



## **Athena SWAN Silver department award application**

**Name of university:** University of Strathclyde

**Department:** Department of Civil and Environmental Engineering

**Date of application:** 30<sup>th</sup> April 2013

**Date of university Bronze Athena SWAN award:** 29<sup>th</sup> April 2011

**Contact for application:** Dr Elsa João

**Email:** elsa.joao@strath.ac.uk

**Telephone:** 0141 548 4056

**Departmental website address:** [www.strath.ac.uk/civeng](http://www.strath.ac.uk/civeng)

**1. Letter of endorsement from the head of department: maximum 500 words**

Please see below.

Sarah Dickinson  
Senior Policy Advisor (Athena SWAN)  
Equality Challenge Unit  
7<sup>th</sup> Floor Queen's House  
55/56 Lincoln's Inn Fields  
London, WC2A 3LJ

18<sup>th</sup> April 2013

Dear Ms Dickinson,

I am delighted to be able to give the strongest possible recommendation for the Department's application for an Athena SWAN Silver Award. I have a keen personal interest in furthering the long-term career opportunities of women in academia. I have personal experience of the challenges that female academics face, having risen through academia from a Postdoctoral Researcher through to a Professor, and most recently to Head of Department. I have achieved this as a mother of three children, now aged 13, 11 and 8 years, and with a husband that is also a full-time leading academic.

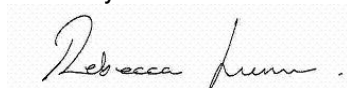
Throughout my career, I have used my experience to provide advice and support to my female colleagues, postdoctoral staff and PhD students. For example:

- I have recommended/nominated female staff for prominent positions e.g. Prof Shipton for the Royal Society/Royal Academy of Engineering Working Group on Shale-Gas Extraction, Dr Pytharouli for invited talks at international conferences.
- Inspired by the experience of maintaining research, whilst having a family, in October 2012 Prof Shipton and I co-wrote a successful EPSRC application to fund 6 months sabbatical time for Dr Pytharouli on her return in April 2013 from maternity leave. This grant will act as a significant enabler, allowing her to pick up her research momentum.
- I submitted a proposal to faculty to create a Faculty Working Group to Support Women in Engineering; this has recently been approved and a budget of £20k is being considered for 2013-14.
- I have become involved more broadly in activities to promote women in Science Technology Engineering and Mathematics. In 2011/12, I was a member of the Royal Society of Edinburgh Working Group on Women in STEM, which made recommendations to Scottish Ministers in March 2012.

Since I joined the Department of Civil and Environmental Engineering in 2005, we have expanded rapidly. During this time, the Department has been highly successful in attracting talented female candidates for posts. We have appointed 5 women, out of a total of 12 new academic staff, ranging from Lecturer through to Professor. The Department is wonderfully multi-cultural (54% non-UK and 35% non-EU) and women are now well represented at all levels; it is a real pleasure to work in. Our current female academic and research staff ratio of 39% must be unique for a UK civil engineering department.

If successful, this Athena SWAN Silver Award will provide the Department with a real opportunity to build upon the good practice we have developed in the last few years, and to ensure that current and future female academics achieve the career goals they aspire to. I can reassure you that I have been fully involved in developing the future action plan; I fully endorse the proposed activities and will make resources available to enable the activities to be carried out. An Athena SWAN Silver Award would also provide us with an excellent platform to launch the proposed Faculty Working Group, which will help to improve the career prospects of women throughout Strathclyde's Engineering Faculty.

Sincerely



Prof. Rebecca J Lunn, Head of Department

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

John Anderson Building, 107 Rottenrow University of Strathclyde, G4 0NG

Telephone: +44 141 548 2826 Fax: +44 141 553 2066 Email: Rebecca.lunn@strath.ac.uk

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## 2. The self-assessment process: maximum 1000 words

Describe the self-assessment process. This should include:

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

The Department's Self-Assessment Team (SAT) consists of ten members representing a wide variety of experiences and different career stages. The SAT includes two members of the Senior Management team (both Senior Lecturers), two Lecturers, two PhD students, one undergraduate student, the Departmental Athena SWAN co-ordinator, the Departmental Administrator and the University's Equality and Diversity Manager.

**Mr Naseem Anwar:** Naseem holds the post of Equality and Diversity Manager. His role involves strategic policy development and ensuring the University implements fair and transparent best practice on equality and diversity. His role on the SAT has been to provide contribution and guidance on the development of the application, and links to the University of Strathclyde's Bronze Action Plan.

**Ms Elspeth Brown:** Elspeth is a 4<sup>th</sup> year undergraduate student on the MEng Civil Engineering degree course. She has just completed her dissertation on the experiences of undergraduate female students in the Department. She has shared results from her own consultation with the SAT.

**Mrs Ruth Burke:** Ruth is the Departmental Administrator and a member of the Management Group. Ruth has had many years' experience of part-time care arrangements for her (now grown-up) step-daughter. She takes the minutes of the SAT meetings.

**Dr Gráinne El Mountassir:** Gráinne is a Lecturer in Geotechnical Engineering. Previously she progressed within the Department from UG to PGR student, subsequently Postdoctoral Researcher and Lecturer positions. Within the SAT, she contributed a case study and to the writing of the application.

**Ms Megan Heather:** Megan is a PhD student and an active committee member of the University's Postgraduate Researcher's Society. She brings a PGR perspective to the SAT.

**Dr Elsa João (Chair):** Elsa is a Senior Lecturer in the Department, Director of Postgraduate Studies and sits on the Management Group of the Department. She did her undergraduate degree in Environmental Engineering in Portugal, an MSc in Geography in the USA and PhD in Geography at the University of London. Elsa has two children, her husband also works full-time, and therefore she has had to juggle a work-family life balance throughout her academic career.

**Dr Charles W. Knapp:** Charles is a Senior Lecturer in the Department. He moved to the UK in 2006 with his family. He is a member of the Department's Management Group and Director of the David Livingstone Centre for Sustainability. Within SAT he has reported on PGT activities and data. He juggles family life with an intensive, international research programme. He is from a dual career family and often requires flexible hours because he has 4 children.

**Ms Chiara Mazzoni:** Chiara is a PhD student and former UG student in the Department, and she brings both of these experiences to the SAT. She is also a STEM ambassador.

**Mrs Susan McKeown:** Susan is the Athena SWAN project co-ordinator for the Department. She organised SAT meetings and the data collection and presentation of staff and student

consultations. Susan contributed to writing of the application and provided Athena SWAN best practice guidance information.

**Dr Christine Switzer (Deputy Chair):** Christine is a Lecturer in Environmental Engineering. Prior to this, she held a Research Fellow position at the University of Edinburgh. She is actively involved in recruitment activities and monitoring of retention and progression of undergraduate students, particularly minority groups, through the Department. Within the SAT, she contributed to data analysis and writing of the application.

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

The Head of Department (HOD) held a meeting in April 2012 with female academic staff and undergraduate (UG) students to discuss the experience of female UG students within the Department and potential interventions to improve support for them. Informal discussions followed within the Department and led to the successful bid for funding for a Project Co-ordinator (Susan McKeown). The first SAT meeting was held in December 2012 and the SAT has met on a weekly basis throughout 2013. Susan attended the Going for Silver event in December 2012 and has consulted with the Scottish Resource Centre for Women in SET and Oxford Research and Policy. The SAT team has also consulted the University of Strathclyde's Bronze Action Plan.

Student data from applications through to degrees awarded were provided by the University. We benchmarked ourselves against UK national averages and figures for University College London, a Civil and Environmental Engineering Departmental Silver Award holder. All external figures were acquired from the Higher Education Statistics Agency. Because of the diversity of our degree offerings, we benchmarked ourselves against Civil Engineering and Environmental Science figures at PGT and PGR levels.

All staff and students including UG, PGT (postgraduate taught), PGR (postgraduate research) students were consulted as part of the Self-Assessment process on their personal experiences within the Department. The SAT agreed the content, layout, and distribution of surveys with content tailored to each respondent group. Staff and PGT students completed hard copy surveys while UG and PGR students completed online surveys. Thirty three (72%) staff members, 20 (30%) PGR, 34 (62%) PGT and 43 (10%) UG students completed the questionnaires. Elspeth Brown shared the results of her undergraduate dissertation on the confidence of female civil engineering students; 128 UG students participated in her study. The information collated from this extensive consultation process formed the basis of the Department's Action Plan.

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

The SAT will continue to meet (as a minimum) quarterly, with the main aim of monitoring implementation and reporting progress of the actions identified within the Action Plan. Dr Switzer will assume Chair of the SAT. At least one member of the team will be replaced on an annual basis to ensure involvement from a gender-balanced variety of staff members. Representatives from the Postdoctoral Researchers, PG and UG students will continue to be represented on the SAT. As outlined in the Action Plan, the SAT will report progress and findings at Faculty and Departmental Committee meetings. The SAT will hold a formal review annually with the HoD to log the progress of actions and to add new actions to the Action Plan, based on the experiences of the past year.

(998 words)

**3. A picture of the department: maximum 2000 words**

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

The Department of Civil and Environmental Engineering at the University of Strathclyde is highly interdisciplinary and academic staff originate from a range of different fields including civil engineering, environmental engineering, geology, microbiology, chemical engineering, mechanical engineering and maths. Research is organised into three overlapping research groups: Engineering Geosciences & Geomechanics, Environment, and Infrastructure. We currently have 36 members of academic (26) and research (10) staff, of whom 14 are women (39%). There is strong female representation in our Department at all staff levels. Prof Lunn was appointed as Head of Department (HoD) in 2011 and is the first female HoD in the Department's 126 year history. The HoD is line manager to all academic staff and is appointed for a period of three years; an individual may serve a maximum of two three-year terms. Postdoctoral staff have academic staff as line managers, typically the Principal Investigator of the research grant supporting the post. The Department currently has three female professors: Prof Lunn (HoD), Prof Shipton (Director for Research) and Prof Karstunen (part-time). Of the Department's Professors, 60% are female, which is considerably above the national average, where women make up only 20% of professors<sup>1</sup>. This statistic is even more striking when you consider that the Department is in a traditionally male-dominated discipline where only 5.4% of professors in the discipline are female<sup>2</sup>. Furthermore, our academic and research staff come from 13 different countries. In terms of the student population, we currently have 426 undergraduate, 55 postgraduate (taught) and 67 postgraduate (research) students. Since 2009, consistently over 40% of our postgraduate students have been female.

The Department has been highly successful in recent years in attracting women applicants for academic staff and research positions as well as in promoting female staff within the Department. Since 2009, two of our female Readers were promoted to Professors and two of our female Postdoctoral Researchers were appointed to Lectureships in the Department. Practices in the Department, in particular support for Early Career Researchers and maternity/paternity leave, have fostered an inclusive, supportive, and friendly atmosphere within the Department. The current procedures and excellent representation of women at all levels within the Department have grown organically since 2005 under the direct influence of senior female academic staff. At present the Departmental offices and laboratories are located in three different buildings, and as such there are associated day to day communication issues. By the end of 2013 the entire Department will be located within one building with all academic, research and administrative staff and PGR student offices located on a single floor. This move into purpose built premises along with new state-of-the-art laboratories will further help to foster a fully-integrated and inclusive Department.

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<sup>1</sup> University and College Union (2013) The position of women and BME staff in professorial roles in UK HEIs. <http://www.ucu.org.uk/bmewomenreport>

<sup>2</sup> Royal Society of Edinburgh (2012) Tapping all our talents: Women in science, technology, engineering and mathematics: a strategy for Scotland. [http://www.royalsoced.org.uk/1027\\_Report.html](http://www.royalsoced.org.uk/1027_Report.html)

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

**Student data**

- (i) **Numbers of males and females on access or foundation courses**

The Department does not run foundation courses.

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

The Department offers undergraduate (UG) degrees in Civil Engineering (CE); Civil and Environmental Engineering (CEE); Structural and Architectural Engineering (SAE); and Environmental Health (EH). Students may graduate with a BEng (Pass) degree upon successful completion of the third year of study, a BEng Honours degree after the fourth year of study, and an MEng degree after completing five years of an integrated Masters. Initially, students are accepted to the BEng or MEng based on school performance, but progression to the MEng is based on academic performance throughout the fourth year of study.

Since 2009, our UG population has consistently been 18-19% female, this is slightly higher than the Civil Engineering UK national average (17%) but lower than the Department of Civil, Environmental and Geomatic Engineering at University College London (UCL) (29-30%). The Department has benefited from increased recruitment of female students to the EH and SAE degree programmes, though suspension of these programmes in 2012-13 and 2013-14, respectively, has not adversely affected intake of female students (Table 1). We scaled our data by a factor of 4/5 to compare to UCL, where students complete a BEng in three years or MEng in four years.

Table 1. UG student population in the Department with external benchmarks

<b>Undergraduate Student Population</b>					
<b>Academic Year</b>	<b>Gender</b>	<b>Strathclyde</b>	<b>Strath (scaled)</b>	<b>UCL</b>	<b>UK Average</b>
2009-10	F	85 (18%)	68 (18%)	64 (29%)	47 (17%)
	M	391 (82%)	313 (82%)	154 (71%)	233 (83%)
2010-11	F	93 (19%)	74 (19%)	77 (29%)	50 (17%)
	M	389 (81%)	311 (81%)	192 (71%)	244 (83%)
2011-12	F	84 (18%)	67 (18%)	85 (30%)	50 (17%)
	M	375 (82%)	300 (82%)	201 (70%)	246 (83%)
2012-13	F	82 (19%)	66 (19%)	Not available	Not available
	M	344 (81%)	275 (81%)	Not available	Not available

The Department makes efforts to raise the profiles of female academics and students, and ensures visibility of female academics and students at recruitment events (**Action 2.1**). We plan to continue these efforts, expand our portfolio of recruitment events (**Actions 2.1d and 2.1e**), and consider changes to entry requirements that may exist as barriers to female school leavers (**Action 2.1.f**). We note the success of UCL on this last action. We will continue to monitor intake (**Action 1.1.a**) to evaluate the success of these measures and shape further efforts to improve recruitment (**Actions 1.1.b and 2.1.a**).

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

The postgraduate taught (PGT) programme consists of three degrees: Master of Science (MSc), Postgraduate Diploma (PGDip) and Postgraduate Certificate (PGCert). We offer PGT degrees in Environmental Engineering (EE); Environmental Entrepreneurship (EEnt); Environmental Forensics (EF); Environmental Health (EH); Environmental Science (ESci); Environmental Studies (ES) or Sustainability and Environmental Studies (SES) as of 2011-12; Geotechnics (G); Hydrogeology (H); and Science, Technology & Sustainability (STS). EF, ESci, and STS were suspended in 2011-12, and G was suspended in 2012-13.

We benefit from a strong environmental theme in many of our PGT offerings and as a result our gender balance tracks closer to PGT offerings in Environmental Science. Our PGT population is 40-50% female, versus 24-26% for the UK average for Civil Engineering and 47-50% for Environmental Science (Table 2).

Table 2. PGT student population in the Department with external benchmarks

Postgraduate Taught Student Population						
Academic Year	Gender	Strathclyde	UCL Civil	UCL ES	UK Average Civil	UK Average ES
2009-10	F	40 (42%)	25 (28%)	185 (74%)	20 (25%)	25 (47%)
	M	56 (58%)	64 (72%)	66 (26%)	60 (75%)	28 (53%)
2010-11	F	51 (43%)	24 (25%)	197 (74%)	21 (25%)	25 (47%)
	M	67 (57%)	71 (75%)	71 (26%)	64 (75%)	28 (53%)
2011-12	F	34 (50%)	33 (36%)	193 (76%)	19 (25%)	25 (50%)
	M	34 (50%)	59 (64%)	60 (24%)	56 (75%)	25 (50%)
2012-13	F	22 (40%)	Not available	Not available	Not available	Not available
	M	33 (60%)	Not available	Not available	Not available	Not available

In 2013-14, the Department will launch an MSc in Civil Engineering with specialist streams (Structural Engineering, Geotechnical Engineering, and Geoenvironmental Engineering). The experience from previous degree programmes will inform the marketing for these programmes, using language to attract students from diverse backgrounds (**Action 2.1.g**), particularly streams that accommodate students from non-Civil Engineering backgrounds.

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

The Department has benefited from a sevenfold increase in the number of postgraduate research (PGR) students since 2005. The diversity of research, beyond traditional Civil Engineering disciplines, has attracted a diverse postgraduate research population, with a significantly higher percentage of female PhD students (36-45%) than the UK average for Civil Engineering (Table 3). We have strong female PhD student representation in both traditional and non-traditional disciplines within the Department.

Table 3. PGR student population in the Department with external benchmarks

Postgraduate Research Student Population									
Academic Year	Gender	University of Strathclyde			Strathclyde Total PGR	UCL Total PGR Civil	UCL Total PGR ES	UK Average PGR Civil	UK Average PGR ES
		MRes	MPhil	PhD					
2009-10	F	0 (0%)	1 (20%)	23 (45%)	24 (41%)	22 (33%)	13 (57%)	10 (28%)	19 (48%)
	M	2 (100%)	4 (80%)	28 (55%)	34 (59%)	45 (67%)	10 (43%)	26 (72%)	21 (52%)
2010-11	F	8 (53%)	1 (33%)	23 (40%)	32 (42%)	27 (33%)	72 (59%)	11 (29%)	19 (46%)
	M	7 (47%)	2 (67%)	35 (60%)	44 (58%)	55 (67%)	51 (41%)	27 (71%)	22 (54%)
2011-12	F	6 (67%)	2 (50%)	22 (36%)	30 (41%)	30 (36%)	63 (53%)	14 (29%)	21 (47%)
	M	3 (33%)	2 (50%)	39 (64%)	44 (59%)	54 (64%)	55 (47%)	34 (71%)	23 (53%)
2012-13	F	2 (67%)	1 (33%)	25 (41%)	28 (41%)	Not available	Not available	Not available	Not available
	M	1 (33%)	2 (67%)	36 (59%)	40 (59%)	Not available	Not available	Not available	Not available

We monitor PGR student population and will continue to do so to ensure that we maintain a good balance of male and female researchers. We will collect data on recruitment and shortlisting of PGR candidates to evaluate gender balance and determine future interventions (**Action 1.3**).

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

The number of applications to UG degree programmes has increased substantially over the past five years. Application numbers peaked in 2010-11 and declined slightly with the suspensions of the EH and SAE programmes after the 2011-12 and 2012-13 intakes, respectively. Conversions from applications to offers have fluctuated (Table 4), but increased overall with increasing places available. Apart from 2010-11, conversion rates for prospective female students have been slightly higher than prospective male students. The allocation of offers, based on school performance appears to be fair to both men and women.

Table 4. Conversions of UG Applications to Offers and Acceptances and Entry into Degree Programmes

Academic Year	Gender	Applications (#)	Offers (#)	Acceptances (#)	Conversions from Applications to Acceptances			Degree Programme Acceptances			
					Offers/Apps (%)	Accept/Offer (%)	Accept/App (%)	SAE(%)*	CE(%)	CEE(%)	EH(%)*
2009-10	F	128	101	24	79%	24%	19%	9 (38%)	9 (38%)	0 (0%)	6 (25%)
	M	621	444	119	71%	27%	19%	25 (21%)	80 (67%)	10 (8%)	4 (3%)
2010-11	F	111	66	18	59%	27%	16%	7 (39%)	6 (33%)	2 (11%)	3 (17%)
	M	661	405	97	61%	24%	15%	21 (22%)	70 (72%)	4 (4%)	2 (2%)
2011-12	F	139	83	23	60%	28%	17%	8 (35%)	5 (22%)	2 (9%)	8 (35%)
	M	618	347	95	56%	27%	15%	22 (23%)	59 (62%)	11 (12%)	3 (3%)
2012-13	F	90	69	20	77%	29%	22%	3 (15%)	11 (55%)	6 (30%)	Not recruited
	M	395	243	69	62%	28%	17%	8 (12%)	36 (52%)	25 (36%)	Not recruited

In 2012-13, application numbers dropped, likely reflecting the closure of the SAE programme. Intake of female students was less affected than intake of male students. Undergraduate recruitment of female students is our area of weakest performance. However this is recognised as a national problem. We plan to increase recruitment efforts for female students (**Action 2.1**); redesign the curriculum to align with research strengths (**Action 2.2.d**); re-launch and publicise our undergraduate mentoring programme (**Action 2.3**); and reconsider entry requirements (**Action 2.1.f**). Monitoring of recruitment data will let us evaluate the impact of these efforts (**Action 1.1**).

Applications to PGT degree programmes have increased steadily over the last three years. Since 2009-10, female applicants have comprised 29-38% of applications and 43-46% of acceptances (Table 5). The three most popular PGT degree courses for female students are Sustainability and Environmental Studies, Environmental Health and Environmental Engineering (Table 6).



Table 5. PGT Applications, Offers, Acceptances and Conversion Rates

Academic Year	Gender	Application Data			Conversions from Applications to Acceptances		
		Applications	Offers	Acceptances	Offers/Apps (%)	Accept/Offers (%)	Accept/Apps (%)
2009-10	F	166 (33%)	53 (37%)	41 (43%)	32	77	25
	M	330 (67%)	89 (63%)	55 (57%)	27	62	17
2010-11	F	378 (37%)	74 (51%)	55 (46%)	20	74	15
	M	650 (63%)	71 (49%)	64 (54%)	11	90	10
2011-12	F	466 (38%)	47 (47%)	31 (46%)	10	66	7
	M	776 (62%)	53 (53%)	37 (54%)	7	70	4
2012-13	F	325 (29%)	46 (39%)	21 (44%)	14	46	6
	M	791 (71%)	72 (61%)	27 (56%)	9	49	4

Table 6. Acceptances Based on PGT Programme

Academic Year	Gender	MSc Programme Acceptances (%)										PG Diploma Programme Acceptances (%)							Non Grad (%)				
		EE	EEnt	EF	EH	ESci	EStud	G	H	STS	SES	EE	EENT	EF	EH	ESci	Estud	G		H	SES		
2009-10	F	12	10	2	20	5	32	12				2			2		2						
	M	7	13		20	5	13	24		2		7		2	2		4			2			
2010-11	F	5		11	27	5	18	11	2			2	2	2	2	2							11
	M	17	9		6	11	11	19	2			6	3		2		2	6	2				5
2011-12	F	19	6		29		3									3							10
	M	19	16		14			30							3								8
2012-13	F	10													5								14
	M	26	33		11																		

Declining conversion rates in Table 5 reflect the increase in application numbers and other influences. In 2009-10 and 2010-11, the Department over-recruited home PGT students beyond places allocated by the Faculty from Scottish Funding Council support. This practice ended in 2011-12 and as a result there has been a decrease in MSc student numbers and suspension of unpopular degree programmes. In 2012-13, support for PGT study changed from grant to loan and the University introduced Rest-of-the-UK fees (£9000) to non-Scottish students, reducing the pool of home students. We plan to monitor the long-term effects of these changes to overall recruitment and gender balance (**Action 1.3**).

Centrally-collected data for PGR applications are limited. Most PhD studentship applications are handled by the recruiting academic. Once a candidate has been selected, the academic invites this individual to apply formally. For this reason, PGR application numbers are not available. We will begin monitoring PGR applications by gender at a Departmental level (**Action 1.3**).

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

At undergraduate level, female students account for fewer degrees but the distribution of degrees shows that female students outperform their male counterparts in progression to MEng and awards of First-Class and Upper Second-Class Honours (Table 7). Female students earned more Environmental Health Honours degrees than their male counterparts, though awards of First-Class Honours were rare (Table 8). We will continue to monitor UG performance (**Action 1.2**).

Table 7. UG Engineering Degree Awards<sup>3</sup>

Completion Year	Gender	Undergraduate Engineering (BEng/MEng)								Total Degrees (#)
		MEng D*(%)	MEng M*(%)	MEng (%)	BEng H 1st (%)	BEng H 2.1 (%)	BEng H 2.2 (%)	BEng H 3rd (%)	BEng Pass(%)	
2009-2010	F	1 (20%)	1 (20%)	0 (0%)	0 (0%)	0 (0%)	2 (40%)	1 (20%)	0 (0%)	5 (8%)
	M	12 (23%)	11 (21%)	0 (0%)	1 (2%)	2 (4%)	20 (38%)	2 (4%)	4 (8%)	52 (92%)
2010-2011	F	13 (27%)	7 (47%)	0 (0%)	0 (0%)	1 (7%)	3 (20%)	0 (0%)	0 (0%)	15 (17%)
	M	13 (18%)	31 (42%)	0 (0%)	4 (5%)	3 (4%)	20 (27%)	1 (1%)	2 (3%)	74 (83%)
2011-2012	F	4 (36%)	3 (27%)	0 (0%)	2 (18%)	1 (9%)	1 (9%)	0 (0%)	0 (0%)	11 (14%)
	M	8 (12%)	19 (29%)	2 (3%)	2 (3%)	6 (9%)	22 (34%)	3 (5%)	3 (5%)	65 (86%)
Total Awards	F	18 (35%)	11 (15%)	0 (0%)	2 (22%)	2 (15%)	6 (8%)	1 (14%)	0 (0%)	31 (14%)
	M	33 (65%)	61 (85%)	2 (100%)	7 (78%)	11 (85%)	62 (92%)	6 (86%)	9 (100%)	191 (86%)

Table 8. UG Environmental Health Degree Awards

Completion Year	Gender	Undergraduate Environmental Health				Total Degrees (#)
		BSc H 1st (%)	BSc H 2.1 (%)	BSc H 2.2 (%)	BSc H 3rd(%)	
2009-2010	F	0 (0%)	4 (80%)	1 (20%)	0 (0%)	5 (50%)
	M	1 (20%)	4 (80%)	0 (0%)	0 (0%)	5 (50%)
2010-2011	F	0 (0%)	3 (38%)	5 (62%)	0 (0%)	8 (67%)
	M	0 (0%)	2 (50%)	1 (25%)	1 (25%)	4 (33%)
2011-2012	F	1 (25%)	2 (50%)	1 (25%)	0 (0%)	4 (80%)
	M	0 (0%)	1 (100%)	0 (0%)	0 (0%)	1 (20%)
Total Awards	F	1 (50%)	9 (56%)	7 (88%)	0 (0%)	17 (63%)
	M	1 (50%)	7 (44%)	1 (12%)	1 (100%)	10 (37%)

PGR degree awards have increased since 2009-10 whereas PGT awards have fluctuated because of previously-outlined influences (Table 9). Increase in Masters by Research (MRes) awards for 2010-11 and 2011-12 reflect industrial sponsorships in those years. Since 2009, female students accounted for 52% of PhD awards, 56% of MRes awards, and 47% of MSc awards, the latter reflecting a higher completion rate for female students. With the exception of 2011-12, female students earned more distinction-level MSc degrees. We have a healthy balance of men and women graduating with both PGR and PGT degree awards. We will continue to monitor PG performance on an annual basis (**Action 1.4**).

Table 9. PhD, MPhil, MRes, and MSc awards<sup>4</sup>

Completion Year	Gender	Postgraduate Research			Postgraduate Taught			Total MSc Degrees
		PhD	MPhil	MRes	MSc D*	MSc M*	MSc	
2009-2010	F	5 (63%)	0 (0%)	0 (0%)	10 (63%)	14 (44%)	8 (44%)	32 (48%)
	M	3 (37%)	1 (100%)	1 (100%)	6 (37%)	18 (56%)	10 (56%)	34 (52%)
2010-2011	F	3 (60%)	0 (0%)	5 (62%)	12 (48%)	18 (38%)	6 (60%)	36 (43%)
	M	2 (40%)	0 (0%)	3 (38%)	13 (52%)	30 (62%)	4 (40%)	47 (57%)
2011-2012	F	3 (38%)	0 (0%)	5 (56%)	7 (47%)	13 (46%)	9 (56%)	29 (49%)
	M	5 (62%)	0 (0%)	4 (44%)	8 (53%)	15 (54%)	7 (44%)	30 (51%)
Total Awards	F	11 (52%)	0 (0%)	10 (56%)	29 (52%)	45 (42%)	23 (52%)	97 (47%)
	M	10 (48%)	1 (100%)	8 (44%)	27 (48%)	63 (58%)	21 (48%)	111 (53%)

<sup>3</sup> \*MEng Distinction (MEngD) is the equivalent of First-Class Honours and MEng Merit (MEngM) is the equivalent of Upper Second-Class Honours.

<sup>4</sup> \* MSc Distinction (MSc D) and MSc Merit (MSc M)

## Staff data

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

The Department has grown since 2003-4, when academic staff was 100% male and partially relied upon PhD students for teaching. The University strategically reinvested in the Department and expanded beyond traditional disciplines. By 2009-10, the Department had 22 academic staff (32% female; Table 10). In 2013-14, our 26 members of academic staff will be 38% female. We have strong female representation in traditional (5 female academics) and non-traditional (5 female academics) Civil Engineering disciplines. Research staff is gender-balanced, with some fluctuation. We will continue to monitor staff data (**Action 1.5**).

Table 10. Academic and research staff breakdown by level and gender

Academic Year	Gender	HoD	Professor	Reader	Senior Lecturer	Lecturer	Academic Staff	Research Staff
2009-10	F	0	0 (0%)	2 (67%)	1 (20%)	4 (31%)	7 (32%)	3 (43%)
	M	1	1 (100%)	1 (33%)	4 (80%)	9 (69%)	15 (68%)	4 (57%)
2010-11	F	0	1 (33%)	2 (67%)	1 (17%)	4 (33%)	8 (33%)	7 (54%)
	M	1	2 (67%)	1 (33%)	5 (83%)	8 (67%)	16 (67%)	6 (46%)
2011-12	F	1	3 (60%)	0 (0%)	1 (14%)	4 (36%)	8 (33%)	7 (54%)
	M	0	2 (40%)	1 (100%)	6 (86%)	7 (64%)	16 (67%)	6 (46%)
2012-13	F	1	3 (60%)	0 (0%)	1 (14%)	4 (36%)	8 (35%)	5 (42%)
	M	0	2 (40%)	0 (0%)	6 (86%)	7 (64%)	15 (65%)	7 (58%)
2013-14	F	1	3 (60%)	0 (0%)	2 (25%)	5 (38%)	10 (38%)	4 (40%)
	M	0	2 (40%)	0 (0%)	6 (75%)	8 (62%)	16 (62%)	6 (60%)

Because of rapid growth, there is an apparent gap for women between junior and senior positions. This is due to the promotion of two females from Reader to Professor positions in 2011-12. A newly-appointed female Senior Lecturer will join the Department in May 2013 and partially fill this gap. A number of Lecturers and Senior Lecturers are approaching readiness for promotion. The Head of Department is committed to nurturing talent with a view to promotion in the future.

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

Most academic staff turnover since 2009 has been male. One male academic departed in a lateral move to another institution. Three male academics departed under Early Retirement/Voluntary Severance. One female Professor departed for a Chair in Scandinavia to be closer to family, despite a University counter-offer, though she remains part-time (20%) at Strathclyde. Research staff tend to leave when contracts expire, of which four (three female, one male) accepted Lectureships at other institutions and six others accepted postdoctoral or industry roles. This year, one female researcher won a Lecturer post in the most recent competitive appointment. The Department will continue to monitor staff turnover with respect to gender balance (**Action 1.5**).

(1,986 words)

#### 4. Supporting and advancing women's careers: maximum 5000 words

##### Key career transition points

- a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.
- (i) Job application and success rates by gender and grade – comment on any differences in recruitment between men and women at any level and say what action is being taken to address this.

A significant challenge in the analysis of application and success rates for staff is the incomplete data available from Human Resources, which is an ongoing action on the University's Athena SWAN Bronze Action Plan. The Department keeps records of shortlists including gender. Based on these data, the Department receives significantly more applications from male candidates compared to female candidates. Women have comprised 10% of applications, 23% of shortlisted candidates, and 40% of appointments in the past four academic years (Table 11).

Table 11. Application, shortlisting, and appointment data for the period of 2009-10 to 2012-13

Academic Year	Applications (#)	Applications			Shortlist		Appointment Level	Discipline	Gender
		Male	Female	Unknown	Male	Female			
2009-10	Not available				2 (50%)	2 (50%)	Lecturer	Geotechnical Engineering	F
	67	60 (90%)	4 (6%)	3 (4%)	6 (100%)	0 (0%)	Senior Lecturer	Structural Engineering	M
	Not available				3 (100%)	0 (0%)	Professor	Experimental Geomechanics	M
	Not available				1 (50%)	1 (50%)	Professor	Engineering Geosciences	F
2010-11	65	56 (86%)	7 (11%)	2 (3%)	5 (100%)	0 (0%)	Lecturer/Senior Lecturer	Structural Engineering	no appt
	5	3 (50%)	2 (40%)	0 (0%)	3 (60%)	2 (40%)	Lecturer/Senior Lecturer	Structural Engineering	no appt
2011-12					2 (50%)	2 (50%)	Professor	Structural Engineering (any)	internal appt
	34	28 (82%)	4 (12%)	2 (6%)	4 (100%)	0 (0%)	Teaching Fellow	Structural Engineering	M
	3	3 (100%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	Senior Lecturer	Environmental Geology	M
2012-13					2 (67%)	1 (33%)	Teaching Fellow	Water Engineering	M
	Not available				3 (75%)	1 (25%)	Lecturer	Geomechanics	F
	Not available				2 (67%)	1 (33%)	Senior Lecturer	Materials Science	F
	Not available				(same applicant pool)		Lecturer	Structural Engineering	M
<b>TOTAL</b>	<b>200</b>	<b>173 (87%)</b>	<b>20 (10%)</b>	<b>7 (3%)</b>	<b>34 (77%)</b>	<b>10 (23%)</b>		<b>Female Appointments</b>	<b>4 (40%)</b>
								<b>Male Appointments</b>	<b>6 (60%)</b>

The HoD and other members of staff actively solicit talented female and male applicants for new positions. In more senior posts, efforts to solicit applications were critical to successful appointment. Applications for Postdoctoral Researcher vacancies have been similarly gender-imbalanced, though appointments have been balanced at 40-55% female.

Since 2010-11, the Department has been able to ensure gender-balanced representation on interview panels, especially since the HoD and Director for Research are both women. **Action 3.1** will ensure that this best practice continues. Support will continue for the career development and promotion of early career academic staff, which will ensure a wider pool of potential panellists for future recruitment interviews (**Actions 3.2 and 3.3**).

The Department follows University policy and guidance in wording for advertisements, job descriptions, and further particulars. Recommendations to improve recruitment practices in job advertisements are being pursued through implementation of the University's Bronze Award Action Plan. The Department has shown an excellent track record in attracting talented female

staff to the Department at all levels. We will continue to showcase the talents of our staff, female and male, on our website (**Action 2.1**) and maintain formal and informal recruitment practices (**Action 3.1**).

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

The Department is relatively small and as such there have not been many applications for promotion in recent years. In the past three academic years, nine applications for promotion were submitted by members of academic staff. Six were successful (3 female, 3 male) and three were unsuccessful (1 female and 2 male). Cases based on strong research performance have generally been successful on the first attempt, whereas cases based on a balance of teaching and research have been more difficult to get through the process. Based on success rates, the transition from Lecturer to Senior Lecturer is a key barrier where the Department and University need to provide more support and guidance (**Action 3.3 and 3.4**).

Members of staff either approach the HoD expressing an interest to apply for promotion, or they are proactively identified by their appraisers within the University's Annual Development Review (ADR) process as being close to promotion. Mentoring support is tailored to support candidates in preparation for promotion (**Action 3.3**).

A number of relatively new staff members, including many female Lecturers and Senior Lecturers, will be approaching eligibility for promotion over the next 1-5 years. The HoD looks to develop a pool of talented women (and indeed men) at early stages in their careers; targeted objectives have been given to individuals, within the ADR process, to build their CVs towards promotion.

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

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

The University Recruitment and Selection process requires all Chairs of recruitment panels to complete the training module on Equality and Diversity. Shortlisting is done strictly on the basis of essential and desirable criteria; the HR team oversees the process and gathers written documentation on reasons for unsuccessful candidates. HR has prepared a guidance document for good practice in recruitment for use by all Departments at the University. The HoD has personally elicited applications from strong candidates, both female and male.

The Department ensures that its recruitment panels are gender-balanced with at least one Professor as part of the panel. In rare cases where this balance has not been possible, the Department requests the presence of a member of staff from another Department.

The gender balance of the Department has been visible on the Department's webpages, though recent efforts have been made to highlight achievements, particularly those of female students and staff, to increase our appeal to prospective staff and students at all levels (**Action 2.1**).

New academic staff receive generous start-up packages negotiated between the HoD and the Faculty that include research funds and studentships.

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

There are no real areas of attrition specifically for female staff in the Department, though there are key stages in academic careers that require support. These key stages are transition from researcher to Lecturer, completion of the probationary period, promotion from Lecturer to Senior Lecturer, and promotion to more senior levels. A strong ethos exists within the Professorial staff to mentor probationary and research staff, support career development through key transitions, and encourage networking contacts for international opportunities.

Since 2009, two female postdoctoral researchers have been appointed to Lectureships within the Department and a further four postdoctoral researchers (three female, one male) have been appointed to Lectureships in other Universities in the UK, France and Malaysia.

The Department's implementation of the University's mentoring scheme for probationary academic staff support new Lecturers through probation and promotion (**Action 3.2**). Staff may request changes in mentoring to suit their development and they may request a female mentor. The University recently launched a mentoring skills training course.

In the later career stages (Reader, Professor), a consistent track record of excellent research is essential. Staff must balance teaching, citizenship and knowledge exchange activities with their research. The Professorial staff provide support and mentoring to staff approaching later-stage promotions. The University also offers mentoring to these staff. The Department and University encourage staff members to take training to suit their development needs.

### **Career development**

- a) **For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.**
  - (i) **Promotion and career development – comment on the appraisal and career development process, and promotion criteria and whether these take into consideration responsibilities for teaching, research, administration, pastoral work and outreach work; is quality of work emphasised over quantity of work?**

## Annual Development Review

The University's Annual Development Review (ADR) process is a comprehensive annual evaluation of staff activity in research, teaching, knowledge exchange, and citizenship. Each year, staff set objectives for the upcoming year and they are appraised against objectives from the previous year. ADR appraisal responsibilities are shared among the HoD, Deputy HoD, and Director of Research; appraisers are rotated regularly. Line managers conduct ADRs for research staff. The ADR process is designed to encourage staff to identify areas for development that will assist them in furthering their careers. Probationary staff conduct an additional annual review with their mentors and the HoD to demonstrate satisfactory progress and plans for the eventual completion of the probationary period. Both processes are compulsory within the University, so uptake is 100%.

In the staff consultation, concerns were expressed about workload, the ADR process, and career progression. The consultation highlighted areas for improvement, many of which were known already, and formed the basis for the Action Plan. Female respondents were quite positive about career progression and support in their consultation responses. A wider range of responses were recorded among male respondents, including some negative to neutral responses; some respondents felt that too much emphasis was on research. Currently, the Department has a workload model that only accounts for teaching. As a result, some staff feel certain activities are not valued fairly. The HoD allocates administrative roles based on individuals research, teaching and knowledge exchange activities. The HoD is keen to extend the formal workload model to incorporate all activities including research; administrative duties; supervision, mentoring, and support of UG, PGR, and PGT students; and outreach, in consultation with all staff to ensure to ensure value and transparency (**Action 5.3**). The Department values quality of work and balance of activities over volume.

## Probation and Promotion

The probation period at the University is three years during which time the probationer is expected to make satisfactory progress in research, teaching, knowledge exchange, and citizenship activities. Mentoring support and workload management by the HoD are in place to support this process as a staged progression over the three year period to avoid excessive demands being put on new junior members of academic staff. In particular, teaching load is incremental so that new staff can use the critical post-arrival period to develop their research without being overwhelmed by new teaching. Regular mentor meetings support this process. In the past three years, all eligible probationers have successfully completed probation.

In terms of promotion, candidates are put forward by the Department, but promotion is a central University decision. Once candidates for promotion have expressed an interest to the HoD or been identified through the ADR process, senior staff support and mentor candidates through the application process. The HoD conducts all ADRs for promotion candidates and probationers herself, prioritising them and spending considerable time iterating paperwork to present the best possible cases for promotion or confirmation of appointment.

The consultation identified some concerns regarding promotion. Responses from female staff indicated that they felt supported by the Department in preparation for promotion, whereas responses from male staff were more mixed. A notable minority of male respondents to the Departmental consultation expressed views that they had been treated unfairly during the

promotion process. The Department will communicate these concerns to the Faculty and University and request updates to promotion criteria to make the process more transparent for all staff (**Action 3.4**).

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

### **Induction**

The University offers an induction seminar for new staff where they are introduced to the University's policies and procedures. Each new member of staff has an induction checklist that contains information and actions that they need to read and complete within the first 8 weeks of their appointment. This checklist includes completing the University's online training module for Equality and Diversity.

### **Mentoring**

All probationary academic staff within the Department are assigned a mentor upon arrival and this assignment is formally registered with HR (**Action 3.2**). The mentor is responsible for providing advice and guidance throughout the probationary period as well as assisting with completion of the annual probationary paperwork. Mentoring continues beyond probation if those individuals wish it to (and in many cases does). Staff can also request a change in mentor; this has been carried out successfully in the last year for a female Lecturer.

Coaching and mentoring are available to all new non-probationary academic staff by more senior staff. Research mentoring for all staff is also supported within the research groups (Environment, EGG<sup>5</sup>, Infrastructure and FAFF<sup>6</sup>). Research mentoring activities include pre-submission reviews of grant proposals and journal papers. Professors make themselves available for informal mentoring with respect to career progression and development, and there is very much an open-door policy in the Department. In the consultation, female staff were very positive about having "*benefitted from mentoring*", a wider range of responses were recorded from the male staff. One female member of staff commented that "*informal mentoring in this Department is generally excellent*". The mentoring opportunities within the Department will be highlighted at the next Departmental meeting, aside from this no further action will be taken.

### **Professional development**

The Strathclyde Programme in Research and Leadership (SPIRAL) is run by Human Resources' Organisational and Staff Development Unit (OSDU). This programme offers a wide range of training, professional development, and networking opportunities. Although a significant amount of activities are aimed at Early Career Researchers, the programme includes activities and events aimed at all levels. In 2012, the University was shortlisted for Times Higher Education Awards in four categories, including Best Support for Early Career Researchers, and won the award for UK University of the Year.

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<sup>5</sup> Engineering Geosciences and Geomechanics

<sup>6</sup> Faults and Fluid Flow



New probationary members of academic staff are required to take 30 credits within the Postgraduate Certificate/Diploma in Advanced Academic Studies, also run by OSDU. Classes within this PGCert/PGDip are designed to support development of key skills required of individuals in a first academic post. Postdoctoral researchers can also take these classes and gain a qualification.

According to records held by the OSDU, 54% of the research staff and 75% of the academic staff who participated in research and professional development activities from the Department were female. The Department will provide feedback to the programme delivery team about quality and content of existing training opportunities as well as topics for where further training is desired (**Action 3.2.a**). We will also promote these opportunities further within the Department (**Actions 3.2.b and 4.2**).

### **Faculty Working Group**

The HoD has proposed a Faculty Working Group (FWG) to facilitate the progression of women within engineering at Strathclyde (**Action 5.1**). The HoD has offered to Chair this working group initially. This proposal has been discussed and recently approved by the Faculty Executive Team and a budget of £20k is now being considered for 2013-14 to ensure that the group can pursue a number of initiatives. Proposed activities include: UG and PG prizes for female students; networking events for women at all levels; mentoring for female academics and researchers; and pump-priming research and knowledge exchange competitions.

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

In order to promote more widely the careers of women in academia, our HoD proposed and the Dean agreed to produce an edition of the Faculty Magazine dedicated to women in engineering with articles on the successes of women from UG students through senior academics (**Action 4.1**). The FWG will identify further articles to include in future issues to support and inspire women to consider careers in academia.

In the Department, we run a number of different schemes to support all of our students. Below we break down the activities we run for UG and PG students to encourage their retention within the degree programme, the engineering sector, and academia.

### **UG Students**

In the first year of the UG course students are assigned into groups for practical laboratories. Since 2009, Departmental policy has been to ensure that groups with female students maintain at least two together to avoid isolation. Students may request to change groups at any time.

Since 2009, the Department has run a student-student mentoring scheme, where 1<sup>st</sup> year students are mentored by 4<sup>th</sup> year students in and 2<sup>nd</sup> year students 4<sup>th</sup> by 5<sup>th</sup> year students. Arrangements are

similar to laboratory groups and most female students are matched with female mentors. This scheme has helped the student body to feel more integrated, fostering links between different year groups. The scheme did not run in 2012-13 because the scheme leader took Voluntary Retirement at short notice prior to the start of term; however, plans are in place to re-introduce the scheme in 2013-14 (**Action 2.3**).

The industrial mentoring scheme was launched in 2010. Graduates in the civil engineering industry mentor our 3<sup>rd</sup> year students. Students may ask to have a different mentor for each semester and female students may request a female mentor. Our mentoring scheme helps to allay fears that our female UG students may have about entering the industry. After visiting her mentor in a Civil Engineering consultancy one of our female UG students reported: *"I was then somewhat enlightened by the fact that [our mentor] does not work unreasonable hours as this is a scary preconception about the industry...As a woman who in the future will want a family it is pleasant knowing that reasonable working hours are available [in an engineering consultancy]"*.

Since 2009, the Department has tracked the progression of students through our UG programmes on a gender basis to identify areas of potential disadvantage. Our female UG students perform very well (Table 8). Although there is fluctuation due to the small numbers, the UG drop-out rate for women on average is the same as for men (14%).

### **PGR and PGT Students**

All PGR students have first and second supervisors who act as their first points of contact within the Department. If further support is required, students may approach the Directors for Research and Postgraduate Studies, both of whom are female. The Department has procedures in place so that students can request a change of supervisor if necessary. This has happened on a few occasions for both male and female students. All PGT students are supported by the MSc Programme Directors and Director for Postgraduate Studies.

One of the issues raised in the PGR consultation was laboratory support. This issue has been previously raised in research group and supervision meetings and the Department is addressing it (**Action 2.5**). The Department was awarded a short-term equipment-sharing grant that included a temporary research support post. We were fortunate to fill this post with a highly-talented woman returning from an extended career break. This individual has provided specialist support for several instruments and activities. Feedback from students has been very positive. On the strength of this initial support, we were able to secure funding for a three-year Laboratory Business Development Officer (starting from June 2013) and this post is about to be advertised.

According to records held by the OSDU, since 2009, 48% of the PGR students who have participated in Research and Development activities held at the University have been female. This shows a healthy uptake among our female PGRs, indicating that they are well aware of the opportunities available to them. **Action 2.4** outlines plans to increase the availability of online courses; enhance interaction between PGRs and staff; and develop a mentoring programme for PGT students

As PGR students prepare for postdoctoral and Fellowship applications, academic staff in the Department review CVs and provide advice on applications. In addition, we have held mock presentations and interviews for both internal and external positions (**Action 3.2**). For

Departmental positions, no staff members on the interview panels are present at mock interviews. Since 2009, five female PGRs have progressed to postdoctoral fixed term research contracts within the Department and this has helped them with subsequent transitions to other academic or industry roles.

## Organisation and culture

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

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

Table 12 presents the balance of men and women on Departmental Committees. These figures include Administrative and Technical staff as full contributory committee members. In the Committees that are internal to the Department (Management Group, UGTLC, PGTLC, Research, and H&S Committees), female representation is 22-70%. All committees have multiple female members and four of the six committees are chaired by women.

Table 12. Representation of men and women on Departmental committees

Academic Year	Gender	Management Group	UGTLC <sup>1</sup>	PGTLC <sup>2</sup>	Research Committee	H&S Committee <sup>3</sup>	IAB <sup>4</sup>
2009-10	F	3 (33%)	3 (25%)	6 (50%)	5 (29%)	2 (29%)	1 (11%)
	M	6 (67%)	9 (75%)	6 (50%)	12 (71%)	5 (71%)	8 (89%)
2010-11	F	3 (33%)	3 (23%)	8 (62%)	6 (35%)	3 (33%)	1 (11%)
	M	6 (67%)	10 (77%)	5 (38%)	11 (65%)	6 (67%)	8 (89%)
2011-12	F	5 (62%)	5 (29%)	7 (70%)	8 (40%)	3 (33%)	3 (33%)
	M	3 (38%)	12 (71%)	3 (30%)	12 (60%)	6 (67%)	6 (67%)
2012-13	F	4 (44%)	4 (27%)	5 (50%)	8 (36%)	2 (22%)	4 (33%)
	M	5 (56%)	11 (73%)	5 (50%)	14 (64%)	7 (78%)	8 (67%)

<sup>1</sup> Undergraduate Teaching and Learning Committee

<sup>2</sup> Postgraduate Teaching and Learning Committee

<sup>3</sup> Health and Safety Committee

<sup>4</sup> Industrial Advisory Board

Members of the IAB support mentoring for our third year undergraduate students, provide input to curriculum design, and assist with teaching activities. Until 2011, there was only one female industry representative on our IAB. The Department has actively sought to increase the female representation on the IAB and increase the visibility of female Civil Engineers to our undergraduate students. One of the current female members of the IAB graduated from the Department in 2008.

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

Since 2009, all academic staff have been on permanent contracts and all the research staff (except one) on fixed-term contracts. The type of contract is dependent on the employment position and there is no difference related to gender. One Senior Researcher Fellow (male) has a permanent contract because of continuous service beyond four years, a practice consistent with UK Fixed-term Employees Regulations (2002).

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

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

The Departmental Management Group is the main decision-making committee. All other committees report to this Group. Three women sit on the Management Group (44%). The Department has female representatives on seven of eight Faculty committees and on two University-wide committees. Committee overload for women in the Department is not considered as an important issue as there is a high overall female representation across the staff body and in particular in senior positions. A significant majority of staff agree that there is a fair representation of women and men on Departmental committees (79% of both female and male staff respondents).

One staff member commented in the staff consultation that: *“more information about committee population would be useful”*. We will ensure that information regarding committee structure and representation is easily visible on the Department’s intranet (**Action 5.2**).

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

Currently, the HoD assigns the administrative and pastoral duties for individual staff members. The teaching load is assigned in discussion with the relevant UGTLC/PGTLC and the staff member involved. The HoD strives to ensure that workloads are balanced across all academic staff. The HoD is keen to ensure that early career academics are not overburdened with teaching to enable them to develop their research at a critical stage in their careers. As such, there is a staged teaching and administrative load for Probationers, starting at 25-50% and progressing to 75-100% incrementally over three years. The Department currently has a workload model that covers Teaching duties only that is accessible to all staff to view. The HoD will work in consultation with staff to update the workload model to include all activities (**Action 5.3**).

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

Departmental meetings are scheduled to commence at either 10am or 2pm to ensure that they lie well within what the Department considers to be core hours (10am to 4pm), allowing those with childcare commitments to attend. Certain meetings such as the Industrial Advisory Board (IAB) and periodic special seminars are scheduled in the evenings to ensure industry and public participation. The Department has a number of Visiting Professors from industry involved in teaching and engagement activities. Advance notice of their visits is circulated so that staff may schedule time with these visitors during core hours. Further flexibility is available on a case-by-case basis as required to take into account family responsibilities. For example the HoD has no meetings scheduled after 3pm on 2.5 days per week due to childcare arrangements. Many social activities in the Department outside of core hours are family-friendly.

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

Women are represented at all levels in the Department. They are highly visible in the senior management team (HoD, Director of Research, Director of Postgraduate studies). Staff overwhelmingly agree (86% of female and 95% of male staff respondents) that the culture within the Department is inclusive of women and men. Student consultation also highlighted this inclusive culture. 100% of UG, 100% of PGT and 75% of PGR female respondents and 80% of UG, 100% of PGT and 75% of PGR male respondents agree that the atmosphere in the Department is inclusive for men and women. One female PGT student commented that the Department is “*very supportive of women*”.

In the staff consultation a number of comments were made regarding the lack of opportunities for networking/socialising/engagement within the Department. At present the Departmental offices and laboratories are located in three different buildings. By the end of 2013 the entire Department will relocate to one building with all staff and PGR student offices located on a single floor. All of the staff who raised these issues also commented that this is likely to be improved by the imminent move. The PGR consultation highlighted social space as a key issue. After the move to the new premises, staff and PGR students will use the same common room and use of this space after the move will be monitored (**Action 2.4**).

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

Staff at all levels are encouraged by the HoD to participate in Outreach events; however, only 20% of female (and 42% of male) staff respondents “mostly agree” or “definitely agree” that outreach activities are given consideration as part of their overall workload. One female staff member commented “*although my efforts...are appreciated, I don’t think they are being taken into account as part of my workload*”. The HoD will take action to update the workload model in consultation with all staff to include all activities including outreach (**Action 5.3**).

Three women (1 Professor, 1 Lecturer, 1 PhD student) in the Department volunteer as STEM Ambassadors. We promote this scheme to staff and PhD students. Over the last three years, staff and students in the Department have participated in many different Outreach activities that are

targeted at primary and secondary school pupils as well as school leavers as part of our UG recruitment strategy (**Action 2.1**). The Department’s Open Day activities were recently redesigned to include a roundtable of activities for prospective UG students to engage with staff and students. The HoD ensures that staff and student involvement in Department-sponsored outreach activities is gender-balanced. Staff and students are welcome to take part in further activities as they wish.

### Flexibility and managing career breaks

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

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

The Department has a 100% return rate for staff on open-ended contracts returning to work after maternity leave over the last three years. In the case of the Research Associate listed in Table 13, her fixed term contract expired four months before she was due to go on maternity leave. The Department found funds to extend her contract to include teaching duties during this four month period. After the birth of her child, the Head of Department forwarded to her details of a Postdoctoral Fellowship in another department and personally recommended her for the position. She was offered the post (including possible part-time or flexible working), but she decided she was not ready to return to work.

Table 13. Female staff members who have gone on maternity leave

Academic Year	Position	Comment
2010-11	Professor	Returned
2011-12	Administrative Assistant	Returned
2011-12	Research Associate	Did not return -Fixed term contract expired prior to going on maternity leave
2012-13	Lecturer	Returned

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

The University HR Department does not currently record this data. The University Equality & Diversity manager and SAT will liaise with Human Resources regarding this issue (**Action 6.2**). The Department’s records show that no one has been eligible to take this leave in the last three years.

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

The University HR Department does not record this data (**Action 6.3**). Within the Department, there is a culture of informal flexible working among academic staff. In the consultation, the majority of male and female staff respondents indicated that they have made use of opportunities

for flexible working with informal arrangements. One formal application was made by the Department Administrator and approved by HR for a flexible working arrangement for an Administrative Assistant upon return from maternity leave. She works full time hours condensed into longer days from Monday to Thursday, with the remaining time made up on a Saturday morning at home. This arrangement has allowed her to balance her childcare responsibilities with her role in the Department.

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

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

In line with the University's policy, all staff have the option to work from home on an occasional or regular basis on agreement with their line manager (for academic staff, this is the HoD). Staff should ensure that (i) provision is made to allow effective communication while working from home and (ii) that such working arrangements do not interfere with their responsibilities which require face-to-face contact (for example supervision of other staff, students, teaching). Currently, there are four members of academic staff (1 male and 3 female) regularly working flexibly (i.e. working from home) under arrangements informally agreed with the HoD. One female Administrative Assistant is also working flexibly under a formal arrangement (as discussed). Flexible working arrangements are well-supported by Senior Management in the Department. These arrangements are predominantly made to enable staff to balance childcare/caring responsibilities, although all arrangements are made on an individual basis. Arrangements have been made for staff at all levels of seniority from Administrative Assistant, Lecturer, Senior Lecturer, and Professor. The HoD also works flexibly, as she shares after school childcare responsibilities with her husband. She leaves 2.5 days per week at 3.30pm and then continues working at home in the evenings.

As part of the University's Bronze Action Plan, the Equality and Diversity Manger will liaise with HR to pursue successful recording of flexible working data (**Action 6.3**). Currently, the University's OSDU does not offer any training on implementing flexible working arrangements; however, policy and guidance are available on their website.

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

The Department provides support during three critical stages: (i) prior to leave, (ii) while on leave and (iii) on return from leave. Current practice is as follows:

- i. **Prior to maternity, paternity, or adoption leave:** Succession plans are made and agreed with the HoD to ensure that research supervision and teaching responsibilities are transferred in a

stress-free way. A Keep in touch (KIT) programme is agreed. This may also involve arranging financial recovery for maternity leave to cover Departmental roles. One of the Department's female Professors was pregnant when she joined the Department in 2010, and as such was not eligible for maternity pay. Human Resources made arrangements prior to her going on leave, so that she could receive financial assistance whilst on maternity leave. The Department submitted a formal application to the University for Maternity Cover for an administrative member of staff's role highlighting allocation of salary and requesting a formal flexible working agreement upon return. Both were granted. The same approach was used to apply for teaching cover for one of our female Lecturers who took maternity leave in 2012-13, enabling the appointment of a fixed-term Teaching Fellow.

- ii. **While on leave:** KIT programme implemented. KIT activities have included supervision meetings with PhD students, grant/paper writing from home, and keeping up-to-date with emails. KIT activities are *entirely* voluntary, but the experience of current female academic staff is that returning to work is more successful if their research is kept 'ticking over' whilst on leave and they remain in touch with their research projects, students, and postdoctoral staff. Any time spent working during the period of leave is recorded and added to the total leave period. A female Lecturer started having supervision meetings with her two PhD students two months after the birth of her child, on several occasions at home, and more often fortnightly at the University.
- iii. **On return from leave:** Options are discussed for both phased return and flexible working at a review meeting. Mentoring and coaching are provided for 6-8 months on return from maternity leave by another mother in the Department. This is possible due to the high representation of women and parents in our Department. A female Lecturer has a flexible working agreement agreed with the HoD, where she works from home on Fridays. HoD also offered informal advice having been on maternity leave at various stages of her career. While she was on maternity leave, the HoD and Director of Research co-wrote a successful EPSRC research proposal to fund 6 months sabbatical time upon her return in April 2013 from maternity leave. This grant will reduce the pressure of returning to work with a young child, supporting her return to the Department by enabling her to focus on her research.

As a result of the good practice in the Department, the HoD has also been consulted at Faculty level to share her knowledge and good practice in this area. As such a guidance document will be prepared and circulated within the Department and Faculty (**Action 6.1**).

**(4,999 words)**



## 5. Any other comments: maximum 500 words

The members of the SAT have thoroughly valued this application process as a means of critically evaluating our own internal procedures, both formal and informal. It has enabled us to identify areas of strength, including: (i) female representation in our academic staff, (ii) female representation in senior roles and (iii) support for parental leave. The Action Plan has allowed us to reflect on practices and ensure that they become documented so that these are not likely to end at the onset of a future change in leadership of the Department. The application process has also provided us with the opportunity to identify areas of weakness, for example: (i) the low proportion of female UG students, (ii) the lack of a complete workload model and (iii) the provision of clear and up-to-date guidance regarding promotion. We have outlined the strategies and measures we will introduce to the Department in our Action Plan to address all of these areas. The Action Plan has also been key for identifying where we must continue to monitor, collate and analyse data to identify actions that will ensure females continue to be represented in the Department at all levels. Feedback received from the staff, PGR, PGT and UG consultations will be discussed at the relevant Departmental Committees to establish if any further actions out with the scope of the Athena SWAN Action Plan are required.

It is our ambition that our Department can lead the way for good practice at the University of Strathclyde, but in particular within the Faculty of Engineering. We recognise that in the other Engineering Departments women are a small minority and in some cases there are only one or two female academic members of staff. We plan now to build upon our own good practices and extend them to other Engineering Departments in our Faculty, to improve the experiences of women in Engineering academia. The Faculty- and University-wide initiatives proposed and/or led by our Department, including the setting up of a Faculty Working Group at Strathclyde to facilitate the progression of women's careers and the dedication of an edition of the University's *Engineering Insight* Magazine to the profiles of successful female students and staffs attest to our ambition. The Faculty Working Group, that will be chaired by our HoD, is intended for female academics, particularly ECRs and Lecturers, across the Faculty so that they can set an agenda for support that helps them progress their careers and promote themselves both inside and outside the University. The Department is committed to making a difference in the progression of women in STEM subjects and academia as evidenced by the activities of our STEM Ambassadors in schools through to our HoD's contributions to the Royal Society of Edinburgh Working Group on Women in STEM and their 2012 report "Tapping All Our Talents".

### The SAT Team

29<sup>th</sup> April 2013

(474 words)

## 6. Action plan

**Provide an action plan as an appendix. An action plan template is available on the Athena SWAN website.**

Please find attached the Department of Civil and Environmental Engineering's Action Plan for the period May 2013 – April 2016.

**7. Case study: impacting on individuals: maximum 1000 words**

Case studies have been removed to protect individuals' confidentiality.

**Department of Civil and Environmental Engineering  
Athena SWAN Silver Award, April 2013 submission  
Action Plan – 3 years**

**May 2013 – April 2016**

Glossary:

SAT – Self-Assessment Team

SRC – Scottish Resource Centre for Women in Science and Engineering

OSDU – Organisational Staff Development Unit

UG – Undergraduate

PG – Postgraduate

UGT&LC – Undergraduate Teaching & Learning Committee

PGT&LC – Postgraduate Teaching & Learning Committee

AS –Athena SWAN

HR – Human Resources

RDP – Research and Professional Development

The SAT will liaise with the Chair and Secretary of the relevant committee to ensure these actions are carried forward onto the agendas.

The SAT will monitor the actions on a quarterly basis.

Actions will be assessed for their effectiveness and to review impact.

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
<b>1</b>	<b>Baseline Data and Supporting Evidence</b>							
1.1	Monitor UG student numbers by gender against national benchmark	Data collected, recorded, analysed for AS application	Create continuing system to affect actions on a timely basis in	Progress Log to be updated in: SAT meetings	Department Administrator, SAT	To coincide with recruitment timetables on an	July/August 2013	Up to date and reliable data to analyse and determine future actions

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
			consultation with relevant committees	UGT&LC Management Group	UGT&LC	annual basis  On-going until April 2016		
1.2	Monitor UG Performance	Data collected, recorded and analysed	Create continuing system to affect actions on a timely basis in consultation with relevant committee	SAT meetings  UGT&LC	SAT  UGT&LC	Annually until April 2016	October 2013	Up to date and reliable data to analyse and determine future actions
1.3	Monitor PGT and PGR student numbers by gender	Data collected, recorded and analysed for AS application	Create continuing system to affect actions on a timely basis in consultation with relevant committee	SAT meetings  PGT&LC	Department Administrator  SAT  PGT&LC	To coincide with recruitment timetables  On an annual basis	October 2013	Up to date and reliable data to analyse and determine future actions
1.4	Monitor PG Performance		Create system which follows the UG model already in place	SAT meetings  PGT&LC	SAT  PGT&LC	Annual until April 2016	May 2014	Up to date and reliable data to analyse and determine future actions
1.5	Monitor staff data	Data collected, recorded and	Create system and maintain	SAT meetings	Department Administrator	Twice annually	September 2013	Up to date and reliable data to

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
		analysed for AS application	portfolio	Management Group		until April 2016		ensure gender balance in academic staff is maintained and monitored and to determine actions in particular when current Head of Department steps down
<b>2</b>	<b>Undergraduate and postgraduate students</b>							
2.1	Increase recruitment numbers of female UG students	(a) Promote gender diversity of staff and female achievements on department website—A section entitled 125 years of Civil Engineering " to be included	Continue to update	SAT meetings Department meetings	SAT Team IT Manager Department Administrative Assistant	On-going until April 2016	April 2013	Increase UG female students year on year and in the long term

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
		<p>(b) Promote UG student success and achievements - News and Events on department website</p> <p>(c) Outreach events</p> <p>(d) STEM Ambassador scheme promoted to PHD students</p>	<p>Continue on an annual basis and develop engagement with Primary as well as Secondary schools</p> <p>Continue to promote and participate</p> <p>Department activity at University of Strathclyde's annual Scottish</p>	<p>SAT meetings Department meetings</p> <p>SAT meetings UGT&amp;L Committee</p> <p>Department website SAT meetings</p> <p>SAT meetings UGT&amp;L Department meeting</p>	<p>SAT Team Department Administrative Assistant</p> <p>SAT Team UGT&amp;LC Outreach Team PHD students</p> <p>SAT Team PHD students</p> <p>UGT&amp;LC All staff SAT</p>	<p>On-going until April 2016</p> <p>Annual events until April 2016</p> <p>On-going until April 2016</p> <p>June 2013</p>	<p>April 2013</p> <p>July 2013</p> <p>May/June 2013</p>	

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
			Space School  Entry Requirements	UGT&LC Management Group	SAT UGT&LC Management Group	On-going long term – September 2015/2016	April 2013	
2.2	Support UG students	(a) Meeting between female UG students and Head of Department  (b) Interconnect (Society for women in Science, Engineering, Maths and The Built Environment currently through Faculty and Facebook	Event for Female UG Students  Promote at department level to encourage students to sign up to Facebook page	SAT meetings  UGT&LC  SAT meetings IGT&L	SAT  4 <sup>th</sup> and 5 <sup>th</sup> Year Students  UGT&LC  Department Administrator	Annually to April 2016    On-going until April 2016	October 2013    April 2013	To allow female students to meet each other early to foster inclusivity Assist communication between female students

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
2.3	Establish UG Student by Student Mentoring Scheme	Consultation with UG students	Re-Introduce scheme	Management Group  SAT meetings	Head of Department  Management Group UGT&L C  4 <sup>th</sup> and 5 <sup>th</sup> year UG students	On-going until April 2016	August 2103	To improve support for female UG students and encourage better communication between years
2.4	Support PG Students -  Promote RDP Courses  Promote Mentor/Mentee courses         Establish Social space	Courses available online	Liaise with RKES and OSDU to increase availability and how best to promote      Ensure use of space in new building	PGT&L C meetings  SAT meetings    Management Group	PGT&LC  RKES   Management Group	On-going until April 2016	July 2013	Maintain and increase support for female PG students in the department
2.5	Provide Laboratory Training and	Position of Laboratory Business	Fill position	Management Group	Head of Department	Initially October	October 2013	To improve experience of



Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
	Technical Support	Development Manager created and currently recruiting		SAT meetings				all students and increase confidence of female students and participation
<b>3</b>	<b>Key Career Transition Points, Appointments and Promotions</b>							
3.1	Contribute to best practice charter - for staff recruitment and gender balance on appointment panel	Good practice exists as department ensures gender balance on their panellists and continue to appoint women in increasing numbers	Formalise best practice	Management Group SAT meetings HR Department	Head of Department HR Department	By 31 <sup>st</sup> July 2014	February 2014	Ensure a gender balance in appointments where possible and continue to increase the number of women in the department
3.2	Continue to Support Early career researchers	Preparation for interviews, Fellowships Professional Studies modules	Continue and extend best practice to all Research Groups Liaise with RKES and Careers Service to promote in the department	Research Committee SAT meetings Department Intranet	Research Committee SAT RKES Careers Service	On-going April 2016	May 2013	Continue to retain women and enable them to progress within the department
3.3	Contribute to best practice charter –	Good support and recruitment practice	Formalise best practice	Management Group	Head of Department	By 31 <sup>st</sup> July 2013	February 2014	Share best practice and

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
	promotion support	exists and women progress well through the department		SAT meetings	HR Department			continue to identify and nurture a pool of talent
3.4	Show clear and up to date promotion criteria to demonstrate fairness		Raise awareness and discuss with Centre	SAT meetings	Equality & Diversity Manager HR Department SAT	April 2016	June 2013	Further support women in their career development in a formal capacity
<b>4</b>	<b>Career Advice and Support</b>							
4.1	Raise profile of female students and staff – Faculty Magazine issue dedicated to women from UG students to senior staff	Agreement from Dean confirmed	Collection of success stories and awards  Discuss other appropriate content	SAT meetings  Department Intranet	Head of Department  SAT Team  Department Administrator  Faculty Marketing Development Co-ordinator	By 31 <sup>st</sup> October 2013 – For End of Year Issue	May 2013	Support and encourage female students and staff in the department and faculty
4.2	Promotion of specific courses -Mentoring, Supervision of PG students, Recruitment,	Mentoring Skills Workshop for Women in Science and Engineering (OSDU)	Discuss further with OSDU and SRC how best to promote courses for women	SAT meetings  Department Intranet	SAT Team  OSDU	Annually to April 2016	November 2013	Provide women with training and support specific to their

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
	Coaching, Leadership Development	Coaching for Success (SRC)  Online resources available						needs and career development
<b>5</b>	<b>Culture, Communication and Departmental Organization</b>							
5.1	Establish Support Working Group within Faculty – including networking, targeted funding opportunities and career development	Proposal to Faculty for Working Group to facilitate the progression of women in Engineering at Strathclyde	Set up group with funding proposal of £20,000 per year	Report to Faculty Executive Team  SAT meetings  Department Intranet	Head of Department	By September 2014	Summer 2013	Promote the careers of women within the Faculty as a whole
5.2	Ensure and maintain a balance of representation of women and men on decision making committees  Document information to inform staff what committees they can attend	N/A	Create system for advising staff on committee membership – Make available on Department Intranet	SAT meetings  Department Intranet	Head of Department  Department Administrator	On-going until April 2016  On-going until April 2016	May 2013  October 2013	Continue to improve gender balance on committee and help staff understand what committees they can be involved in

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
5.3	Establish formal department workload model	N/A	N/A	SAT meetings Management Group	Head of Department	By September 2014	July 2013	Formal recognition of outreach, mentoring and activities related to women and science good practice initiatives
<b>6</b>	<b>Career breaks/flexible working</b>							
6.1	Establish process to assist in Managing maternity career breaks	Keep in touch programme, teaching cover arranged, phased return	Discuss how experiences, advice and support can be shared widely	SAT meetings Department Intranet	Head of Department Relevant Female academic staff HR Department	By 31 <sup>st</sup> July 2014	February 2014	Ensure that all staff can benefit from the advice, experience and support in managing career breaks
6.2	University recording of paternity leave	N/A	Liaise with HR Department to effect change	SAT meetings	SAT Equality & Diversity	By 30 <sup>th</sup> April 2015	August 2013	Accurate University record of paternity leave

Action	Description of Action	Action taken already and outcome at April 2013	Further action planned	Progress Log	Responsibility	Timescale	Start date	Success Measure
					Manager			
6.3	University recording of applications for flexible working and success rates	N/A	Liaise with HR Department to effect change	SAT meetings	SAT Equality & Diversity Manager	By 30 <sup>th</sup> April 2015	August 2013	Accurate University record of applications for flexible working and success rates