 23/3/2017: Gender breakdown

Proposal outcome	Proposals by F PIs	% of Proposals Submitted by F PIs	Proposals by M PIs	% of Proposals Submitted by M PIs
Awarded	10	26%	51	26%
Closed	1	3%	8	4%
Declined by Funder	15	39%	76	39%
ReWork Underway	1	3%		
No update	11	29%	57	29%
Withdrawn			4	2%
Total	**38**		**196**	

Table 5.2.23 Sponsors of research proposals submitted from 1/1/2014 to 23/3/2017: Gender breakdown

Sponsor	Proposals by F PIs	% of Proposals Submitted by F PIs	Proposals by M PIs	% of Proposals Submitted by F PIs
EU Industry, Commerce & Public Corporations			3	2%
EU Other			8	4%
European Commission	7	18%	41	21%
OST Research Councils	14	37%	65	33%
UK central government bodies/local authorities, health	3	8%	26	13%
UK Charity Peer/Open	3	8%	7	4%
UK industry, commerce and public corporations	2	5%	20	10%
Other	9	24%	26	13%
Total	**38**		**196**	

Table 5.2.24 Grant Applications: Summary by amount requested

Value	Proposals by F PIs	Proposals by M PIs	Total	% F for each budget range
Under 50£k	5	38	43	12%
50-100£k	1	18	19	5%
100-250£k	14	59	73	19%
250-500£k	11	38	49	22%
500k-1£million	7	28	35	20%
Over 1£million	0	10	10	0%
Over 2£million	0	3	3	0%
Over 5£million	0	1	1	0%
Total	38	195	233	16%

Table 5.2.25 Departmental Athena SWAN Staff Survey responses to questions on support for research: Academic staff

Question	Average Score F	Average Score M
Q1 You have access to adequate information and resources to help prepare research grant applications.	4.13 (8)	3.89 (41)
Q2 You have access to adequate support to manage and run research projects	3.38 (8)	3.30 (40)
Q3 You have access to adequate support and information related to the recruitment of new PhD students.	3.88 (8)	3.71 (41)

Female academic staff express greater satisfaction than male colleagues with the Departmental support for research applications and research management (Table 5.2.25). Actions are planned to address the lower degree of satisfaction amongst staff regarding post-award support, with only 46% of academic staff agreeing/strongly agreeing that they have access to adequate support to manage and run research projects.

Action Item 4.5 (a)   Review existing support for the management and running of research grants through consultation with PIs

Action Item 4.5 (b)   Introduce a "suggestions for improvement box" after the relevant question in the 2019 departmental staff survey

Action Item 4.8 (d)   Monitor the impact of recently introduced Research Support Team

5.3. Flexible working and managing career breaks

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

Summary Table for Flexible Working and Career Breaks
Highlights:
- 100% rate of return from maternity leave for both academic and support staff
- Staff are satisfied that they can work flexibly to suit their circumstances

Areas for improvement:
- Departmental support before, during and after maternity leave
- Paternity leave uptake
- Awareness of College policies on flexible working

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

Explain what support the Department offers to staff before they go on maternity and adoption leave.

Twelve members of staff have taken and returned from maternity leave since 2013. In all the cases outlined in Table 5.3.1, leave arrangements were agreed between the staff member and her line manager/HoS and appropriate accommodations were made when health complications arose. Male staff have also been encouraged and enabled to attend their partners' antenatal appointments.

Staff can access College HR maternity support and one member of the Department participated in the HR 'Preparing for Maternity Leave' workshop over the past five years. Less formal support is also available either on a one-to-one basis through College-led peer networks and weekly visits from a Faculty HR member. Colleagues within the Department are generally happy to share advice on how to work out their entitlements, apply for a place in the excellent on-site College nursery and other matters.

However, only 40% of affected staff (in all categories) agree that the support and information offered before going on maternity/paternity/adoption leave is adequate, as reflected in the Table 5.3.2 and Table 5.3.3 scores. We propose three main steps to improve this situation.

Action Item 6.1(a)   Briefing sessions for HoS/line managers with HR on how to support staff

Action Item 6.1 (b)   Line managers/HoS and HR Rep to formally meet with staff entitled to maternity, paternity or adoption leave to inform them of their entitlements and how to manage KIT days

Action Item 6.1 (c)   Post a summary on Departmental intranet with links to the College level support

Table 5.3.1 Formal applications for maternity leave 2013-present

Staff Grade	Maternity Leave
Academic staff	5
Research staff	6
Professional and Technical support staff	1

Table 5.3.2 Departmental Athena SWAN Staff Survey responses to questions on support prior to maternity/paternity/adoption leave: Academic and Research staff responses. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female L+T	Male L+T	Overall L+T	Female Postdoc	Male Postdoc	Postdoc Overall
The support and information offered by the Department to staff before going on maternity/paternity/adoption leave is adequate.	3.24 (38)	3.00 (5)	3.29 (17)	3.23 (22)	-	3.67 (3)	3.67 (3)	4 (1)	3 (2)	3.33 (3)

Table 5.3.3 Departmental Athena SWAN Staff Survey responses to questions on support prior to maternity/paternity/ adoption leave: Non-Academic staff responses. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female P+S	Male P+S	Overall P+S*	Male Tech.
The support and information offered by the Department to staff upon return to work from maternity/paternity/adoption leave is adequate.	3.4 (35)	2.75 (4)	3.50 (2)	3.00 (6)	3.33 (3)

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

Explain what support the Department offers to staff during maternity and adoption leave.

All staff are entitled to 10 Keeping in Touch (KIT) or up to 20 Shared Parental Leave in Touch days. Up to now all have preferred to manage their maternity/paternity/adoption leave informally in consultation with their HoS/Line manager. However, only 38% of affected staff (in all categories) agree that the support and information offered is adequate; see Tables 5.3.4 and 5.3.5. Steps to improve the effectiveness of the provision are set out in our Action Plan.

Table 5.3.4 Departmental Athena SWAN Staff Survey responses to questions on support during maternity/paternity/adoption leave: Academic and Research staff

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female L+T	Male L+T	Overall L+T	Female Postdoc	Male Postdoc	Postdoc Overall
The support and information offered by the Department to staff during maternity/paternity/adoption leave is adequate.	3.26 (34)	3.40 (5)	3.33 (15)	3.35 (20)	-	3 (2)	3 (2)	4 (1)	3 (2)	3.33 (3)

Table 5.3.5 Departmental Athena SWAN Staff Survey responses to questions on support during maternity/paternity/adoption leave: Professional and Support staff

Question	Dept. Overall	Female P+S	Male P+S	Overall P+S*	Male Tech.
The support and information offered by the Department to staff during maternity/paternity/adoption leave is adequate.	3.26 (34)	2.75 (4)	3.50 (2)	3.00 (6)	3.50 (2)

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

Explain what support the Department offers to staff on return from maternity or adoption leave. Comment on any funding provided to support returning staff.

All academic staff who have taken maternity leave since 2011 received College Elsie Widdowson Fellowships. These provide 50% contributions to the salary costs of the returning academic to fund fixed-term cover of typically a year to relieve a proportion (often 100%) of teaching and administrative duties. The specific nature of the support is agreed with the HoS when the application is made and depends on which Section is involved.

The return to work support and information offered by the Department after maternity/paternity/adoption leave was considered adequate by 46% of affected staff. Professional and Support staff find returning to work challenging and record lower

satisfaction levels than academic staff; see the contrasting responses in Tables 5.3.6 and 5.3.7. The Departmental Staff Survey did not solicit detailed comments on the support provided and additional steps will be taken to understand and address the reasons for dissatisfaction.

Action Item 6.2 (a)   Introduce a formal meeting with HoS/Line manager as an "induction" upon return to work

Action Item 6.2 (b)   Introduce a "suggestion box" relating to support for work transition after a career break and from part-time to full-time employment

Action Item 6.4 (a)   Run a focus group for staff members with caring responsibilities to identify ways of improving the extisting support system

Action Item 6.4 (b)   Introduce "suggestion boxes" after each question relating to maternity/parental leave in future staff surveys

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All staff are informed via email circulation of College support for childcare vouchers and nursery provision in the College's excellent (Early Years Education Centre) Nursery. The College offers staff a 'Post-maternity Coaching' workshop, which one staff member has attended over the last 5 years, and provides access to emergency family support services.

Table 5.3.6 Departmental Athena SWAN Staff Survey responses to questions on support after returning to work from maternity/paternity/adoption: Academic and Research staff

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female L+T	Male L+T	Overall L+T	Female Postdoc	Male Postdoc	Postdoc Overall
The support and information offered by the Department to staff upon return to work from maternity, paternity or adoption leave is adequate.	3.4 (35)	3.8 (5)	3.47 (15)	3.55 (20)	-	3 (2)	3 (2)	4 (1)	3.5 (2)	3.67 (3)

Table 5.3.7 Departmental Athena SWAN Staff Survey responses to questions on support after returning to work from maternity/paternity/adoption: Professional and support staff

Question	Dept. Overall	Female P+S	Male P+S	Overall P+S*	Male Tech.
The support and information offered by the Department to staff upon return to work from maternity, paternity or adoption leave is adequate.	3.4 (35)	2.75 (4)	3.50 (2)	3.00 (6)	3.33 (3)

(iv)   Maternity return rate

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

The rate of return from maternity leave is 100% for both Academic and Support staff, see Table 5.3.8.

Table 5.3.8 Maternity leave data July 2011-July 2017

Year maternity leave commenced	Staff grade	Number
2011	Research - Level B	1
2013	Lecturer - Level C	1
2013	Professional services	1
2014	Lecturer - Level C	1
2014	Senior Lecturer - Level D	1
2014	Professional services	1
2015	Reader - Level D	1
2015	Research - Level B	2
2016	Research - Level B	1
2017	Professional services	1

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

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

Table 5.3.9 Formal applications for paternity leave 2013-present

Staff Grade	Paternity Leave
Academic staff	3
Research staff	1
Professional and Technical support staff	1

The Department has had no request for shared parental, adoption or parental leave over the last five years. Formal paternity leave is available to all members of staff and covers a period of two weeks, taken as a single contiguous block, or as two distinct one-week blocks. The uptake rates summarized in Table 5.3.9 are very low. While the reasons are

not clear, anecdotal evidence indicates that the situation may reflect the effort required to arrange for (and liaise with) specialist cover, or the need to take the leave in block form. Staff appear to prefer to agree informal paternity leave or increased flexibility with their HoS/line manager.

Only staff who apply for formal paternity automatically receive HR support including information on childcare vouchers or workshops. While those making informal arrangements miss out on these messages, few staff (17% of respondents) agree that the Department currently encourages paternity or shared parental leave sufficiently (see Tables 5.3.10 and 5.3.11). Steps are proposed below to address this shortfall.

Action Item 6.3 (a)   Post information regarding entitlements on Departmental website in newsletter, highlight benefits of paternity leave.

Action Item 6.3 (b)   Heads of Sections/Line managers to take the lead in accommodating more flexible arrangements for paternity leave

Action Item 6.3 (c)   HoD to explain the Department's position on accommodating flexibility on paternity leave to all staff by email and at the staff assembly

Table 5.3.10 Departmental Athena SWAN Staff Survey responses to questions on take-up of paternity leave and shared parental leave: Academic and Research staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female L+T	Male L+T	Overall L+T	Female Postdoc	Male Postdoc	Postdoc Overall
The Department encourages the take-up of paternity leave and shared parental leave.	3.08 (51)	2.83 (6)	3.12 (25)	3.06 (31)	4 (1)	3 (3)	3.25 (4)	3 (1)	4 (2)	3.67 (3)

Table 5.3.11 Departmental Athena SWAN Staff Survey responses to questions on take-up of paternity leave and shared parental leave: Non-Academic staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female P+S	Male P+S	Overall P+S*	Male Tech.
The Department encourages the take-up of paternity leave and shared parental leave.	3.08 (51)	2.5 (2)	3.00 (4)	2.86 (7)	3.00 (4)

(vi) Flexible working

Provide information on the flexible working arrangements available.

According to the College Staff Survey staff, 90% of staff agree they can work flexibly and can organise their own workload (Table 5.3.12), although female academic staff are, on average, slightly less satisfied. Only 43% of Departmental staff are fully aware of the formal flexible working policies, as reflected by the average scores in Tables 5.3.13 & 5.3.14. While informal flexible working is common in the Department, steps are required to improve awareness of College flexible working policy.

Action Item 6.5: Publicise the policy through the Departmental intranet and newsletter with a link to the main HR website

Table 5.3.12 College Staff Survey 2017: % of positive responses to questions relating to flexible working. Base = number of respondents. Data not available for groups smaller than 10 people

	I am able to work flexibly to fulfil the duties of my role:	As long as I get the work done, I am trusted to organise my workload in a way that suits me
Overall	91%	94%
Academic Base: 40	90%	100%
Research Base: 12	100%	83%
Female Academic & Research Base: 11	82%	100%
Learning & Teaching Base: 1	Data withheld	Data withheld
Professional Services Base: 26	92%	88%
Female Professional Services Base: 10	100%	80%
Technical Services Base: 8	Data withheld	Data withheld

Table 5.3.13 Departmental Athena SWAN Staff Survey responses to question on flexible working: Academic and Research staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female L+T	Male L+T	Overall L+T	Female Postdoc	Male Postdoc	Postdoc Overall
Do you agree with the statement: I am aware of the Departmental policy on flexible working?	2.98 (98)	2 (8)	2.81 (42)	2.68 (50)	3.5 (2)	3.43 (7)	3.44 (9)	3.67 (3)	3.5 (6)	3.56 (9)

Table 5.3.14 Departmental Athena SWAN Staff Survey responses to question on flexible working: Professional and Support staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female P+S	Male P+S	Overall P+S*	Male Tech.
Do you agree with the statement: I am aware of the Departmental policy on flexible working?	2.98 (98)	3.36 (11)	3.67 (9)	3.52 (21)	2.43 (7)

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

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

The specific arrangements made for returning to full-time work following a career break, or part-time work, are agreed individually with line managers or HoS, depending upon the roles and circumstances of each staff member. The data presented in Tables 5.3.15 and 5.3.16 indicate only moderate satisfaction levels. However, the data are questionable as the number of responses exceeds the number of staff who have experienced any such transition.

Action Item 6.2 (b)   Introduce "suggestion box" relating to support for work transition after a career break and from part-time to full-time employment

Table 5.3.15 Departmental Athena SWAN Staff Survey responses to questions on transition back to full time roles: Academic and Research staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female L+T	Male L+T	Overall L+T	Female Postdoc	Male Postdoc	Postdoc Overall
The policy and practice to support and enable staff who work part-time after a career break to transition back to full-time roles is adequate.	3.43 (30)	-	3.44 (16)	3.44 (16)	3 (1)	3 (2)	3 (3)	4 (1)	-	4 (1)

Table 5.3.16 Departmental Athena SWAN Staff Survey responses to questions on transition back to full time roles, responses from Professional and Support staff.
(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)

Question	Dept. Overall	Female P+S	Male P+S	Overall P+S*	Male Tech.
The policy and practice to support and enable staff who work part-time after a career break to transition back to full-time roles is adequate.	3.43 (30)	4 (2)	3.50 (2)	3.60 (5)	3.67 (3)

5.4. Organisation and culture

Summary Table for Organization and Culture
Highlights:

- Good representation of female staff and students on Departmental Committees
- Numerous examples of females in leadership roles
- High level of participation of female staff and students in outreach activities
- Most staff report good working relationships with their colleagues
- Broadly similar experiences for male and female PhD students.

Areas for improvement:
- Promotion of female role models amongst all staff and student levels
- Degree of interaction between the academic Sections

(i)   Culture

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

The Department is culturally diverse and attracts very able staff and students from across the globe. It recognises the importance of social interaction and supports or enables the wide spread of annual social events for staff and students listed in Tables 5.4.1 and 5.4.2. There are also many informal social events (such as celebrations to mark PhD Vivas) and one-off receptions to celebrate inaugural lectures or major staff awards.

The Department has a well-used common room with tea and coffee making facilities that is open to all staff and PhD students. The PhD students have requested improvements via the Staff Student Liaison Committee that are being addressed.

Action Item 4.4 (d)   A common room committee will be convened; committee to engage with common room users to gain feedback and action improvements

Table 5.4.1 Examples of Departmental social events

Social Event	Level of organization	Participants
MSc welcome parties at the start of the academic year.	Each Section organizes a welcome party	MSc students and staff, typically PhD students also participate
UG Welcome lunches at the start of the academic year; one lunch per UG year cohort	Departmental	UG students and staff
PhD student welcome lunch at the start of the academic year	Departmental	PhD students and staff
Departmental Christmas party	Departmental	Staff and PhD students
Section Christmas party	Sections	Staff and PhD students
PhD-led social events, e.g., pub quiz, summer party	Department (PhD administrator and PhD student: representatives)	Staff and PhD students
CivSoc Spring Dinner	Civil Engineering Society, supported by Undergraduate Office	Students and staff
Networking social after annual "Three Minute Thesis" competition	Departmental	Staff and PhD students
3rd and 4th year project presentation receptions	Departmental	UG students and staff

Table 5.4.2 Examples of social events coordinated by the student Civil Engineering Society (CivSoc) and supported by the Department

Event	Participants
Engineering night of philosophy	Two events per year; participants include staff and students, alumni are invited to one event
Pub quizzes	Participants include staff and students (Primarily UG students.)
Christmas and annual evening dinners	Participants include staff and students
Bar nights	UG students (PG students are invited)
Festive events	These include an Easter egg hunt, mince pies and pancake Tuesday events at appropriate times. These are aimed at students

The College Staff Survey indicates that the majority of staff have good working relationships with their colleagues (Q1, Table 5.4.3). However, aspects of the Departmental culture could be improved. Most noticeably, research staff are less satisfied, across the College, regarding inclusivity than Academic and Professional and Support staff (Q2, Table 5.4.3).

> Action Item 4.10(e)   Run focus group with postdocs to explore inclusivity issues raised in Bronze Application 2017, monitor progress and plan further actions

Table 5.4.3 College Staff Survey 2017: responses to questions that give an indication of Departmental culture. Numbers of responses in parentheses.

Question	Academic % Positive (40)	Research % Positive (12)	Academic & Research Female (11)	Learning & Teaching % Positive (1)	Professional Services % Positive (26)	Professional Services Female (10)	Technical Services % Positive (8)
Q1 I have good working relationships with the colleagues I work with	93%	92%	100%	Protected	96%	100%	Protected
Q2 The College is an inclusive employer for all staff	73%	36%	73%	Protected	88%	90%	Protected
Q3 I am kept informed about changes within my Department/Division	70%	75%	82%	Protected	56%	60%	Protected

The scores recorded on gender balance, equality principles and role model issues in Q1 of Tables 5.4.4 & 5.4.5 reflect the limited proportion (57%) of staff who agree that these important matters are promoted sufficiently actively by the Department. Five steps are therefore proposed.

> Action Item 5.3(c)   Introduce EDDC as standard agenda items at DMC & Departmental Assembly Meetings
>
> Action Item 1.2(c)   All 1st year UG students to attend Unconscious Bias Training during the first term of their studies
>
> Action Item 1.2(d)   Introduce "Learning Environment and culture" as a standing agenda item in student-stafff liaison meetings
>
> Action Item 4.8(b)   All new Academics to complete within 3 years Recruitment & Selection, Unconscious Bias, Equality & Diversity and PRDP training
>
> Action Item 5.3(d)   EDDC to be composed to facilitate liaison with key Departmental committees

Table 5.4.4 Departmental Athena SWAN Staff Survey responses to questions on organisation and culture by academic and Research staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; non-postdoc R+T=research and teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
Q1 Gender balance, equality principles and role models are promoted in the Department.	3.61 (98)	3.38 (8)	3.74 (42)	3.68 (50)	3.5 (2)	4 (7)	3.89 (9)	3.67 (3)	4 (6)	3.89 (9)
Q2 Section meetings provide a useful forum for open discussion with all staff.	3.74 (76)	4.38 (8)	3.8 (40)	3.9 (48)	4 (2)	3.8 (5)	3.86 (7)	3.5 (2)	3.67 (3)	3.6 (5)
Q3 The Departmental website is a source of useful information for the various activities and roles within the Department.	3.58 (98)	3.38 (8)	3.55 (42)	3.52 (50)	4 (2)	3.57 (7)	3.67 (9)	4 (3)	4 (6)	4 (9)
Q4 You are aware of decisions made at the Departmental Management Committee (DMC) through the minutes circulated by e-mail and/or the Head of Department's feedback sessions that are held after each DMC meeting.	4.23 (94)	4.25 (8)	4.27 (41)	4.27 (49)	4 (2)	4.14 (7)	4.11 (9)	4.33 (3)	4.17 (6)	4.22 (9)

Table 5.4.5 Departmental Athena SWAN Staff Survey responses to questions organization and culture by Professional and Support staff

Question	Dept. Overall	Female P+S support staff	Male P+S	Overall P+S*	Male Tech.
Q1 Gender balance, equality principles and role models are promoted in the Department.	3.61 (98)	3.36 (11)	3.22 (9)	3.29 (21)	3.86 (7)
Q2 Section meetings provide a useful forum for open discussion with all staff.	3.74 (76)	4.33 (3)	3 (5)	3.5 (8)	3.5 (6)
Q3 The Departmental website is a source of useful information for the various activities and roles within the Department.	3.58 (98)	3.73 (11)	3.56 (9)	3.67 (21)	3.43 (7)
Q4 You are aware of decisions made at the Departmental Management Committee (DMC) through the minutes circulated by e-mail and/or the Head of Department's feedback sessions that are held after each DMC meeting.	4.23 (94)	4.4 (10)	4.56 (9)	4.45 (20)	3.8 (5)

Recognising the key role communication plays in culture, the Departmental Staff Survey asked questions about the current communication channels; see Q2 and Q3 in Tables 5.4.4 and 5.4.5. Much of the current Departmental communication is by email, although there is also an intranet that is accessible via the Departmental webpage. While the current means of disseminating decisions from Departmental Management Committee (DMC) meetings are well received (Q4, Tables 5.4.4 & 5.4.5), discussions amongst the SAT and consideration of all available data led to the conclusion that communication should be improved.

Action Item 5.1(a)   Introduction of quarterly Departmental Newsletter

Action Item 5.1(b)   Monitor impact by introducing a relevant question in the Departmental survey

Action Item 5.2   Newsletter to note significant achievements of all staff

Action Item 5.3(b)   Anonymous staff drop-in box for comments

Our surveys of PhD students found that both the Departmental and College cultures are generally inclusive (Table 5.4.6), but that more work needs to be done to achieve cross-section integration. Table 5.4.7 presents the responses to questions related to culture in the 2017 PRES survey data. While no significant gender bias emerges, our scores are slightly lower than the average across College and the Department has proposed three steps to improve the PRES outcomes.

Action Item 3.3 (a):   Department to undertake further analysis to assess gender bias in the available survey data (Graduate School Well Being Survey, PRES).

Action Item 3.3 (d)   Continue to support social integration of researchers through Departmental social events (such as our pub quizzes).

Action Item 3.3 (f):   Run a seminar series for PhD students in year 2 across the Department. Each session to last 1 hour to include 3-4 10min presentations, discussion & refreshments.

Table 5.4.6 PhD Focus Group: comments on organization and culture

Overall:
There was agreement that there was little discernible difference between the male/female experiences in the Athena SWAN main categories.
Organisation and culture
The group consensus was that the culture is generally inclusive
There was a sense that the sections can be isolated, leaving little room for positive collaboration across sections.

Table 5.4.7 2017 PRES data: responses to questions relating to culture

Comment	F	Overall
Q1 My department provides a good seminar programme	3.89	3.90
Q2 I have frequent opportunities to discuss my research with other research students	3.70	3.90
Q3 The research ambience in my department or faculty stimulates my work	3.65	3.70
Q4 I have opportunities to become involved in the wider research community, beyond my Department	3.62	3.60

The Department recognises explicitly that there may be particular issues facing female students. It tasks one female academic to be a formal Tutor for Women, who offers a first point of contact for students who have such concerns. While this and other aspects of Departmental culture are recognised positively, including good working relationships with colleagues (Q1 in Table 5.4.3) the Staff Survey data also identified in responses to Q1 and Q2 in Table 5.4.8 a desire for better connections between the five substantial and distinct academic Sections of our large Department, which will be facilitated.

Action Item 4.4(a)   Highlight opportunities for internal academic and non-academic collaboration in regular Departmental research updates. Encourage networking via thematic and/or project workshops.

Action Item 4.4(b)   Monitor staff satisfaction on internal networking by adding a relevant question in the biennial Departmental survey.

Table 5.4.8 College Staff Survey 2017: responses to questions that give an indication of disconnect between sections

Question	Academic % Positive (40)	Research % Positive (12)	Academic & Research Female (11)	Learning & Teaching % Positive (1)	Professional Services % Positive (26)	Professional Services Female (10)	Technical Services % Positive (8)
Q1 My colleagues work together to achieve the goals of our Department/Division	57%	58%	64%	Protected	72%	80%	Protected
Q2 I believe there is effective collaboration between the teams that work within my Department/Division	35%	50%	36%	Protected	36%	40%	Protected

The Athena SAT's work has been discussed at all Departmental Management Committees (DMC) since May 2016 and recorded in minutes distributed to all staff. The Athena Charter and principles have been promoted at staff assemblies and on a dedicated section of the Departmental website. Our Staff Survey showed that Athena awareness is rising, with 57% of respondents agreeing/strongly agreeing that they were aware of the Charter and the principles it upholds (Tables 5.4.9 & 5.4.10).

Action Item 5.6(a)	Regularly update Department's Athena SWAN webpage
Action Item 5.6(b)	Biennial Athena SWAN Departmental survey
Action Item 5.6(c)	Highlight in newsletter Department's activities & commitment to Athena SWAN
Action Item 5.3(d)	EDDC composition to facilitate liaison with key Departmental committees

Table 5.4.9 Departmental Athena SWAN Staff Survey responses to question on Athena SWAN Charter: Academic staff

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
I am aware of the Athena SWAN Charter and the principles it upholds.	3.57 (93)	3.5 (8)	3.67 (42)	3.64 (50)	3 (2)	3 (6)	3 (8)	4.33 (3)	3 (6)	3.44 (9)

Table 5.4.10 Departmental Athena SWAN Staff Survey responses to questions organization and culture by Professional and Support staff

Question	Dept. Overall	Female P+S support staff	Male P+S	Overall P+S*	Male Tech.
I am aware of the Athena SWAN Charter and the principles it upholds.	3.57 (93)	4 (9)	3.67 (9)	3.79 (19)	3.4 (5)

(ii)   HR policies

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

The Executive Assistant to the HoD is also the Department's HR Liaison Representative. She helps administer recruitment, promotions, probations, and staff contracts and ensures that College HR policies are followed, working with the HR website and liaising with the Faculty of Engineering HR team. She supports the Senior Appointments team and Promotions Committee and, occasionally, the Faculty HR Manager regarding probations and any complex contractual issues. She informs all staff via email of the Faculty HR team member's bi-weekly term-time visits to the Department, of any HR organised workshops (for example on parental leave) and of any updates to HR policies.

The Department supports the Faculty of Engineering's "Have Your Say" campaign which aims to eliminate discrimination, harassment and bullying, by providing appropriate pathways for reporting poor behaviour. The formally recognized Departmental contact can be approached, in confidence, by all staff and PhD students to discuss their concerns. Six Departmental staff volunteered to participate in pilot courses on active bystander training run by the Faculty in 2017.

> Action Item 5.8   Department will liaise with the Department of Mechanical Engineering to run training sessions on being an active bystander

There is no discernible gender bias in views as to whether HR policies are well communicated (Tables 5.4.11 & 5.4.12). However, we note that only 46% of staff consider themselves informed adequately/effectively of HR policies and aim to improve this score.

> Action Item 5.3 (a)   Clarify advice via email/Departmental newsletter and provide list of key HR topics staff can address at drop-in sessions.

Table 5.4.11 Departmental Athena SWAN Staff Survey responses to question on HR policy dissemination: Academic and Research staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T= non-postdoc research and teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
The process by which staff are informed of HR policies is adequate/effective?	3.31 (95)	3.25 (8)	3.27 (41)	3.27 (49)	4.5 (2)	3.86 (7)	4 (9)	3.67 (3)	3.2 (5)	3.38 (8)

Table 5.4.12 Departmental Athena SWAN Staff Survey responses to question on HR policy dissemination: Professional & Support staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female P+S support staff	Male P+S	Overall P+S*	Male Tech.
The process by which staff are informed of HR policies is adequate/effective?	3.31 (95)	3.1 (10)	3.44 (9)	3.25 (20)	2.86 (7)

As noted earlier, the Department will adhere strictly from 2018 to College HR guidelines which recommend that at least one member of each interview/selection panel has completed interview training. We will also monitor HR and other training records more regularly.

> Action Item 4.1(a):   Ensure that at least 40% of appointment panel(s) members have completed the College HR recruitment and selection course
>
> Action Item 4.8(b):   All new Academics to complete within 3 years Recruitment & Selection, Unconscious Bias, Equality & Diversity and PRDP training
>
> Action Item 4.1(a): Ensure that at least 40% of appointment panel(s) members have completed the College HR recruitment and selection course
>
> Action Item 4.8(b): All new Academics to complete Recruitment & Selection, Unconscious Bias, Equality & Diversity and PRDP training within 3 years

(iii)   Representation of men and women on committees

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

The good representation of female members in key Departmental Committees is demonstrated in Table 5.4.13. Two of the four MSc clusters are led by female staff, two of the four undergraduate year coordinators are female, as is one of the five HoSs and our Departmental Operations Manager (DOM). Committee membership is often linked to specific administrative roles and is generally assigned by the HoD and DOM, with input from committee chairs who take account of gender balance and personal circumstances.

> Action Item 5.4(a)   Newsletter to note significant rotations of key posts; potential candidates to discuss with Head of Section/Line Manager.
>
> Action Item 5.4(a)   Newsletter to note significant rotations of key posts; potential candidates to discuss with Head of Section /Line Manager.

The scores reported in Tables 5.4.14 and 5.4.15 show 69% of staff finding that equality and inclusivity is considered adequately in the Department's organizational structure, although female staff are less satisfied than their male counterparts. Further improvements should follow from the three Action Plan steps below.

Action Item 4.8(b)   All new Academics to complete Recruitment & Selection, Unconscious Bias, Equality & Diversity and PRDP training within 3 years

Action Item 5.3(c)   Introduce EDDC as standard agenda items at DMC & Departmental Assembly meetings

Action Item 5.3(d)   EDDC composition to facilitate liaison with key Departmental committees

Table 5.4.13 Departmental Committee membership by gender

	Committee	F	M	Total	% F
2017	Departmental Management	2	10	12	**17%**
	Departmental Research	2	8	10	**20%**
	Departmental Library	3	4	7	**43%**
	Departmental Health & Safety	8	20	28	**29%**
	Departmental Computer	2	9	11	**18%**
	Undergraduate Teaching	5	13	18	**28%**
	MSc Management	4	6	10	**40%**
	PhD Management	2	1	3	**67%**
	Academic Promotions *(excluding Departmental Panel Rep. who is to be confirmed)*	5	15	20	**25%**
	UG Staff Student Liaison	10	15	25	**40%**
	PG Staff Student Liaison	13	21	34	**38%**
	PGR Staff Student Liaison	14	2	16	**88%**
	Athena SWAN SAT	8	6	14	**57%**
	Civil Engineering Society (students)	5	5	10	**50%**
2016	Departmental Management	2	10	12	**17%**
	Departmental Research	2	7	9	**22%**
	Departmental Library	4	3	7	**57%**
	Departmental Health & Safety	8	20	28	**29%**
	Departmental Computer	2	9	11	**18%**
	Undergraduate Teaching	6	14	20	**30%**
	MSc Management	3	7	10	**30%**
	PhD Management	2	1	3	**67%**
	Academic Promotions	3	12	15	**20%**
	UG Staff Student Liaison	12	12	24	**50%**
	PG Staff Student Liaison	12	22	34	**35%**
	PGR Staff Student Liaison	7	8	15	**47%**
	Athena SWAN SAT	8	6	14	**57%**
	Civil Engineering Society (students)	6	4	10	**60%**

	Departmental Management	10	2	12	**17%**
	Departmental Research	3	0	3	**0%**
	Departmental Library	6	2	8	**25%**
	Departmental Health & Safety	18	3	22	**14%**
	Departmental Computer	9	2	11	**18%**
	Undergraduate Teaching	13	5	18	**28%**
2015	MSc Management	9	3	12	**25%**
	PhD Management	1	2	3	**67%**
	Academic Promotions Committee	11	3	14	**21%**
	UG Staff Student Liaison	17	8	25	**32%**
	PG Staff Student Liaison	23	11	34	**32%**
	PGR Staff Student Liaison	7	8	15	**53%**
	Athena SWAN SAT	5	3	8	**38%**
	Civil Engineering Society (students)	5	5	10	**50%**

Table 5.4.14 Departmental Athena SWAN Staff Survey responses to questions on organisation by Academic and Research staff

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+TR+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
The Department actively considers gender equality and inclusivity in its organisational structure (e.g., in the research, promotion or teaching committees)?	3.75 (77)	3.43 (7)	3.82 (33)	3.75 (40)	4 (2)	3.83 (6)	3.88 (8)	4.5 (2	3.25 (4)	3.67 (6)

Table 5.4.15 Departmental Athena SWAN Staff Survey responses to questions Professional and support staff

Question	Dept. Overall	Female P+S support staff	Male P+S	Overall P+S*	Male Tech.
The Department actively considers gender equality and inclusivity in its organisational structure (e.g., in the research, promotion or teaching committees)?	3.75 (77)	3.67 (9)	3.86 (7)	3.75 (16)	4.2 (5)

(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?

HoSs and the HoD support and encourage staff to undertake activities which raise their visibility in the Department, College and external world through research collaboration, membership of journal editorial boards, participation in professional bodies, media work and other activities.

Participation in external committees is generally discussed in academic PRDPs and is considered explicitly in promotion. The Departmental Survey shows that 72% of Academic staff agree/strongly agree they are encouraged to participate on influential external committees; all the female staff who responded either agreed or strongly agreed with this statement.

While data is not available regarding current participation in external committees by all Academic staff, indicative data gathered from a sample of six female academic staff (Table 5.4.16) confirm a high degree of external engagement at national and international levels. These data were voluntarily provided by Lecturer, Senior Lecturer and Professor level staff. The SAT have anecdotal evidence that all female academics have comparable levels of external visibility.

Table 5.4.16 Female participation in external committees – involvement among sample of 6 Departmental female Academic staff in 2017

Activity	% of sample of six female staff engaged involved in each Activity	Total number of engagements by sample of female staff in each Activity
Member of Journal Editorial Board	67%	13
Member of Committee of British Technical Body	100%	13
Panel membership for national and International Research Councils	67%	11
UK/Regional Government Advisory Board representation	50%	8
International Technical Committees	50%	6

(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.

While the Department Management Committee has discussed adopting a workload allocation model, it has always voted to follow a more flexible arrangement. All members of staff are encouraged to raise and discuss issues or difficulties related to workload allocation when they arise. The Department's systems for rotating roles and responsibilities aim to achieve a balance between individual's and Department's needs. Most established staff are expected to contribute in some way to administrative roles and activities.

However, the current arrangements are not universally popular. The weighted average scores in Tables 5.4.17 & 5.4.18 show only 45% of staff agreeing that the allocation of work within their Section and Department is fair and transparent and that there are significantly lower levels of agreement amongst female staff. Four steps will be taken to respond to these findings.

Action Item 5.4(a)   Newsletter to note significant rotations of key posts; potential candidates to discuss with Head of Section/Line Manager.

Action Item 5.4(b)   Line Managers & Heads of Sections to produce annual workload summaries for review by independent staff identified in 4.9, as well as by HoD and DOM

Action Item 5.4(c)   Run focus group with Professional services staff to identify underlying issues for low survey scores

Action Item 5.4(d) New Technical Services Manager to review technician operations and run focus group with technical staff to identify underlying issues for low survey scores

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Table 5.4.17 Departmental Athena SWAN Staff Survey responses to question on workload: Academic and Research staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T=non-postdoc research and teaching staff*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
Do you think the allocation of work within your section and across the Department is fair and transparent?	3.27 (86)	3 (7)	3.31 (39)	3.26 (46)	4 (2)	3.43 (7)	3.56 (9)	4 (1)	3.25 (4)	3.4 (5)

Table 5.4.18 Departmental Athena SWAN Staff Survey responses to question on workload: Professional and Support staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female P+S support staff	Male P+S	Overall P+S*	Male Tech.
Do you think the allocation of work within your section and across the Department is fair and transparent?	3.27 (86)	3.22 (9)	3.63 (8)	3.33 (18)	2.83 (6)

(vi)   Timing of departmental meetings and social gatherings

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

The Department does not impose core hours for meetings. However, 86% of staff (and 67% of part-time staff) agree that most meetings are scheduled between 10am to 4pm. 77% of staff agree/strongly agree that Departmental and Section meetings are held at times that allow those with caring responsibilities and part-time staff to attend. With smaller meetings, staff availability is often checked using an electronic poll, so a time/date can be identified that is most convenient for all attendees. While there is no noticeable gender bias in response amongst academic staff, there is less female satisfaction amongst the small number of postdoc responses (Table 5.4.19, Q1) and amongst Professional and Support staff (Table 5.4.20, Q1).

Historically, networking events, social activities and some seminars have been organised in the late afternoon/early evening. Efforts have been made recently to make these events more compatible with family or other commitments. For example, there is now a networking lunch for all staff after the annual undergraduate examination board meeting. While 79% of staff agree that social gatherings in their Section and Department are as inclusive as they can feasibly be, the Departmental Survey shows that only 49% of staff with caring or childcare responsibilities and 43% of part-time staff consider that social gatherings are held at family-friendly times; there is also gender bias in the responses (Q3, Tables 5.4.12 & 5.4.13).

> Action Item 5.5:   Hold staff assemblies in early afternoon after a social gathering with a sandwich lunch

Table 5.4.19 Departmental Athena SWAN Staff Survey responses to questions on timing of meetings and social gatherings: Academic and Research staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses; R+T=non-postdoc research and teaching staff)*

Question	Dept. Overall	Female Academic	Male Academic	Overall Academic	Female R+T	Male R+T	Overall R+T	Female Postdoc	Male Postdoc	Postdoc Overall
Q1 Departmental and Section meetings are held at times that allow those with caring responsibilities and part-time staff to attend	3.86 (74)	4.25 (8)	4.06 (36)	4.09 (44)	4 (1)	3.8 (5)	3.83 (6)	3 (2)	3.75 (4)	3.5 (6)
Q2 Social gatherings in the Department and Section are as inclusive as they can feasibly be.	3.91 (98)	4.13 (8)	4.10 (42)	4.1 (50)	4 (2)	4.14 (7)	4.11 (9)	4 (3)	3.17 (6)	3.44 (9)
Q3 If you have caring/childcare responsibilities, do you consider that work social gatherings are held at appropriate times?	3.15 (41)	2.67 (6)	3.44 (18)	3.25 (24)	0	3.8 (5)	3.8 (5)	4 (1)	3.5 (2)	3.67 (3)

Table 5.4.20 Departmental Athena SWAN Staff Survey responses to questions on timing of meetings and social gatherings: Professional and Support staff. *(Survey presented as weighted numeric averages from 5=Strongly agree, to 1=Strongly disagree. The numbers of respondents are presented in parentheses)*

Question	Dept. Overall	Female P+S support staff	Male P+S	Overall P+S*	Male Tech.
Q1 Departmental and Section meetings are held at times that allow those with caring responsibilities and part-time staff to attend	3.86 (74)	3.71 (7)	4.25 (4)	3.83 (12)	2.75 (4)
Q2 Social gatherings in the Department and Section are as inclusive as they can feasibly be.	3.91 (98)	3.91 (11)	3.78 (9)	3.81 (21)	3.86 (7)
Q3 If you have caring/childcare responsibilities, do you consider that work social gatherings are held at appropriate times?	3.15 (41)	1.8 (5)	4 (1)	2.17 (6)	2.5 (2)

(vii) Visibility of role models

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

Female staff act in positions of leadership and responsibility across our Department; specific examples are identified in Table 5.4.21. Our students also act as role models, with at least 50% of the elected CivSoc committee being female in recent years (Table 5.4.13). Examples of specific activities aimed at promoting female role models are given in Table 5.4.22. Our Departmental Staff Survey indicated 57% of staff agreeing/strongly agreeing that gender balance, equality principles and role models are promoted actively. Eight further positive steps will be made, as outlined below.

Action Item 1.1(b):   Promote female role models in the wider context of diversity via i) the Departmental recruitment video ii) Departmental social media (twitter) iii) Department website, ensuring positive gender representation.

Action Item 1.2(a):   Introduce a section "Is Civil Engineering for me?" in the Departmental website, including biographies of & interviews with alumni following different carreer paths, giving emphasis on female role models

Action Item 2.1(a):   Introduce examples on the website of successful female students at College and their progression after graduation, taking cases from all sections.

Action Item 2.1(b):   Liaise with female alumni and invite them to participate in the annual open-day event

Action Item 2.1(c):   Involve current MSc & PhD students with positive female representation in the PGT Open Day.

Action Item 2.1(d):   Use of case study profiles of female MSc graduates on the website.

Action Item 3.1:   Promote female role models in the research pages of the Departmental website and in invited talks and other public interfaces, as appropriate.

Action Item 3.2(a):   Increase percentage of female invited speakers to provide role models, reflecting the rising proportion of women in engineering. This will be in conjunction with action 1.2(b), enriched with additional research-oriented visiting lectures targeting PhD students and postdocs.

Table 5.4.21 Examples of female members of the Department acting as role models

Role Model Example	Dominant Audience
Female professorial staff	Current students and more-junior staff
Female academic staff	Current students
Female departmental operations manager (DOM)	Staff
Female administrative staff who have won both college and student union awards for supporting students and the student experience	Staff and students
Female Head of Section (HOS)	Staff and students
Female academic staff leading MSc Clusters	Staff and MSc students
Female coordinators of 3rd and 4th year of the undergraduate degree	Staff and UG students
Female alumni profiled on Dept. website	Current and prospective students
Female members of civil engineering society committee	Year 1 and year 2 UG students
Female graduate and Undergraduate teaching assistants	Undergraduate and MSc students
Female undergraduate Quest scholars who participate in one outreach activity each term as organized by STEMNET	Secondary school students
Female undergraduate students who participate in the Imperial College Union / CivSoc "Mums and Dads" scheme which partners students in first year with students in higher years with similar interests	First year UG students

Table 5.4.22 Examples of exercises targeted at promoting female role models

Overview of activity	Target audience
Geotechnics section has 50:50 gender split in website alumni profiles	Current students and prospective students
Dervilla Mitchell FREng's regular talk to UGs as female role model holding key engineering leadership positions while raising a family	Current UG students
Roma Agrawal, Royal Academy of Engineering award winner for promoting careers in engineering, celebrated on Departmental website Alumni profiles	Current students and prospective students
Departmental Outreach team and female PhD students involved in multiple interactive Women in Engineering events	Secondary school female students
Two issues of the student CivSoc's magazine focussed on women in engineering over the last 3 years	Students and staff in the Department

One very useful outcome of the SAT's work has been to gather the speakers' data presented in Table 5.4.23 which reveal a need to increase the proportion of female speakers in the invited lecture programmes organised by the Department and its Sections.

Action Item 1.2(b):   Increase percentage of female invited speakers to provide role models, reflecting the rising proportion of women in engineering. Engagement with the alumni network and industry contacts to facilitate this.

Table 5.4.23 Departmental seminars and talks by external speakers: gender breakdown of samples of external talks from all Sections

Year	Logged talks totals	Total of F speakers	% F speakers
2017	42	11	17%
2016	52	6	12%
2015	65	4	10%

(viii)   Outreach activities

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

Recognising that outreach is critical to raising the proportion of females applying to university courses, the Department has tasked a female academic staff member with a formal Outreach Coordinator role. She is supported by contacts in each Section and funding is available to support new staff who wish to take part in outreach activities.

Table 5.4.24 Outreach data – participation by gender

Total staff contributors	Female staff contributors	Total UG contributors	Female UG contributors	Participating potential students total	Participating female potential students
17	53%	19	47%	136	83%

Table 5.4.24 provides evidence of the Department's desire to attract more female Undergraduate applications and promote female role models in its outreach work, enumerating the staff, Undergraduates (UGs) and potential students who participated in eight examples of the Department's outreach activities over 2016-2017. The Department's Staff Survey showed that 54% of staff are aware of its outreach activities, but that only 39% of those who responded perceived that their participation in outreach activities is encouraged, recognised or valued - even though outreach is addressed explicitly in the College promotion form. There was no noticeable gender bias in the response to these questions and steps will be taken to improve the standing of outreach work.

Action Item 1.1 (a)   Engage more female UG year 3 & 4, and research students in outreach activities, including the Open Day.

Action Item 5.7 (a)   Report staff & student outreach activities in the Departmental newsletter

Action Item 5.7 (b)   Annual report on outreach activities to Department Management Committee

Total excluding tables and figure captions: 6225 words

6. FURTHER INFORMATION
Recommended word count: Bronze: 500 words

6.1. PhD students with caring responsibilities

SAT discussions indicated that the Department had no formal or standard procedure for supporting pregnant PhD students; this was also raised in the Focus Group and led to two new Action points.

> Action Item 3.4(a)   PhD supervisors to refer PhD students with caring responsibilities to PG Tutor
>
> Action Item 3.4(b)   Supervisors to inform new PhD students of available pregnancy support (consulting PG Tutor and Tutor for Women)

6.2. Professional and Support Staff

The Departmental Staff Survey revealed a lower level of satisfaction among Professional and Support staff than with Academic staff, particularly around workload and maternity leave.

> Action Item 5.4(c)   Run focus group for professional services staff to identify underlying issues
>
> Action Item 6.4 (a)   Run focus group for staff members with caring responsibilities to identify ways of improving the existing system

6.3. Technical Staff

Our Departmental Staff Survey revealed its lowest levels of satisfaction among the, exclusively male, technical staff. A new Technical Services Manager (TSM) was appointed in summer 2017 who will undertake a review of technical staff arrangements to identify how the Department can improve their experience.

> Action Item 5.4(c)   New TSM to review technician operations and run focus group for technical staff to identify underlying issues for low survey scores

Total excluding tables and figure captions: 150 words

Total for entire application form excluding tables and figure captions: 10196 of 10500 maximum

Image 6.1: Postgraduate graduation and staff award ceremony for Faculty of Engineering, held each May in Albert Hall, adjacent to main College campus

7. ACTION PLAN

Bronze Award Application
2017-21 Action Plan
Department of Civil & Environmental Engineering, Imperial College London

ACRONYMS: HoD: Head of Department; HoS: Head(s) of Section; DOM: Departmental Operations Manager; SAT Admin: Self-Assessment Team Administrator; PGR Admin: Postgraduate Research Administrator; PG Tutor: Postgraduate Tutor; TSM: Technical Services Manager

	OBJECTIVE	RATIONALE	KEY OUTPUTS & MILESTONES	TIMEFRAME (start/end date)		RESPONSIBILITY	SUCCESS MEASURE
General							
	Form new EDDC group	Oversee implementation of Athena Action Plan as well as College and Faculty policies on Diversity, Inclusivity and Departmental Culture	Undertake tasks outlined in Tables 3.4 and 3.5, working towards next Athena SWAN application, reporting regularly as standing agenda items for DMC and Departmental assemblies	Form in Dec 2017	Meet Quarterly and submit new Athena appli-cation in Nov 2021	EDDC Chair and DMC	Effective staged implement ation of Action Plan and degree of achieve-ment in specified targets

	OBJECTIVE	RATIONALE	KEY OUTPUTS & MILESTONES	TIMEFRAME (start/end date)		RESPONSIBILITY	SUCCESS MEASURE
1.	**Undergraduate (MEng) Course**						
1.1.	Increase proportion of female UG applications	Data show proportion increasing from 25% to 34% over the last 5 years and no negative bias in recruitment process. Maintain this trend by introducing further initiatives	a) Engage more female UG year 3 & 4 and research students in outreach activities, including the Open Day	Oct 2018 and onwards	Review annually one month after the main activitiy	Outreach Coordinator & Director of Admissions	Maintain an increasing trend in the number of applications from female students
			b) Promote female role models in the wider context of diversity via i) the Departmental recruitment video ii) Departmental social media (twitter) iii) Department website, ensuring positive gender representation	Oct 2018 and onwards	Review annually at the start of autumn term	Director of Undergraduate Studies & Director of Admissions	Increase percentage of female Year 1 UG students to: 36% by 2019 38% by 2021
1.2.	Support career development	Perception that UG applicants and students do not have a full appreciation of the breadth of the civil engineering profession, revealed through SAT discussions and feedback from	a) Introduce a section "Is Civil Engineering for me?" in the Departmental website, including biographies of, and interviews with, alumni following different career paths, giving emphasis on female role models	Oct 2018 and onwards	Review every two years in October	SAT Admin, Careers' Advisor, UG & PG Teams	Raised awareness of possible career paths, as monitored by the Dept. Careers' Advisor

		students in careers' sessions					
		Data show less than 20% of engineers in the Invited Lecture programmes run by Department and Sections are female	b) Increase percentage of female speakers to provide role models, reflecting the rising proportion of women in engineering. Engagement with the alumni network and industry contacts to facilitate this	Mar 2018	Ongoing	SAT Admin, Director of Undergraduate Studies, CivSoc	Increase proportion of female speakers to 35% by 2021
		Continuing drive to foster an environment with greater mutual respect and without any gender bias	c) All 1st year UG students to attend Unconscious Bias Training during the first term of their studies d) Introduce "Learning Environment and Culture" as a standing agenda item in student-staff liaison meetings	Nov 2017	Review annually in November	SAT Admin, Senior Tutor, Director of Undergraduate Studies	Positive feedback in the staff-student liaison meetings

	OBJECTIVE	RATIONALE	KEY OUTPUTS & MILESTONES	TIMEFRAME (start/end date)		RESPONSIBILITY	SUCCESS MEASURE
2.	**Taught Postgraduate (MSc course)**						
2.1	Noting challenge of Brexit outcomes, maintain or improve high number of PGT applications of female students	Data show fluctuations, with the percentage of female applicants being around 35%. Challenge is probable loss of EU students, who have higher than average proportion of female participants	a) Introduce examples on the website of successful female students at College and their progression after graduation, taking cases from all Sections	Oct 2018 onwards	Review annually in October	PGT Admin Team SAT Admin, MSc Course Directors	At least maintain 35% of female applicants If possible, work towards 40% female applicants by 2021
			b) Liaise with female alumni and invite them to participate in the annual open-day event	Dec 2019 onwards	Review annually in Sep-tember		
			c) Involve current MSc & PhD students with positive female representation in the PGT Open Day	Dec 2019	Review annually in Nov-ember	PGT Admin Team SAT Admin, MSc Course Directors	
			d) Use of case study profiles of female MSc graduates on the website.	Apr 2018	Review annually in April	PGT Admin Team SAT Admin, MSc Course Directors	

	OBJECTIVE	RATIONALE	KEY OUTPUTS & MILESTONES	TIMEFRAME (start/end date)		RESPONSIBILITY	SUCCESS MEASURE
3.	**Research Postgraduate (PhD) Course**						
3.1.	Increase PGR applications from female students	Data show female application rate around 25% over the last 5 years	Promote female role models in the research pages of the Departmental website and in invited talks and other public interfaces, as appropriate.	Apr 2018	Review annually in April	SAT Admin, Postgraduate Research Admin, Director of Postgraduate Research	Increase female applications to 30% by 2019 and 35% by 2021.
3.2.	Support career development	Data show under-representation (less than 20%) of female engineers in the invited lectures programme. 57% of staff in the Departmental survey agree or strongly that gender balance, equality principles and role models are promoted in the Department	a) Increase percentage of female invited speakers to provide role models, reflecting the rising proportion of women in engineering. This will be in conjunction with Action 1.2(b), enriched with additional research oriented visiting lectures targeting PhD students and postdocs	Mar 2018 onwards	Review each term	Section Admin, Director of Postgraduate Research, SAT Admin	Increase proportion of female invited lecturers to 35% by 2021. Check feedback from staff-student liaison meeting, with monitoring as a standard agenda item
		PGR focus group showed low awareness of how funds for conference attendance are allocated and perception of lack of transparency.	b) Include conference funding information in induction pack; circulate funding opportunities by regular emails	Oct 2017	Review each term	Postgraduate Research Admin	Positive comments regarding transparency and access to funds for conference

							attendance in future focus groups and survey results
3.3.	Ensure good learning & development experience for PGR students with no gender bias	Points arising from focus group and detailed analysis of the 2017 PRES survey and the 2015 Graduate School Well Being Survey indicated areas for improvement	a) Department to take further analysis to assess gender bias in available survey data (Graduate School Well Being Survey, PRES)	Oct 2017	Review every 2 years, following the PRES survey	Director of Postgraduate Research, Departmental Research Committee, Postgraduate Research Admin, Postgraduate Tutor	10% increase over 2017 student satisfaction in Research Culture and Professional Development questions in 2019 PRES survey
			b) Streamline induction of PhD students (first meeting, starter checklist, improved handbook)	Oct 2017	Ongoing	Postgraduate Research Admin, Postgraduate Tutor	Further 10% increase in 2021 PRES survey
			c) Continue to run a PGR information session "for research progress and career planning" in year 2, introduce a similar session in year 3	Oct 2017	Review annually in October	Postgraduate Research Admin, Postgraduate Tutor	
			d) Continue to support social integration of researchers through Departmental social events (e.g., pub quiz)	Oct 2017	Review quartely	Postgraduate Research Admin, Postgraduate Tutor, PGR class reps	

			e)	Run workshop on PhD supervision in the Department	Autumn 2017	Repeat every 3 years	Postgraduate Research Admin, Director of Postgraduate Research, Postgraduate Tutor	40% of PhD supervisors to attend relevant Departmental or College training by Autumn 2019 100% by Autumn 2021
			f)	Run seminar series for PhD students in year 2 across the Department. Each session to last 1 hour to include 3-4 10min presentations, discussion & refreshments.	Jan 2018	Run every 2 months	Postgraduate Research Admin	Positive feeback in the student-staff liaison committee
3.4.	Improve support before, during & after maternity, parental or adoption leave	There is no formal procedure for the support of PhD students with caring responsibilities. This became evident through SAT discussions, PhD focus group and informal feedback from students	a)	PhD supervisors to refer PhD students with caring responsibilities to PG Tutor	Oct 2017	Ongoing	PhD Supervisors, Postgraduate Research Admin, Postgraduate Tutor & Tutor for Women.	Increased awareness of relevant support among PhD students, proven by survey results
		There is no formal procedure to report pregnancy and receive support for PhD students	b)	Supervisors to inform new PhD students of available pregnancy support (consult PG Tutor and Tutor for Women)				

	OBJECTIVE	RATIONALE	KEY OUTPUTS & MILESTONES	TIMEFRAME (start/end date)		RESPONSIBILITY	SUCCESS MEASURE
4.	**Career support, Appointments and Promotions**						
4.1.	Ensure recruitment policy and procedures are followed correctly	Discussion within SAT indicated that not all staff involved in recruitment are fully aware of the procedures	a) Ensure that at least 40% of appointment panel membership completes College HR recruitment & selection course	Mar 2019 onwards	Review annually in April	Executive Assistant to HoD, Head of Sections, Line Managers	Increase percentage of relevant staff undertaking training on College HR recruitment & selection to: 40% by end of 2019 80% by end of 2020 100% by end of 2021
			b) Ensure that all key personnel involved in, admissions, recruitment and promotion panels complete Unconscious Bias Training	Mar 2019	Review quarterly	SAT Admin, Executive Assistant to HoD, Departmental Operations Manager	All key personnel to complete Unconscious Bias Training by mid-2019

| 4.2. | Encourage applications from female candidates for academic and research posts | Discussion within SAT indicated that for several disciplines within Civil Engineering it can be difficult to resource applications from female candidates | a) Review wording of job advertisement template to increase appeal to a wider range of staff
b) Make Head of Sections and Line Managers aware of the recently proposed "Know your pool" guidelines
c) Circulate notice of all academic and research posts to all researchers and academics in the Department
d) Monitor recruitment data for gender balance | Jun 2018 onwards

When issued

Ongoing | Review annually

Review annually in August | Executive Assistant to HoD | Maintain improving trend in gender balance for academic and research staff, above the national average |
| 4.3. | Improve the induction and welcoming of new staff | 46% of staff agree or strongly agree that the process of introducing and welcoming new staff is appropriate in the Departmental Staff Survey (May 2017) | a) Introduce more social events to meet colleagues in the Department
b) Introduce "buddy scheme" to support settling into new working environment
c) Introduce email updates announcing arrival of all new staff, including short biographies
d) Streamline postdoc induction and distribute Postdoc and Fellows Development Centre's handbook | Oct 2018 and onwards | Review annually in November | HoD, Departmental Operations Manager, Executive Assistant to HoD

Executive Assistant to HoD, Dept Postdoc Champion | Increase satisfaction rate in the relevant questions in the biennial Departmental survey to:

60% by May 2019

80% by May 2021 |

4.4.	Improve existing (and create additional, where appropriate) mechanisms for staff to network internally	Departmental Staff Survey comments emphasised the need for more inclusive cross-section activities to maximise research collaboration	a)	Highlight opportunities for internal academic and non-academic collaboration in regular Departmental research updates. Encourage networking via thematic and/or project workshops	Oct 2018 and onwards	Review annually	Dept Research office	Satisfaction rate in the new question of the biennial Dept. survey rising to: 60% by May 2019 80% by May 2021
			b)	Monitor staff statisfaction on internal networking by adding a relevant question in the biennial Departmental survey			SAT admin, SAT Chair	
			c)	Pilot Research Show case; monitor impact to decide whether to run it regularly	29 Nov 2017	Possibly every two years	Dept Research office	
			d)	A common room committee will be convened; committee to engage with common room users to gain feedback and action improvements	Dec 2017	Meet every 6 months	Departmental Operations Manager	
4.5.	Improve the Department support for managing research grants	Departmental Staff Survey data and comments indicated 58% of staff agree or strongly agree that current new research grant "start-up" and	a)	Review existing support for the management and running of research grants through consultation with PIs.	Oct 2018 and onwards	Review annually	Departmental Operations Manager	Increase satisfaction rate in the relevant questions in the biennial Depart-

		project management support is adequate	b)	Introduce a "suggestions for improvement box" after the relevant question in the 2019 Departmental staff survey				mental survey to: 70% by May 2019 85% by May 2021
4.6.	Improve effectiveness of PRDP process at all levels	Low expectations for benefits of the PRDP process among research/teaching staff and technicians recorded in Departmental Survey	a) b)	Raise staff awareness and organise PRDP training for all staff by email and Departmental newsletter Ensure that all Head of Sections/Line Managers complete PRDP training	Jan 2018 and onwards	Review annually	Executive Assistant to HoD, Head of Sections, Line Managers	Increase & record PRDP training. All Head of Sections & Line managers to train by mid-2019
4.7.	Insufficient uptake of PRDP at all staff levels within the Department	34% of staff completed a PRDP in 2016 (9% for female staff), while College Survey indicates 55% completion rate with 62% female uptake	a) b)	Encourage PRDP completion by sending regular reminders to Head of Sections/Line Managers HR liaison to monitor closely completion rates and follow-up non-completions when appropriate. HoD to review completion details twice a year	March 2018 and onwards	Review annually in July	Executive Assistant to HoD, HoD, Head of Sections, Line Managers	Target 75 % female & male PRDP completion rates by 2019 Raise to 85 % female & male PRDP completion rates by 2021

4.8.	Improve career development and uptake of related training	Departmental Survey data show 75% of staff agree or strongly agree that information on training is adequate. However, SAT discussions and survey data indicate low awareness of some of the training available, including PRDP	a)	Provide a one-page summary of available training on the Departmental website	Jan 2018 and onwards	Review quarterly	SAT Admin, Head of Sections, Line managers	Increased uptake of related training
			b)	All new Academics to complete Recruitment & Selection, Unconscious Bias, Equality & Diversity and PRDP training within 3 years	Oct 2018	Review annualy	SAT Admin, Executive Assistant to HoD, Departmental Operations Manager	Report on training uptake at probation meetings
			c)	Distribute to Principal Investigators monthly Postdoc and Fellows Development Centre (PFDC) newsletter highlighting upcoming training courses	Jun 2018 and onwards	Review annualy	Dept Postdoc Champion	Training by postdocs to reach 10 days/year contractual entitlement
			d)	Monitor the impact of the recently introduced Research Support Team	Ongoing	Review annually	Departmental Research Support Team	Increase success rate in grant bids; increase PhD recruitment
		Current College training completion records are inconsistent	e)	Monitor ICIS (Imperial College Information Systems) data on training records	Jan 2018 and onwards	Review every 6 months	SAT Admin, Executive Assistant to HoD	Improved training records

4.9.	Support career progression of all staff	67% of staff agree or strongly agree that Heads of Section/Line Managers offer support & guidance on career progression, some dissatisfaction among male research/teaching staff and technicians	a) Formally discuss the readiness for promotion as part of the PRDP b) Use PRDP to encourage qualified applicants to apply for promotion	Mar 2018 and onwards	Review annually	Head of Sections, Line managers	Increase satisfaction rate in the Dept. survey to 75% by May 2019 85% by May 2021
4.10.	Support career development and progression of postdocs	Postdoc participation in the staff survey was relatively low Meeting with postdoc reps indicated that improvements are needed in their support	a) Improve liaison between HR rep and Postdoc Champion	Jun 2018 and onwards	Review every April	Postdoc Champion, Executive Assistant to Head of Department	Improve postdoc participation in the biennial staff survey by 10% in the 2019 survey by 20% in the 2021 survey Positive feedback in the annual meeetings of postdocs with the HoD
			b) Raise awareness of the responsibilities of PIs in terms of supporting the professional development and progression of postdocs	Sept 2018 onwards	Review every April	Executive Assistant to Head of Department	
			c) Encourage postdocs to take up the 10 days training per annum	Oct 2018 onwards	Review quartely	Postdoc Champion	
			d) Encourage career mentoring by the Departmental Postdoc Champion	Jan 2018	Review every 6 months	Postdoc Champion, Line managers of postdocs	
			e) Run focus group with postdocs to explore inclusivity issues raised in Bronze Application 2017, monitor progress and plan further actions	July 2019	Repeat every 3 years	Postdoc Champion	

4.11.	Improve transparency, ensuring an open and fair promotion system for all staff	65% overall Staff Survey satisfaction rate among staff who have been through the process Lower satisfaction from those who have not and all female academics, male research/teaching staff and technicians	a) Two senior staff (not HoD or other line managers) to provide independent guidance on promotion for academics and support staff linked to 5.4 below. Rotate assignments on 3-year cycle	Jan 2018 and onwards	Review annually	HoD, Head of Sections, Line Managers, Appointed Professorial and Support staff leads	Increase satisfaction rate in relevant question of the biennial Depart-mental survey to: 75% by May 2019 85% by May 2021
			b) Promotion panels to include at least one female Professor	Oct 2017	Review annually	Executive Assistant to HoD	
			c) Departmental Management Committee (DMC) to review current promotion criteria and potential alternatives	Sept 2018	Review every 4 years	HoD, Departmental Management Committee	
			d) Monitor promotion data for gender balance	Apr 2018	Review annually	Executive Assistant to HoD	
4.12.	Reverse negative views about fairness of promotion process	Promotion process is viewed less positively by staff who have not yet been through the process, with only 25% of such staff agreeing or strongly agreeing that the process is transparent and fair	a) Line manager, Head of Sections or other nominated person to support and guide colleagues going through promotion process. b) Extend academic mentoring scheme duration up to the time of the first promotion application	Jan 2018 and onwards	Review annually	Head of Sections, Line manager	Increase satisfaction rate in Dept. survey to: 40% by May 2019 60% by May 2021

	OBJECTIVE	RATIONALE	KEY OUTPUTS & MILESTONES	TIMEFRAME (start/end date)		RESPONSIBILITY	SUCCESS MEASURE
5.	**Culture, Communication and Departmental Organization**						
5.1.	Enhance information sharing	General feedback from the Departmental Survey and SAT discussions indicate need for better dissemination of information	a) Introduction of quarterly Departmental Newsletter b) Monitor impact by introducing a question on information sharing and communication in the Departmental survey	Oct 2018	Review annually	Executive Assistant to HoD, Departmental Operations Manager, HoD	Satisfaction rate in the new question of the biennial Depart-mental survey relating to Newsletter to improve to: 60% by May 2019 80% by May 2021
5.2.	Higlight and celebrate staff efforts in support activities	Feedback from Departmental Survey indicated need for improved awareness and recognition of teaching and research support	Newsletter to note significant achievements of all staff	Oct 2018	Review annually	Executive Assistant to HoD, HoD with input from Departmental Operations Manager, Technical Services Manager	Positive comments in the biennial Depart-mental survey

5.3.	Improve communi-cation within the Department	Survey and discussions show need for: i) better communication of HR issues, policies and practice; and ii) direct communication with HoD	a)	Clarify advice via email/Departmental newsletter and list of key HR topics staff can address in drop-in sessions	Oct 2018	Repeat in HR drop-in sessions emails	Executive Assistant to HoD, Departmental Operations Manager	Positive comments in the biennial Departmental survey
			b)	Anonymous staff drop-in box for comments				
			c)	Introduce EDDC as standard agenda items at DMC & Departmental Assembly meetings	Oct 2017	Review annually	HoD	Recorded in minutes
			d)	EDDC composition to facilitate liaison with key Departmental committees	May 2018	Review annually and as required	Chair of EDDC	Recorded in minutes
5.4.	Ensure fairness in work allocation in the Department	51% of staff agree or strongly agree that the allocation of workload is fair and transparent Particularly low scores from female academics, male teaching/research and female support staff	a)	Newsletter to note significant rotations of key posts; potential candidates to discuss with Head of Sections/Line manager	Oct 2018 and onwards	Review annually	Line managers, Head of Sections, HoD, Departmental Operations Manager, Technical Services Manager	Increase satisfaction rate in Dept. survey to 65% by May 2019 85% by May 2021

			b) Line managers & Head of Sections to produce annual workload summaries for review by independent staff identified in 4.9, as well as by HoD and DOM c) Run focus group with Professional services staff to identify underlying issues for low survey scores d) New TSM to review technician operations and run focus group with technical staff to identify underlying issues for low survey scores				
5.5.	Enable staff with caring/ childcare responsibiliti es to attend social gatherings	Survey data showed that social gatherings are not timed ideally for staff with caring/childcare responsibilities	Hold staff assembles in early afternoon after a social gathering with sandwich lunch	Oct 2018 and onwards	Review annually	Departmental Operations Manager, Executive Assistant to HoD & HoD	Positive feedback in the biennial Departmental survey

				Oct 2018 and onwards	Review annually	SAT Admin	Actions undertaken
5.6.	Promote Athena SWAN Charter values	Survey data and informal discussions showed lack of awareness of the Athena SWAN Charter	a) Regularly update Dept.'s Athena SWAN webpage				
			b) Biennial Departmental Athena SWAN survey				Positive feedback in Dept. survey, with 75% response rate at all staff grades
			c) Highlight in newsletter Department's activities and commitment to Athena SWAN				
5.7.	Highlight and celebrate staff outreach activities	Departmental Survey showed that 54% of staff agree or strongly agree that they are aware of the Department's outreach activities

39% of staff agree or strongly agree that their participation in outreach activities is encouraged, recognised and valued by the Department | a) Report staff & student outreach activities in the newsletter

b) Annual report on outreach activities to Department Management Committee | Oct 2018 and onwards | Review annually | Outreach coordinator | Increase satisfaction rate in relevant question of Departmental survey to:

65% by May 2019

85% by May 2021 |

5.8.	Ensure a working environment of mutual resperect	Although there are no specific concerns/cases about staff behaviour in the Department, SAT discussions focussed on implementing best practice from other Departments in incorporating "active bystander" as standard Departmental training.	Department will liaise with the Department of Mechanical engineering to run "active bystander" training sessions	June 2018	Review annually	Departmental Operations Manager	40% of all staff to complete active bystander training by 2019 60% of all staff complete active bystander training by 2021

	OBJECTIVE	RATIONALE	KEY OUTPUTS & MILESTONES	TIMEFRAME (start/end date)		RESPONSIBILTY	SUCCESS MEASURE
6.	**Career Breaks and Flexible Working**						
6.1	Improve support before maternity, paternity or adoption leave	Staff survey showed 25% satisfaction with existing provision	a) Briefing sessions for Head of Sections/Line managers with HR on how to support staff	Jun 2018	Ongoing/ Review every two years	Line managers, Head of Sections & Executive Assistant to HoD	Increase satisfaction rate in relevant question of the biennial Depart- mental survey to:
			b) Line managers/ Head of Sections to formally meet with staff entitled to maternity/parental/ adoption leave to inform them of their entitlements and how to manage KIT days	Jun 2018	Ongoing/ Review annualy	Line managers, Head of Sections	40% by May 2019 65% by May 2021
			c) Post on Departmental intranet a summary and links to the College level support	Jun 2018	Review every January	Executive Assistant to HoD	Monitor feedback from staff who have been recently through the process

6.2	Improve support for maternity, paternity, adoption, or career break staff on their return to work	Survey showed 46% satisfaction with existing provision, particularly among professional/support staff	a)	Introduce a formal meeting with Head of Sections/Line manager as an "induction" upon return to work	Jun 2018	Review annually	Executive Assistant to HoD, Line Managers	Increase satisfaction rate in relevant question of the biennial Depart-mental survey to:
			b)	Introduce "suggestion box" relating to support for work transition after a career break and from part-time to full-time employment	May 2019			60% by May 2019 85% by May 2021
		Discussions amongst SAT revealed variability in Elsie Widdowson Fellows' experiences.	c)	Ensure that Head of Sections are aware of best practice in implementing the Fellowship scheme	Jun 2018	Review every two years	Executive Assistant to HoD	
6.3	Increase uptake on paternity and shared parental leave	Data show low uptake on paternity leave and no uptake on shared parental leave	a)	Post information regarding entitlements on Departmental website in newsletter, highlight benefits of paternity leave	Jun 2018	Review annually in February	Executive Assistant to HoD, SAT admin	Increase uptake/ Improve biennial staff survey scores
			b)	Head of Sections/Line managers to take the lead in accommodating more flexible arrangements for paternity leave	Jun 2018	Review every April	Line managers, Head of Sections	

			c)	HoD to explain the Department's position on accommodating flexibility on paternity leave to all staff by email and at the staff assembly	Jun 2018	Review every two years	HoD	
6.4	Improve Departmental support for staff with caring responsibilities	As noted in 6.1, 6.2, 6.3 the Staff Survey revealed the need for improvement	a)	Run focus group for staff members with caring responsibilities to identify ways of improving the extisting support system	Jan 2020	Repeat every 5 years	Executive Assistant to HoD, SAT admin	Increase satisfaction rate in Dept. survey to:
			b)	Introduce "suggestion boxes" after each question relating to maternity/parental leave in the staff survey	May 2019			60% by May 2019

85% by May 2021 |
| 6.5 | Increase awareness of College policy on flexible working | Staff survey showed low awareness of the policy | Publicise the policy through the Departmental intranet and newsletter with a link to the main HR website | | Jun 2018 | Review annually | Executive Assistant to HoD, SAT admin | Increase satisfaction rate by 20% in the next staff biennnial survey |