CONTENTS

Preface

This document presents the case for an Athena SWAN departmental bronze award for the School of Engineering and the Built Environment. The data analysed to support the case is drawn from a number of sources as noted in Table 1.

Source	Data used in the submission	Application of data analysed
HR Connect	Statistical data generated from the University's Human Resources system (e.g. staff numbers). Unless specified otherwise the audit date of snapshot data is 31st March 2016.	Sections 4 & 5
COGNOS	Statistical data generated from the University's student records system (e.g. student numbers, attainment).	Section 4
University policy documents	Detail of University policies (e.g. flexible working policy, leave for parents).	Section 5
SEBE publicity material	Images, prospectus & course information sheets.	Section 5.6
Engagement activities with SEBE staff (March to September 2016)	Pointers to sources of information for the submission work, and opinion on its progress.	Sections 4, 5 & 7
Athena SWAN focus groups discussions (September 2016)	Qualitative data to triangulate findings from the main data.	Sections 5 & 7
Individual and group feedback on drafts of the bronze submission document	Further triangulation of the analysis.	Throughout the document

Table 1: Data sources for the submission

This submission follows the departmental Bronze Award submission guidelines, with a small number of adaptations as noted in Table 2.

Adaptation	Reason for adaptation	Instances	Particular issue(s), if any
Internal & external web links are provided in the submission document	Intention to use submission document as an internal reference tool in the future.	Links provided at first mention of source	
Some retrospective conversion exercises have been conducted on the data sets.	To allow for comparisons to be made across years in this submission and in future submissions.	Staff data (Section 4.2) across the 3 year period comes from two data sets: "prior to 2014", and "post 2014", reflecting the move of research institute staff into the School in Jan 2014.	Data in Table 25 comes from the two data sets.
Incomplete data sets	Data set did not allow analysis by expected year of completion for PGT student data	PGT student completion (Section 4.1(iii), Table 19)	
Missing data sets.	The university does not hold the information.	The number of requests for flexible working.	Being addressed by the University's

		(Section 5.5). Number of SEBE staff who have undertaken Equate coaching.	Athena SWAN Action Plan. Being addressed by SEBE Action Plan AP[21].

Table 2: Data set adaptations

Glossary of terms and abbreviations.

Term	Refers to
Academic year	1st August to 31st July
ALD	Academic Leadership & Development
AP	Action Plan
APR	Annual Promotion Round
Bright Club Edinburgh	Network of academics who take science straight from research to public entertainment (SEBE staff perform regularly)
BSV	Building & Surveying subject group
CF	Confident Futures (a Napier programme to help students develop confidence, leadership, business and work skills)
Connect	A network for women studying computing, engineering or built environment at Edinburgh Napier University
CTR	Civil and Transportation Engineering subject group
DE	Direct Entrant undergraduate student
DL	Distance Learning
DTLE	Department of Teaching & Learning Enhancement
E&D	Equality & Diversity
ECR	Early Career Researcher
ECU	Equality Challenge Unit
EEAG	Employee Engagement Action Group
ELE	Electrical & Electronic Engineering subject group
ENMCA	Edinburgh Napier Mentoring and Coaching Award
Equate	Equate Scotland – an organisation that promotes and encourages the advancement of women in science, engineering, technology and the built environment.
ERG	Engineering Research Group
FE	Further Education
Focus Group	The focus group activities of 14th and 21st September 2016.
HE	Higher Education
HNC	Higher National Certificate
HND	Higher National Diploma
HR	Human Resources department
ICG	Induction Co-ordination Group
IIP	Investors in People
IPAC	Industrial and Professional Advisory Committee
ISC	Institute for Sustainable Construction
LEAPS	Lothians Equal Access Programme For Schools
LTA	Learning Teaching & Assessment
LTAC	Learning Teaching & Assessment Committee
MEC	Mechanical Engineering subject group
MRes	Master of Research
Napier	Edinburgh Napier University
NWED	National Women in Engineering Day (23rd June 2016)
PDR	Personal Development Review
PDT	Personal development tutor
PG	Postgraduate
PGR	Postgraduate research student
PGT	Taught postgraduate student
QAA	Quality Assurance Agency for Higher Education
RAE	Research Assessment Exercise (from 2008)
REF	Research Assessment Framework (from 2014)
Researcher	Staff whose job title includes the term ”Research Assistant” or “Research Fellow”
RICS	Royal Institution of Chartered Surveyors
RIO	Research and Innovation Office

SAL	School Academic Lead
SAT	The School's Self-Assessment team
SCDI	Scottish Council for Development & Industry
SEBE	School of Engineering and the Built Environment
Senior Lecturer	Grade 7 roles
SET	Science, engineering and technology
SFC	Scottish Funding Council
SG	Subject Group
SGL	Subject Group Leader (line manager for all academic staff in SG)
SLT	School Leadership Team
SoC	School of Computing
SPL	Shared parental leave
SRIC	School Research and Innovation Committee
STEM	Science, Technology, Engineering and Mathematics *Note: STEMM (rather than STEM) is sometimes used to include reference to colleagues in the School of Health and Social Care*
SWAP	Scottish Widening Access Programme
Turnover	Those in research and academic posts who leave the University for jobs elsewhere, or retirement.
TRI	Transport Research Institute
UG	Undergraduate
ULT	University Leadership Team
WA	Widening Access
WAM	Workload Allocation model
WLC	West Lothian College

Table 3: Glossary of terms and abbreviations used in this document

[2] Description of the department *(word count 461)*

The School of Engineering and the Built Environment is one of six schools in Edinburgh Napier University all of which report directly to the University's Leadership Team. The School structure is based on both academic staff and students organised within one of four Subjects Groups: Building & Surveying, Civil & Transportation Engineering, Electrical & Electronic Engineering; and Mechanical Engineering. Academic staff numbers are 71 (most of whom undertake both teaching and research) and in addition there are 21 research staff. The School is supported by the School Support Service, the locally embedded professional service, with 13 support service staff (11 female) led by a School Support Manager.

The School offers a range of engaging, challenging and industry-relevant courses that enable graduates to pursue rewarding careers within their chosen discipline. Courses are delivered at both UG and PG level, within the subject group structure. Typical student cohorts are around 1000 (UG) and 330 (PG) (see Section 4.1) and include from a variety of attendance types and teaching mechanisms, but all with an emphasis on practical and self-directed learning. Approximately 50% of students are from outwith the UK. Direct entrant students into Year 2 or 3 of an UG degree traditionally form a significant part of SEBE's profile (27% of UG numbers over the past 5 years). This number continues to grow through partnerships with the FE sector and the University's Widening Access team. High levels of graduate employability and career success have always been a cornerstone of SEBE and the School contributed significantly to the University's recent achievement of number one in Britain for nurturing student talent *http://www.napier.ac.uk/about-us/news/guardian-guideGuide 2017*.

A pictorial representation of the academic subject and research groups, together with the committees reporting structure, is shown in Figure 1.

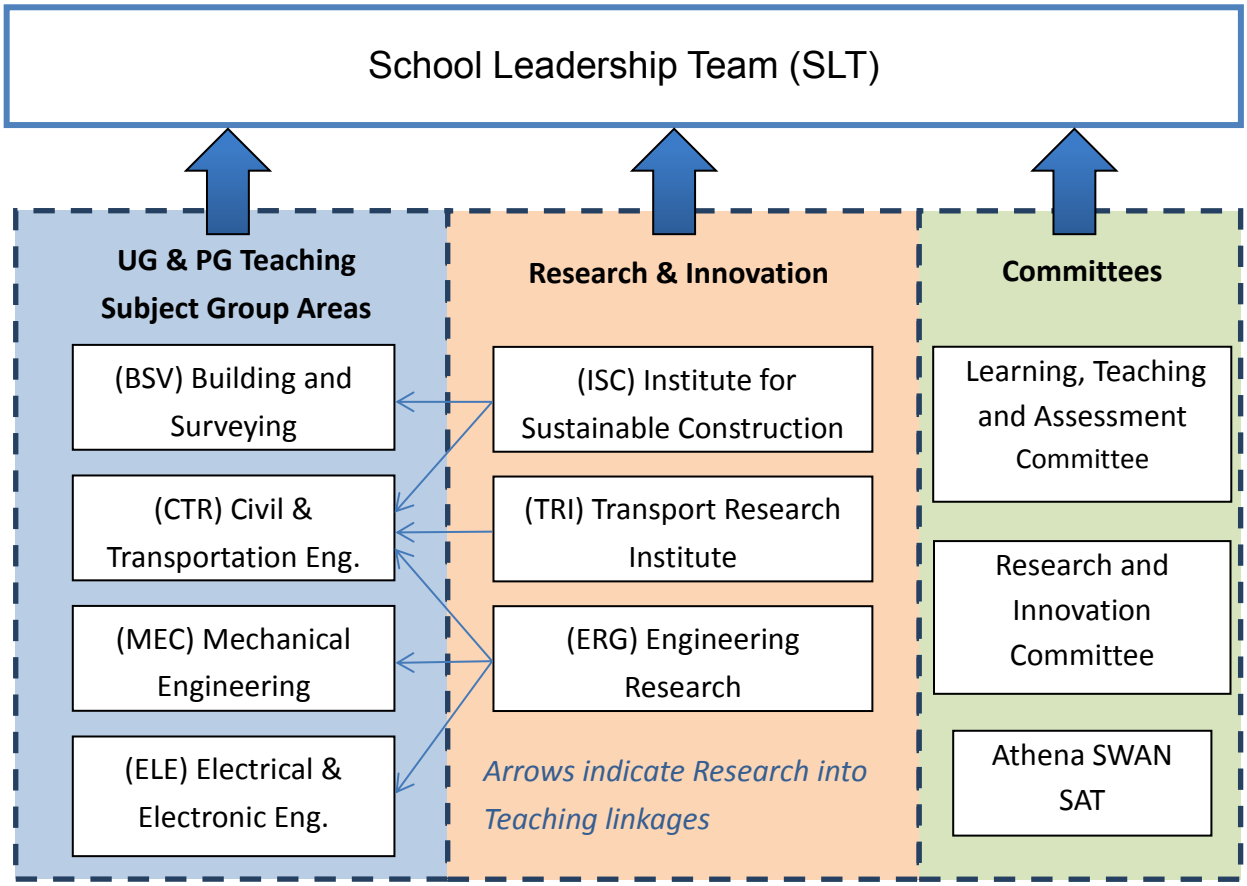

Figure 1: Representation of the structure of the School

The School hosts the Institute for Sustainable Construction (ISC) and the Transport Research Institute (TRI), both of which are internationally recognised research groups. Other key research areas are materials, geotechnics, sensing, automation and control. These are coordinated by the Engineering Research Group (ERG). This structured approach to managing research activities helped increase the numbers of staff contributing to research assessments (Section 5.1). This was also aided by a long history of innovative and applied research in partnership with industry. Outcomes of research and consultancy activities enhance the learning experience of the students, and where possible, applied research is integrated into the degree programmes. The School is located on a single campus, where the teaching laboratories have recently had extensive refurbishment. This was specifically carried out to improve the teaching and learning experience. A key continuing departmental strength reflected in this submission is the partnerships with the activities of Connect and with Equate Scotland (e.g. Section 5.6).

Membership details of the School's committees are in Section 5.6.

[3] Self-assessment process *(word count 940)*

3.1 Self-assessment team description

The SAT comprises 13 members (with, in addition, Professor Hall in place as an adviser) and their roles within SEBE and on the SAT are summarised in Table 4. One member left the University and was replaced by another HR team member (Janette Stone). In addition, the Dean of School stepped down (May 2016) from this position but due to his commitment to, and interest in, equality and diversity elected to remain as Chair of the SAT while the recruitment of a new Dean is on-going.

Name		**School/department**	**University role**	**SAT role (& other relevant activity)**	
Dr Lourdes Alwis	LA	SEBE/ ELE SG	Lecturer	STEM Ambassador	
Julia Dawson	JD	Central Services/ SEBE	School Support Manager	Led on Sections 5.5 & 5.6	
Dr Kate Durkacz	KD	SEBE/ ELE SG	SAL Student Experience	Member of stats sub-team. Member of University SAT. STEM Ambassador.	
		SEBE		Online presence and activity. Link with PG researchers.	
		HR	Diversity Officer	Member of University SAT Member of University E&D Committee	
Janette Stone	JS	HR	Client Partner for SEBE	HR policies and data	Joined the SAT (May 2016)
Dr John McDougall	JM	SEBE/ CTR SG SAL Research	Reader	Member of stats sub-team. Input to REF/RAE data analysis.	
Chrysoula Pantsi	CP	SEBE/ CTR SG	Lecturer	STEM Ambassador	
Debbie Ratcliffe	DR	SEBE	Administrator	Administration and online presence/activity. Linked SAT with Connect and Equate.	
Dr Dan Ridley-Ellis	DRE	SEBE/ISC	Associate Professor	Member of University SAT. Led input to public engagement work.	
	IS	SEBE	Professor of Teaching & Learning	Chair of SAT. Member of stats sub-team. Led on Sections 5.1 & 5.3.	
Prof Sean Smith	SS	SEBE/ISC	Professor of Construction Innovation & Director of ISC	Led input related to REF/RAE. PGR student support and gender balance in construction & engineering industries.	
Alastair Stupart	AS	SEBE	Admissions Tutor	SEBE Athena SWAN Academic Champion. Member of University SAT. Member of University E&D Committee.	
	HY	West Lothian College	Deputy Centre Head of	WLC Gender Equality Committee and student	

			Engineering	widening access activities.
Prof Hazel Hall	HH	School of Computing	Research Professor	University Athena SWAN Academic Champion. Member of University SAT. Member of University E&D Committee.

Table 4: Self-assessment team members

The membership of the SAT demonstrates diversity on several counts including: gender, career stage, role (e.g. teaching and/or research duties) and subject group affiliation. SAT members have relevant experience to support their understanding of issues pertinent to career progression in STEM (Table 5)

Experience	**SAT member offering this experience**
Part-time working	Ratcliffe, S Smith (supporting staff), Stone
Flexible working; including job share roles	
Career breaks	Dawson
Two-career families (with children)	
Recent experience of the recruitment and/or promotion processes from the perspective of applying for a post/promotion.	
Recent experience of the recruitment and/or promotion processes from the perspective of participating in the interview and selection processes for new staff.	Dawson, Hall, I Smith, S Smith
Departmental and institutional management experience	Dawson, Hameed, McDougall, I Smith, S Smith, Stone, Young
Senior management experience	Dawson, Hall, I Smith, S Smith

Table 5: Relevant SAT experience

3.2 The self-assessment process

The SAT in its current form was established following the Dean's appointment of Alastair Stupart as the School's Athena SWAN Champion (January 2016) with a substantial workload allocation given for the task. The SAT's members were drawn from a group of 8 people who were known to be interested or already working in this area. A call from the Dean of School brought forward 7 more interested volunteers and after consideration of all 15 profiles against the Equality Challenge Unit's (ECU) recommended range of experience and diversity, the SAT was formalised at 13 people (with Professor Hall as an adviser). One member of the SAT (Helen Young, an alumni of SEBE) came from outwith the University. Her role at West Lothian College (WLC) involves her cooperating with SEBE on supporting students who articulate onto engineering courses, curriculum mapping to aid transition and encouraging female involvement in STEM, together with chairing WLC's Gender Equality in STEM Working Group.

Since March 2016 the SAT has met monthly, with each meeting chaired by Professor Ian Smith. A number of standing items feature on every agenda including: report on progress of the Athena SWAN work, internal and external engagement activities, SAT member news and notes of forthcoming events relevant to women in STEMM. The SAT reports to the School Leadership Team (see Figure 1 and Table 47) and maintains frequent links with Connect, Equate and Edinburgh Napier's six other Athena SWAN committees.

Between meetings SAT members work on agreed tasks which are related to one-off activities or events (e.g. National Women in Engineering Day). Other tasks are key to the on-going responsibilities of SAT members, such as Ratcliffe's work with Connect; and Ridley-Ellis and Stupart's responsibilities on the University SAT to advise on the E&D balance of University communications. Most of the work of the SAT, however, has been directed towards SEBE's ambition to achieve recognition of its work in supporting women in the studying and teaching of STEM subjects through the achievement of a Bronze Athena SWAN award. This has involved gathering and analysing data for the submission; and seeking feedback from across SEBE, the wider University and beyond, on the process and outcomes of this activity. This work was led by Durkacz, Stupart and staff from HR, with expertise in data analysis provided by the three members of the stats sub-team (Durkacz, McDougall and I Smith).

Between March and November 2016 a large number of meetings and consultations were held in SEBE, all of which fed into the work for this submission. The two main aims of these activities were to (a) raise the profile of SEBE's ambition with regard to Athena SWAN principles, and (b) to gather information and feedback to contribute to the evidence presented in the submission document and SEBE's Athena SWAN Action Plan. The most significant internal meetings and consultations are listed in Table 6.

The SAT met the two above aims through these internal activities, together with involvement in University-wide initiatives and partnering with colleges, professional bodies and industry. Further, alumni of the School were engaged in the work (e.g. publishing news about the focus groups) and had involvement, together with current students, in the School's outward facing celebration of NWED. The SAT's ambition is to continue to keep gender equality in STEM at the heart of the School's strategy.

SAT members also participated in externally hosted events, the majority of which had the broad purpose of networking with colleagues working on similar Athena SWAN related projects and learning from their experience. The most significant are given in Table 7.

Other smaller meetings were held on an *ad hoc* basis, for example with Curtin University (Australia) and Scottish Council for Development & Industry, and with contacts at Equate and other universities for initial advice on preparing a submission. SAT members also attended events related to their particular interests, for example Stupart served on an Athena SWAN

Award assessment panel in this period. As the SAT's experience of preparing and submitting award applications grows, its members continue to make a greater contribution to external events.

Date	Internal consultation/ meeting	SAT participants	Other participants & details
2nd March (Napier)	Visit by WLC's Gender Equality in STEM Working Group, including attendance at "Engineering Taster Course"	AS, HY, LA, IS, KD	8 female WLC students. Napier WA team.
8th March	Gender Equality breakfast (Merchiston Campus)	AS, SS, HH, KD	
	Gender Equality breakfast (Sighthill Campus)		
8th, 9th & 10th March	Four 2hr workshops to SEBE UG "Engineering with Management" students	KD	Delivered by Equate and Confident Futures
5th April	Athena SWAN Champions' Lunch	AS (presentation) HH (Chair)	7 other Napier staff involved in E&D
13th April	LTA Meeting	AS (presentation) KD	
19th April	University Athena SWAN SAT	DRE, AS, HH, MH	
12th May	SEBE lunchtime E&D meeting for PGR students	AS (presentation) IS (Chair)	9 students (6 F :3 M)
25th May	BSV SG Meeting	AS (presentation)	
26th May	ELE SG Meeting	KD (presentation)	
1st June	Athena SWAN Champions' Lunch	DR, AS, HH (Chair)	6 other Napier staff involved in E&D
8th June	ICG Meeting (Fresher's Week planning)- SEBE Athena SWAN work was reported	KD	
15th June	Napier Research Conference – poster presentation on gender equality work in SEBE	AS, KD, DRE, SS, JM	Attendance of approx. 200 (staff, students & external visitors)
19th June	Visit by Rachel Sheffield and Susan Blackley (Curtin University, Australia)	KD, HH	
27th July	STEM Ambassadors' Induction- Edinburgh College	CP	
14th September	Connect Welcome Lunch & 1st Focus Group	KD, DR, CP, LA. HH AS (presentation)	Attendance of 80 (staff, students & visitors)
21st September	2nd SEBE Focus Group	DR, IS, AS,	Attendance of 12 (staff & students)
27th September	Athena SWAN Champions' Lunch	AS (presentation) HH (Chair)	7 other Napier staff involved in E&D
1st October	University Open Day	AS,KD, IS	Information presented about Connect and Athena SWAN
4th October	Associate Student Information	IS (presentation),	Information

	Day	KD, AS, HY	presented about Connect and Athena SWAN
11th October	Ada Lovelace lecture (hosted by Napier and Equate Scotland)	KD, DR, CP, LA. HH	
19th to 24th October	University Inclusivity Week	KD, HH, JS	Athena SWAN stand (20th)
24th October	University Athena SWAN SAT	DR, AS, HH., KD	
26th October	Athena SWAN Champions' Lunch	AS, HH (Chair)	4 other Napier staff involved in E&D
31st October	CTR SG Meeting	JM, IS	
23rd November	Athena SWAN Champions' Lunch	AS (presentation) HH (Chair)	4 other Napier staff involved in E&D

Table 6: Internal meetings and consultations (March to October 2016)

Date	External consultation/ meeting	SAT participants	Other participants & details
26th January (ECU, London)	Athena SWAN assessment panel	AS	
26th April (Glasgow)	Progressing equality & diversity in Scottish HE & FE.	KD, HH	
3rd May (Livingston)	WLC event to increase female awareness & participation in STEM.	HY	T Evans (Napier WA team)
16th June (Liverpool John Moores University)	Attended lecture "Outreach promoting women in STEM with local schools and colleges".	AS	
16th June (Liverpool John Moores University)	Meeting with "Merseyside Network for collaborative outreach" to exchange ideas.	AS	
4th August (Edinburgh)	Discussion with SCDI on STEM activities for female school & University students.	AS	R Martin (Chief Executive of SCDI)
23rd August (Livingston)	WLC engineering student Induction Day - sessions from Napier about articulation and female students in STEM	KD (presentation) AS (presentation)	HY

Table 7: External meetings and consultations (January to October 2016).

3.3 The future of the SAT

Beyond November 2016 the full SAT will meet three times a year (January, April and October) - primarily to monitor the implementation of the Action Plan - while continuing to report on its activities to the School Leadership Team and the University (Athena SWAN SAT and E&D Committees). The SLT (which includes 6 SAT members) is the key means by which equality and diversity will be embedded into SEBE activities.

SAT members will also work in sub-groups to work on particular tasks between full SAT meetings **AP[1,2]**. Forthcoming changes (e.g. appointment of a Dean,), will provide the opportunity to refresh the SAT membership, for example through the introduction of an ECR and/or UG student rep **AP[3]**.

[4] Picture of the Department *(word count 1998)*

4.1 Student data

(i) Numbers of men and women on access courses

SEBE admits students through various access programmes (Tables 8, 9, Figure 3). Napier leads the LEAPS programme which promotes social inclusion and equality of opportunity by facilitating increased HE participation for young people largely from poor socio-economic backgrounds. SWAP is predominantly for people who have been out of education for at least 3 years and the common destination is FE. SEBE has strong links with colleges and appropriate articulation agreements. Articulation is important to SEBE's WA activities and the college links tend to influence higher numbers of female students to continue their studies. SEBE is the HE partner to WLC's all female engineering taster course and the School will contribute further to this unique initiative. **AP[18,32]**

ACCESS PROGRAMME	2013/2014		2014/2015		2015/2016		All Years	
	F%	M%	F%	M%	F%	M%	F%	M%
LEAPS	-	-	1.8	26.3	4.7	37.2	2.1	22.0
SWAP	-	2.5	-	5.3	2.3	11.6	0.7	6.4
Summer School	-	-	1.8	1.8	-	4.7	0.7	2.1
Other UK Access	14.6	82.9	17.5	45.5	11.6	27.9	14.9	51.1

Table 9: Gender ratios of Access Programme students

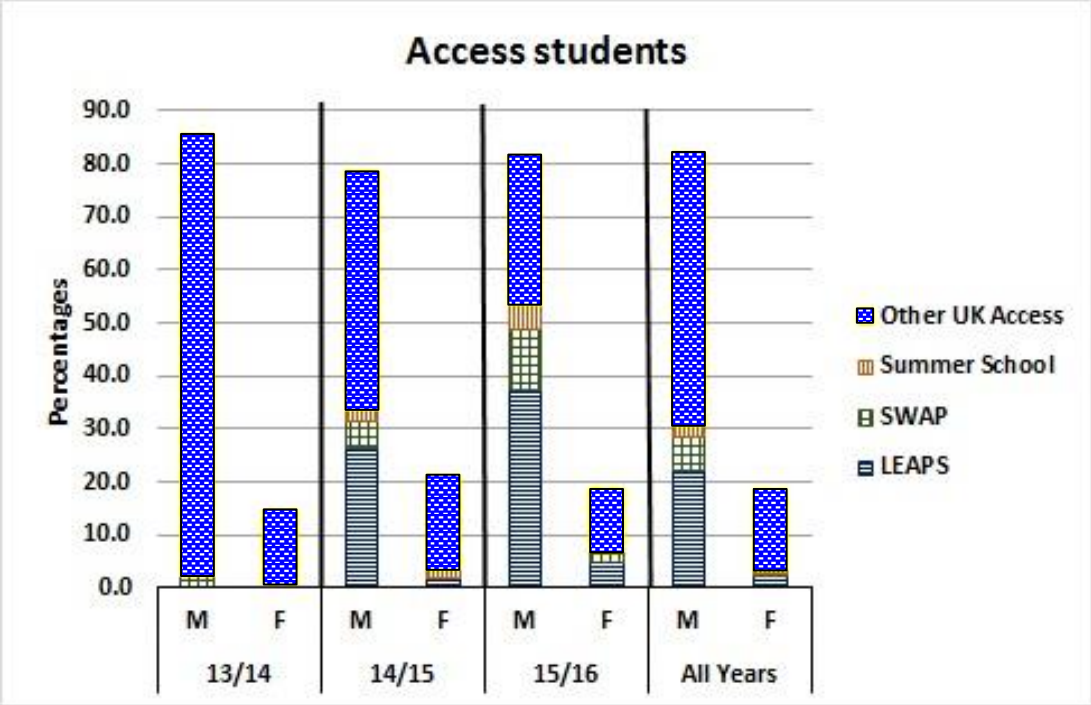

Figure 3: Gender ratios of Access Programme students

The data in Table 9 (and Figure 3) indicate that student numbers from other UK Access programmes decreased from about 97% in 2013/14 (of which 15% were female) to about 40% in 2015/16. Over the 3 years, the gender split across all access programmes is 18:82, which compares well with the HESA average for all students in Engineering and Technology of 16:84. LEAPS is increasing and in 2015/16 contributed about 49% of SEBE's access intake, with the percentage of female students increasing to 11%. The School will further target female LEAPS students with, for example, taster afternoons **AP[26,31]**. A Community Moodle page for Women in Engineering will be established for targeted outreach (Section 5.6) **AP[32]**.

(ii) Numbers of undergraduate students by gender

Table 10 shows the student numbers for the past 3 years by subject group. The MEC programmes have the largest number of students and the BSV programmes have the largest proportion of female students (25%). Over the three-year period the average female to male student ratio is 14:86, which matches exactly with the HESA Engineering and Technology 2013/2014 data. Table 11 provides the percentage data.

UG student numbers - full-time and part-time	2013/14		2014/15		2015/16		All Years	
	F	M	F	M	F	M	F	M
Civil &Transportation (CTR)	39	258	35	255	34	242	108	755
Mechanical (MEC)	40	387	54	420	62	419	156	1226
Electrical & Electronic (ELE)	5	134	8	142	16	161	29	437
Building & Surveying (BSV)	61	211	70	205	84	226	215	642
All UG Students	145	990	167	1022	196	1048	508	3060

Table 10: UG student numbers by Subject Group.

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Undergraduate students %	CTR		MEC		ELE		BSV		ALL		HESA	
Year	**F%**	**M%**	**F%**	**M%**	**F%**	**M%**	**F%**	**M%**	**F%**	**M%**	**F%**	**M%**
2013/14	13	87	9	91	4	96	22	78	13	87	14	86
2014/15	12	88	11	89	5	95	25	75	14	86		
2015/16	12	88	13	87	9	91	27	73	16	84		
Mean	12	88	11	89	6	94	25	75	14	86		

Table 11: Gender ratio of UG students by Subject Group by year

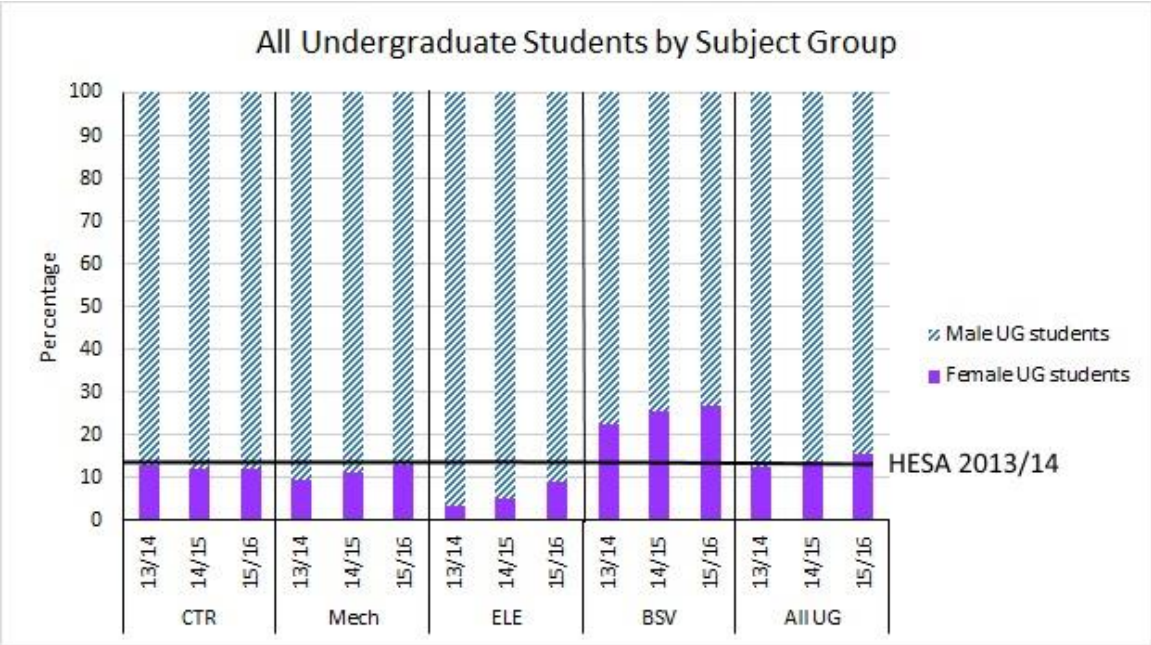

Figure 4: Gender ratio of students by Subject Group

The data in Table 11 (illustrated in Figure 4) shows that the percentage of female students is increasing in three subject groups, the exception is CTR. In 2013/14, overall percentage of female students was slightly below the HESA value (14%). However, due to the higher percentage of female students in BSV, the percentage of female students has since risen (above the HESA value) to 16%. The BSV programmes compare favourably with the HESA data for Engineering and Technology, but less so to the HESA Architecture, Building and Planning data (female:male ratio of 33:67). Neither of these HESA areas is an exact match for the School's BSV programmes.

Full-time / part-time split

The data in Table 12 (represented in Figure 5) shows the split between full-time and part-time students by gender. It is seen that the percentage of part-time students is small (13%) and that the percentage of female part-time students is remaining constant (2%). The majority of part-time students are working engineers, and the gender balance in industry is currently 9%, with only 6% of accredited engineers being female[1]. The percentage of full-time female students is showing a small increase year-on-year. HESA data is only available by study mode and gender rather than by SET, study mode and gender, so comparing data in Table 12 is not feasible.

Attendance	**Full-time**		**Part-time**		**HESA Full-time**		**HESA Part-time**	
Year	F%	M%	F%	M%	F%	M%	F%	M%
2013/14	11	77	2	10	40	34	16	10
2014/15	13	74	2	11				
2015/16	14	72	2	12				
Mean	13	74	2	11				

Table 12: Gender ratio of UG students by mode of attendance

1 WES (2016). *Statistics on women in engineering*. Women in Engineering Society. http://research.swe.org/wp-content/uploads/2016/08/women-in-engineering-statistics-march2016.pdf

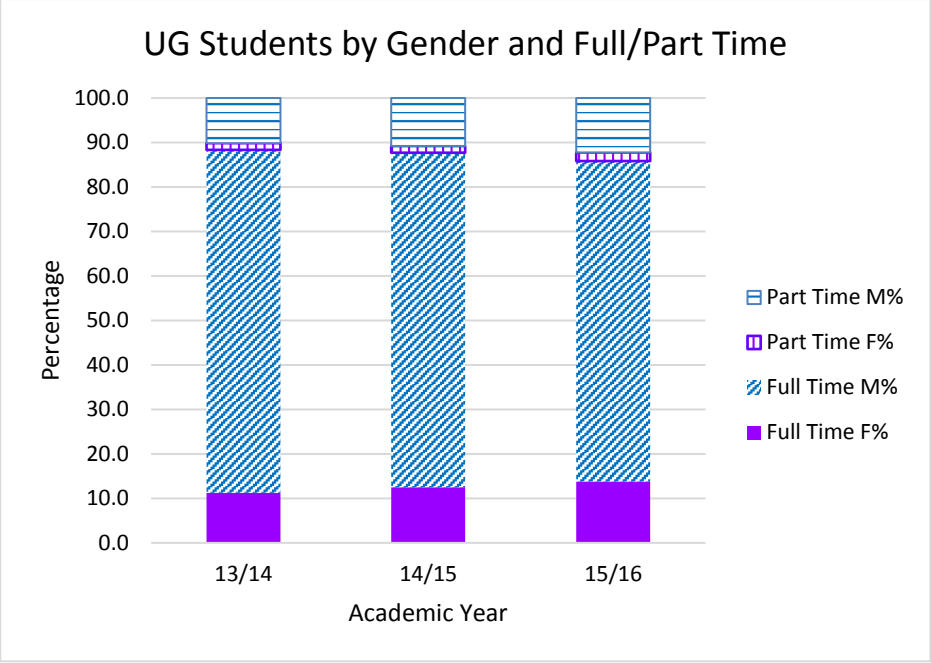

Figure 5: Gender ratio of students by mode of attendance

Applications, Offers and Acceptances

Table 13 shows the numbers of applicants, offers and acceptances over the past three years (illustrated in Figure 6). The numbers of women applying has increased (by 13%) over the past three years and, therefore, the number of offers has also increased. The offer-acceptance ratio is consistently higher for female students, and the acceptance-offer ratio for female students has moved ahead of the male ratio.

YEAR	2013/14			2014/15			2015/16		
	Apply	Offer (%)	Accept (%)	Apply	Offer (%)	Accept (%)	Apply	Offer (%)	Accept (%)
Male	1,994	1,539 (77%)	388 (25%)	1,942	1,516 (78%)	465 (31%)	1,988	1,518 (76%)	457 (30%)
Female	320	263 (82%)	64 (24%)	353	289 (82%)	98 (34%)	363	311 (86%)	96 (31%)
Total	2,314	1,802 (79%)	452 (25%)	2,295	1,805 (79%)	563 (32%)	2,351	1,829 (78%)	553 (30%)

Table 13: UG student applicants, offers and acceptances

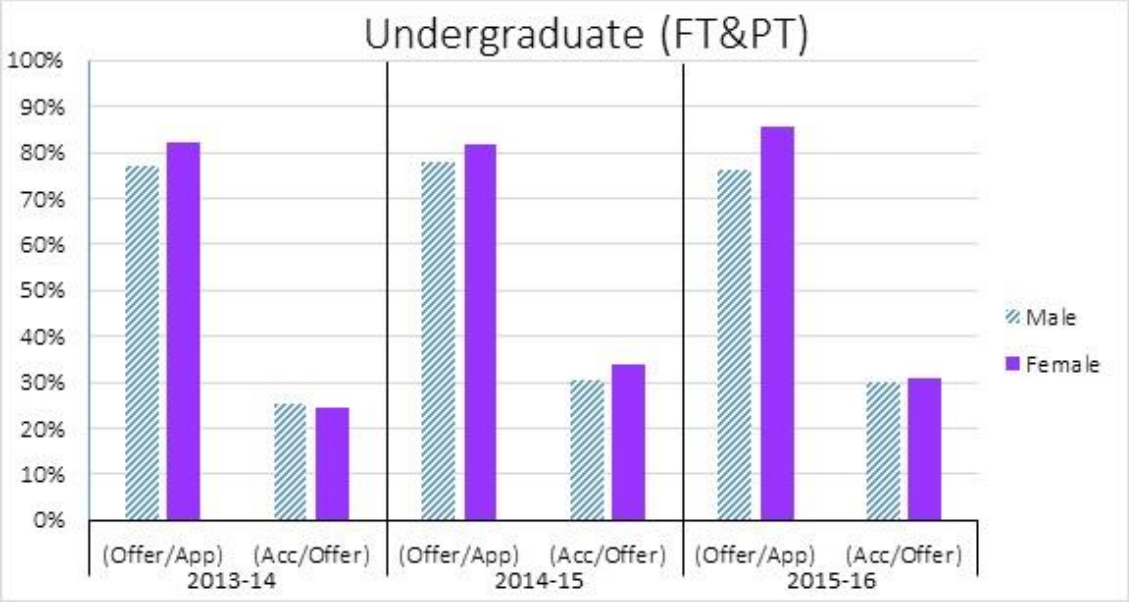

Figure 6: UG student applicants, offers and acceptances.

Many actions over a number of years may have contributed to these improvements These, include wider equality and diversity representation, male and female student "Ambassadors" taking prospective students on tours, outreach activities (Section 5.6 viii), *Connect* activities and increasing representation of women on the website and printed material (Section 5.6 vii). Existing and new actions will be utilised to ensure improvements continue.
AP[15,17,29,33,34,35]

Degree classification

Degree classification data is given in Table 14, and shows percentages by gender for all degrees. Honours degree percentages for undergraduate students are shown in Figure 7, along with the HESA percentages for Engineering and Technology. Overall, results show that a larger percentage of female students consistently achieved First class honours compared to male students. The gap is growing and was 41.7% female to 25.0% male in 2015/16. For all 3 years the female percentage was above the HESA value of 30.5%. In addition, a smaller percentage of female students consistently obtain Third class honours and the data for 2014/15 and 2015/16 are below the HESA figure of 4.1%. These trends are established in SEBE.[2]

2 Stupart A. and Dencer-Brown I. (2016). Analysis of SEBE direct entry student data to assess retention and academic achievement. Edinburgh Napier University, LTA Conference.

Year	Class	F%	M%	Honours F%	Honours M%	HESA F%	HESA M%
13/14	1st	28	16	34.0	22.1	30.5	27.6
	2(i)	34	31	42.6	43.9	44.2	41.3
	2(ii)	16	19	19.1	27.3	21.2	24.4
	3rd	3	5	4.3	6.7	4.1	6.8
	Dist	9	10				
	Ord	10	20				
14/15	1st	28	15	39.1	27.5		
	2(i)	34	24	47.8	42.2		
	2(ii)	8	15	10.9	27.0		
	3rd	2	2	2.2	3.4		
	Dist	12	11				
	Ord	17	33				
15/16	1st	28	17	41.7	25.0		
	2(i)	26	32	38.9	48.3		
	2(ii)	13	15	19.4	23.3		
	3rd	-	2	-	3.4		
	Dist	9	7				
	Ord	24	26				

Table 14: Degree attainment data by gender
Dist = Distinction, Ord = Ordinary

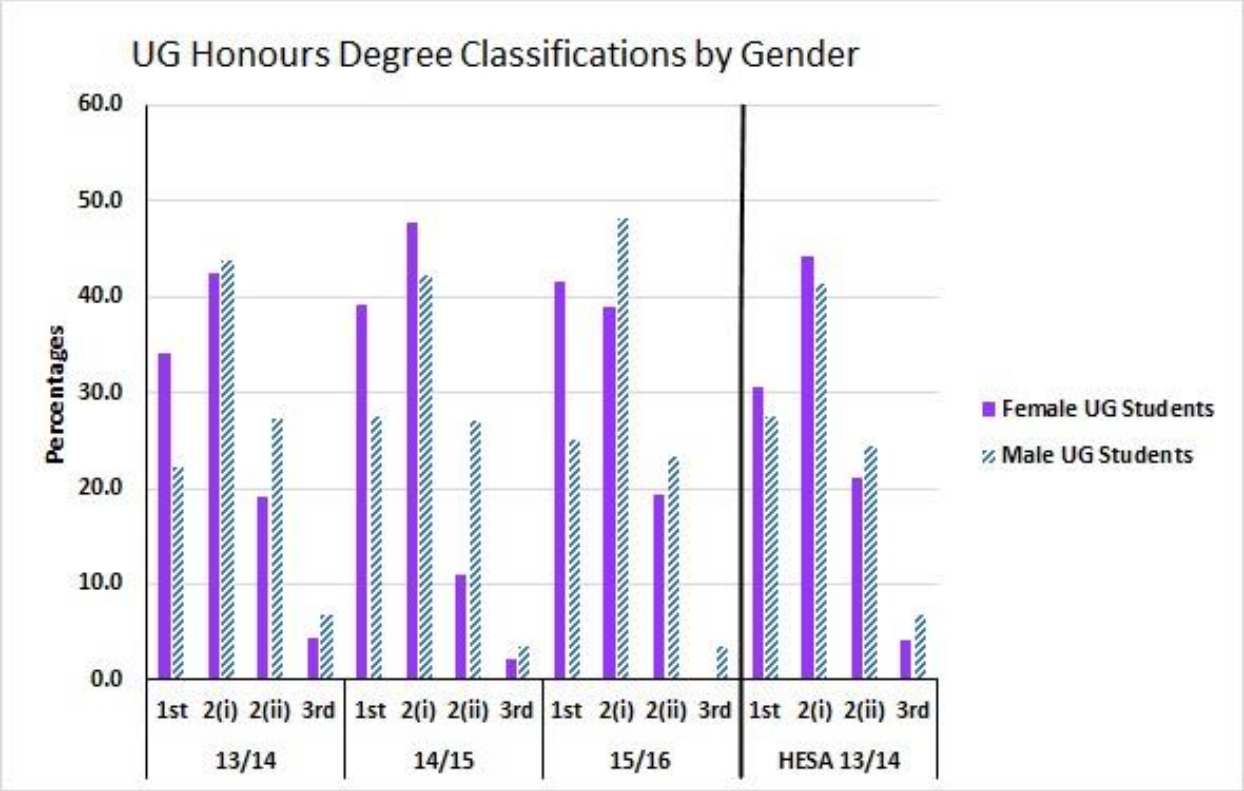

Figure 7: Honours degree percentages by gender

A significant percentage of both genders exit with ordinary degrees, and this is partly due to the requirements of the large numbers of DE students.

Two initiatives are on-going related to improving undergraduate attainment:

1. Many students come from partner colleges through the well-established Associate Student programme where increasing activities for supporting female articulating students has become a focus **AP[16,27]**.

2. In response to calls from industry and professional bodies, credit bearing industrial placements will be offered on some undergraduate programmes. Means of promoting take up by female students will be considered **AP[28]**.

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

The PGT provision has 18 MSc programmes. These are delivered in full-time, part-time and distance learning modes. Student numbers for each mode are shown in Table 15.

Year	Full-Time	Part-Time	Distance Learning	Total
2013/14	151	29	121	301
2014/15	185	32	119	336
2015/16	164	28	142	334
Total	500	89	382	971

Table 15: PGT student numbers

The gender split for each mode is given in Table 16 and illustrated in Figure 8. The percentage of women choosing part-time programmes has increased (to 32%), and compares well with the HESA data (22.4%), but the numbers are only 9% of the total PGT count.

The gender balance for the full-time students has improved since 2014/15 and compares well with the HESA data. The School will continue to encourage women to study PGT programmes, particularly full-time and distance learning **AP[14]**, alongside other initiatives (e.g. **AP[15,29,35]**).

Year	**2013/2014**		**2014/2015**		**2015/2016**		**Total**	
Delivery mode	F%	M%	F%	M%	F%	M%	F%	M%
Full-Time	26	74	18	82	21	79	22	78
Part-Time	14	86	31	69	32	68	26	74
Distance Learning	23	77	21	79	18	82	21	79
All PG Taught	24	76	20	80	21	79	22	78
HESA PG Taught	22.4	77.6						

Table 16: PGT students by gender and delivery route

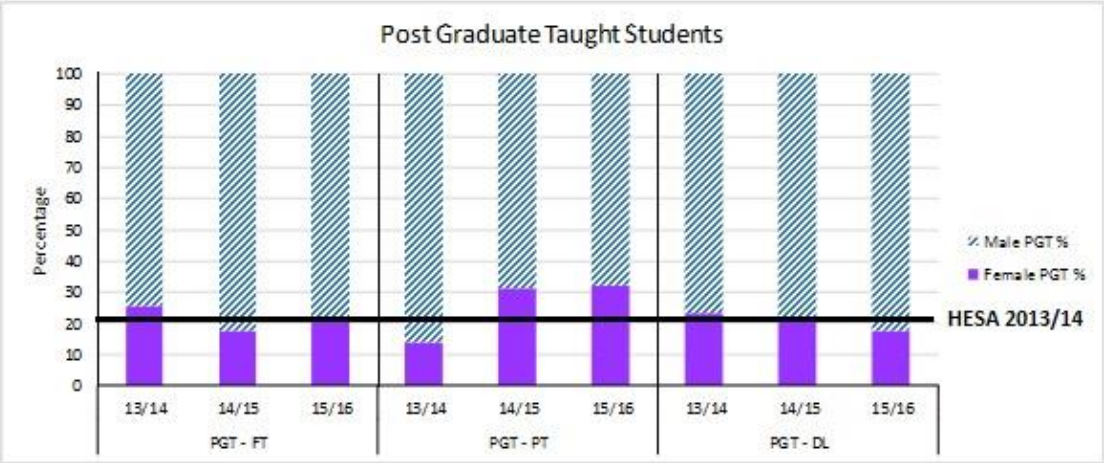

Figure 8: PGT students by gender and delivery route

Applications, Offers and Acceptances

The data in Table 17, illustrated in Figure 9, shows numbers of applicants, offers and acceptances for PGT students. Application numbers are reducing, but the female reduction (7%) is smaller than that for males (14%) over the 3 years. As for UG data, the application-offer female ratio has increased over the 3 years and is consistently higher than the male ratio. The overall offer-acceptance ratios have increased over the 3 years, but are similar between genders. A key PGT action is for SEBE to encourage applications from women. **AP[14]**

Year	**2013/14**			**2014/15**			**2015/16**		
	Apply	**Offer (%)**	**Accept (%)**	**Apply**	**Offer (%)**	**Accept (%)**	**Apply**	**Offer (%)**	**Accept (%)**
Male	983	671 (68%)	190 (28%)	985	716 (73%)	231 (32%)	812	590 (73%)	192 (33%)
Female	209	150 (72%)	52 (35%)	208	160 (77%)	43 (27%)	195	147 (75%)	52 (35%)
Total	1,192	821 (70%)	242 (31%)	1,193	876 (75%)	274 (30%)	1,007	737 (74%)	244 (34%)

Table 17: PGT student applicants, offers and acceptances

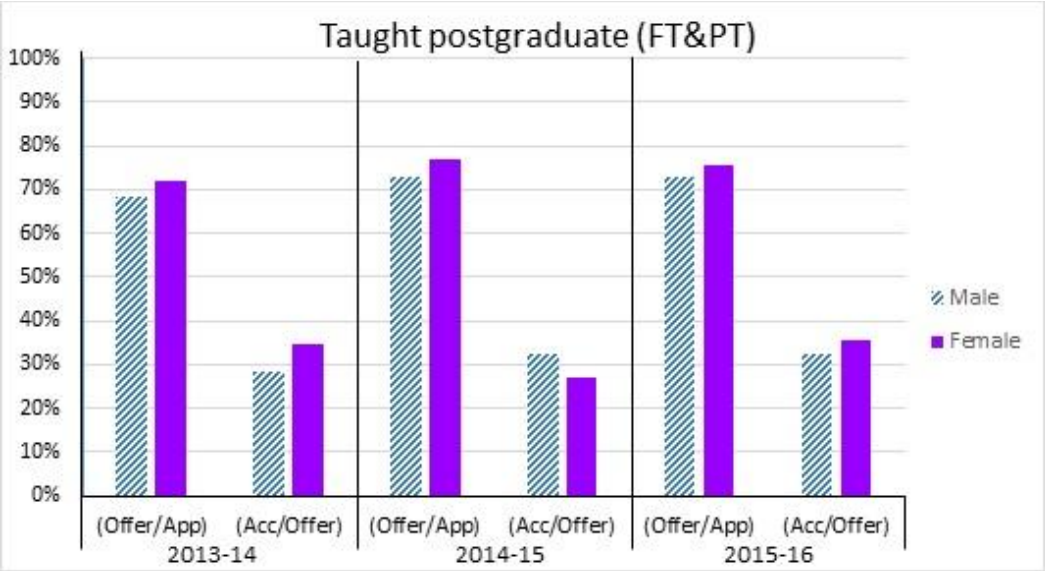

Figure 9: PGT student applicants, offers and acceptances

Degree classification

The data in Table 18 (illustrated in Figure 10), gives the gender breakdown for the postgraduate results. This shows that the percentage of female students gaining a distinction has reduced over the past 3 years. This is a concern, especially given (a) the positive female undergraduate attainment data (Table 14) and (b) the increasing application-offer ratio for female students. The issue was discussed at FG2, and the LTAC has been actioned to investigate **AP[4]**.

Year	Class	F%	M%
2013/14	**Distinction**	37	63
	Pass	14	86
2014/15	**Distinction**	29	71
	Pass	27	73
2015/16	**Distinction**	20	80
	Pass	16	84
Overall	**Distinction**	29	71
	Pass	19	81

Table 18: PGT results by gender

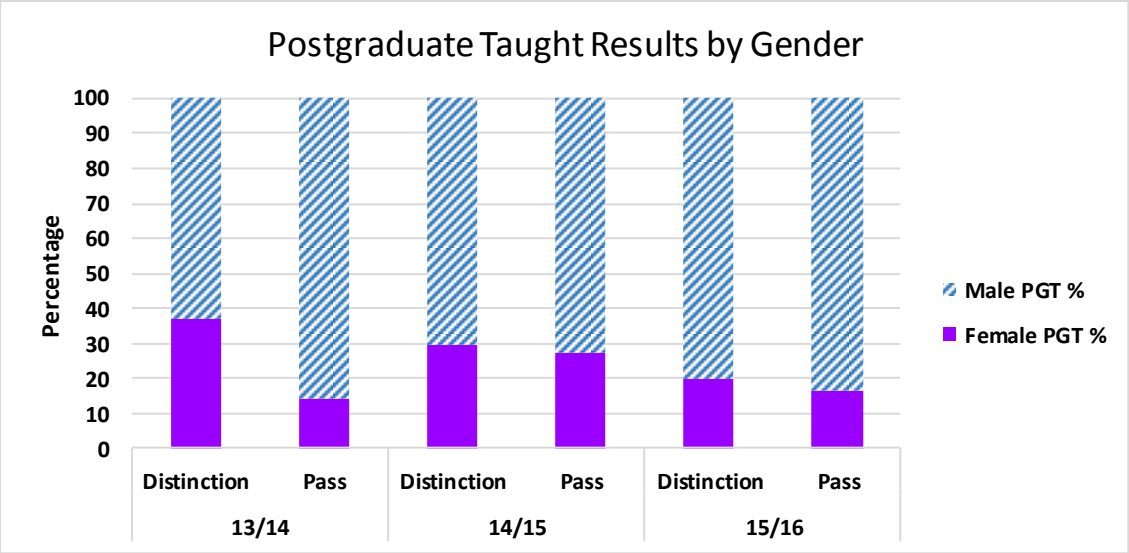

Figure 10: PGT results by gender

Degree completion
The numbers of students completing their degree is shown in Table 19.

Year	Female		Male		Total		From Table 15	
							Total number of students	
2013/14	27	16.9%	133	83.1%	160		301	53%
2014/15	52	27.6%	136	72.4%	188		336	56%
2015/16	30	16.8%	149	83.2%	179		334	54%
Total	109	20.4%	418	79.6%	527		971	54%

Table 19: PGT student completion

This data might suggest that only 54% of students complete. However, it should be noted that more than half of the students study either part-time or distance learning (see Table 16) and won't complete for two years or more, resulting in a higher completion rate. The percentage by gender figures indicate (in comparison with male to female student numbers, Table 16) that female attainment matches student numbers **AP[5]**.

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

PGR numbers have been growing in recent years, due to both the University's strategy and SEBE's research plan. However, numbers remain small (Tables 20 & 21, Figure 11).

Year	Full-Time	Part-Time	Total	Female	%	Male	%
2013/14	12	9	21	3	14%	18	86%
2014/15	16	11	27	5	19%	22	81%
2015/16	28	10	38	12	32%	26	68%
Total	56	30	86	20	21. 7% (mean)	66	78.3% (mean)

Table 20: PGR student numbers by gender and mode

Year	2013/2014		2014/2015		2015/2016	
Delivery mode	**F%**	**M%**	**F%**	**M%**	**F%**	**M%**
Full-Time	25	75	31	69	43	57
Part-Time	-	100	-	100	-	100
All PG Research	14	86	19	81	32	68
HESA PG Research	24.1	75.9				

Table 21: PGR percentage student numbers by gender and mode

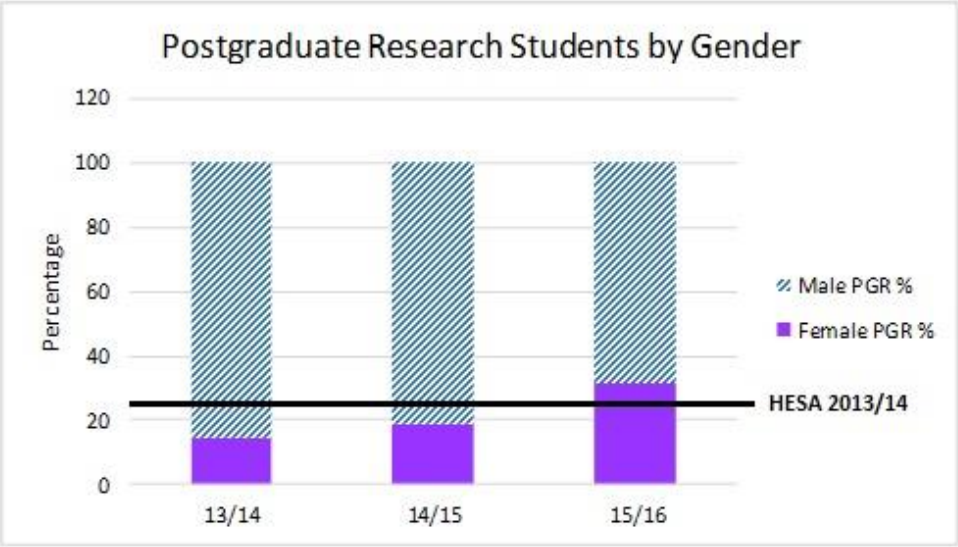

Figure 11: PGR students by gender

The percentage of women enrolling on PGR degrees has increased over the three years and the 2015/16 figure (32%) is above the HESA data (24%). Feedback from current students indicates that the availability of University scholarships has increased both the number of students applying and the current number of full-time students. Also, international female students viewed themselves as having more family support for study abroad if a University scholarship was available (Table 6: meeting with PGR students, FG 2). **AP[23,27,30]**

Applications, Offers and Acceptances

The data in Table 22 (illustrated in Figure 12), suggests that there is a better conversion rate from offer to acceptance than from application to offer. This is to be expected since research areas are usually very specific; so only a proportion of applicants may be appropriate. While the numbers are relatively small, female offers and acceptances are rising and almost always are better than the equivalent male figure.

Year	**2013/14**			**2014/15**			**2015/16**		
	Apply	**Offer (%)**	**Accept (%)**	**Apply**	**Offer (%)**	**Accept (%)**	**Apply**	**Offer (%)**	**Accept (%)**
Male	37	10 (27%)	2 (20%)	26	15 (58%)	11 (73%)	18	13 (72%)	12 (92%)
Female	10	3 (30%)	1 (33%)	5	4 (80%)	4 (100%)	10	9 (90%)	8 (89%)
Total	47	13 (29%)	3 (27%)	31	19 (69%)	15 (87%)	28	22 (81%)	20 (91%)

Table 22: PGR student applicants, offers and acceptances

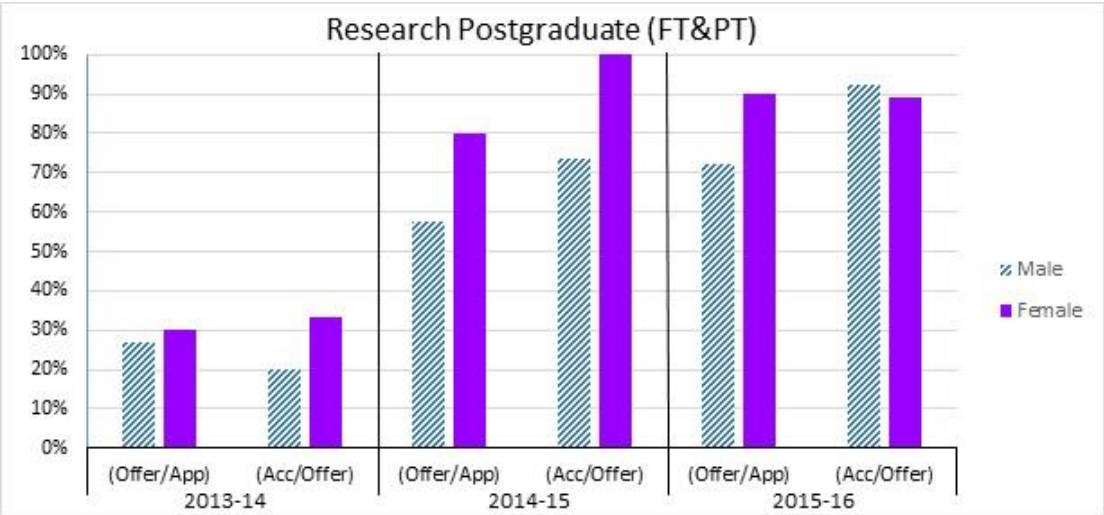

Figure 12: PGR student applicants, offers and acceptances.

Degree attainment

The data in Table 23 (illustrated in Figure 13) shows PGR degrees completion by gender. The number of completions is small, but shows a poor picture of female attainment. However, the students who completed in 2013/2014 enrolled in at least 2010/2011. Therefore, the expectation is that the recent increases in intake and improvement in gender balance described above, will show positive attainment and gender balance results from 2017/18 and beyond **AP[36]**.

Year	PhD	MRes	Total	Female		Male	
2013/14	10	2	12	5	42%	7	58%
2014/15	10	2	12	3	25%	9	75%
2015/16	11	4	15	2	13%	13	87%
Total	31	8	39	10	-	29	-
Mean	-	-	-	3	27%	10	73%

Table 23: PGR degree attainment by gender

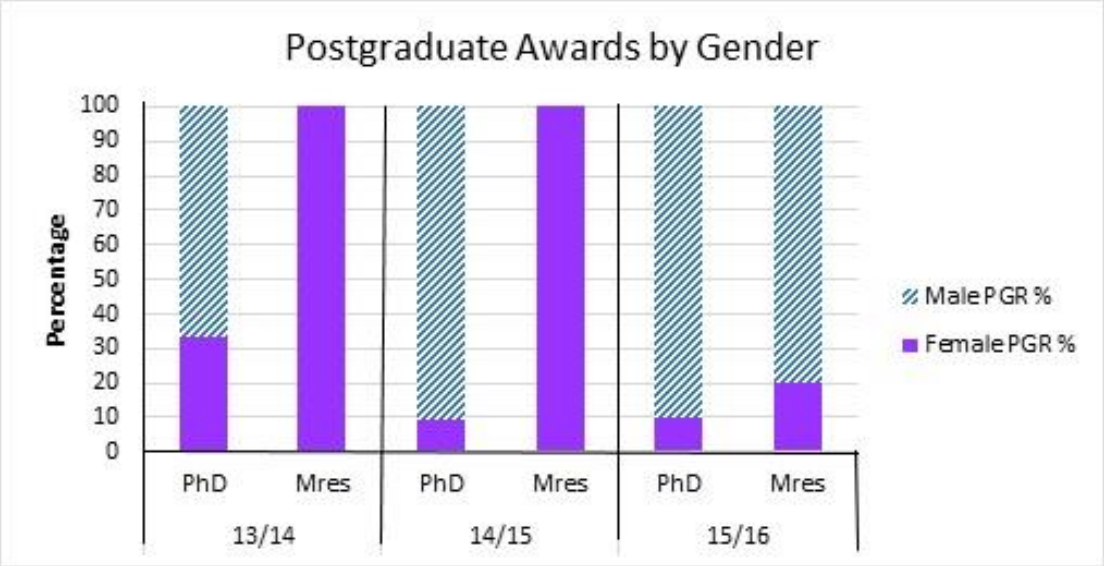

Figure 13: PGR degree attainment by Gender

(v) Progression pipeline between undergraduate and postgraduate student levels

The data in Table 24 shows numbers of postgraduate students who studied their undergraduate degree at Edinburgh Napier. The School has successful MEng programmes in all three engineering sectors (not accounted for in this table). Only 4 or 5 female UG students remain in SEBE each year, but this represents 15% of the total, therefore, broadly equivalent to the general UG percentage of female students in SEBE (Table 11). The small numbers set against earlier findings on female PG application and attainment, increase the need to encourage female UG progression **AP[14, 30]**.

	Year	F	M	Total		F%	M%
UG---PG Full-Time	**2013/14**	X	X	X		27	73
	2014/15	X	X	X		22	78
	2015/16	X	X	X		18	82
UG---PG Part-Time	**2013/14**	X	X	X		-	100
	2014/15	X	X	X		-	100
	2015/16	X	X	X		25	75
Total					Mean	15%	85%

Table 24: Undergraduate to postgraduate progression
No students followed the UG to PG Distance Learning route

4.2 Academic and research staff data

(i) Academic and research staff by grade and gender

The numbers of by grade and gender over the past three years are given in Table 25 and presented in Figure 14.

Academic staff:

All staff	2013/14			2014/15			2015/16		
	Male	Female	%F	Male	Female	%F	Male	Female	%F
Grade 5	1	3	75	3	2	40	-	-	-
Grade 6	33	3	8	31	3	9	32	7	18
Grade 7	15	2	12	15	2	12	14	2	13
Grade 8 & above	15	2	12	16	2	11	14	2	13
Total	**64**	**10**	**14**	**65**	**9**	**12**	**60**	**11**	**15**

Research staff:

All staff	2013/14			2014/15			2015/16		
	Male	Female	%F	Male	Female	%F	Male	Female	%F
Grade 4	5	1	17	3	-	-	3	1	25
Grade 5	7	6	46	8	4	33	6	3	33
Grade 6	5	-	-	6	-	-	3	-	-
Grade 7	3	-	-	3	-	-	3	-	-
Total	**20**	**7**	**26**	**20**	**4**	**17**	**15**	**4**	**21**

Combined (Academic and Research staff) versus HESA % female staff:

All staff	2013/14			2014/15			2015/16		
	Male	Female	%F	Male	Female	%F	Male	Female	%F
Grade 4-7	69	15	18	69	11	14	61	13	18
Grade 8 & above	15	2	12	16	2	11	14	2	13
HESA:									
Grade 4-7			43.7						
Grade 8 & above			18.5						

Table 25: Numbers of SEBE staff by Grade and gender.

Prior to 2014/15, new lecturing staff were appointed to Grade 5 for a two-year probation before moving up to Grade 6, and now new lecturers are appointed to Grade 6.

Across the three years, in line with reducing numbers of SEBE total staff (101 to 90), the number of female staff has reduced by two (17 to 15). The HESA data for 2013/2014 by SET subject area has 6 categories that are relevant to SEBE, including the general engineering category, which gives the percentage of female staff as 19.4%. The percentage of female academic staff in SEBE in the three-year period compares reasonably well with this, though

numbers dipped slightly in 2014/15. The statistics for Grades 4 – 7 and Grade 8 and above don't compare well with the HESA data, but the HESA data is for all SET academic staff and has not been broken down by subject area. Work continues to attract more women to join the School. **AP[22]**

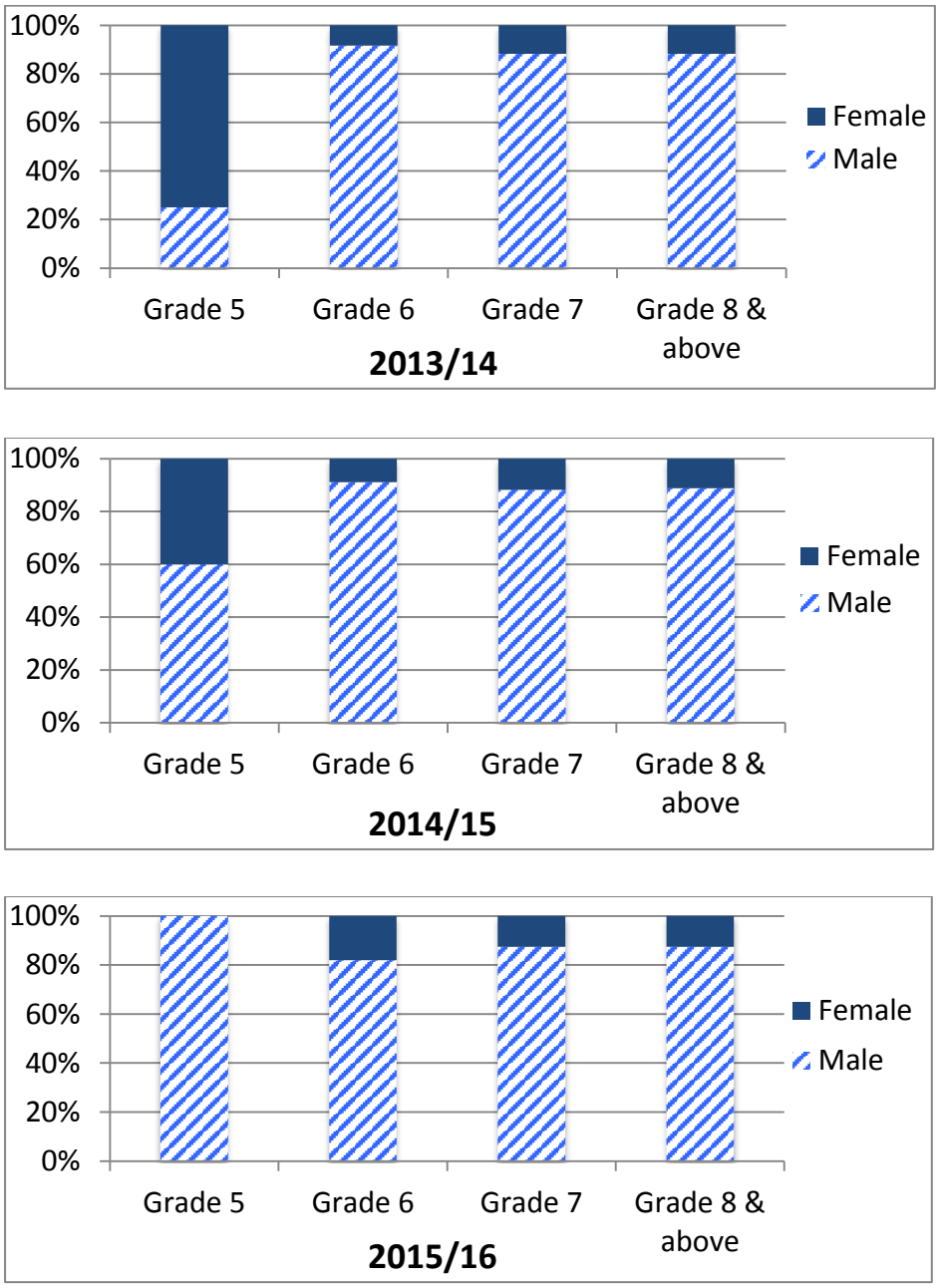

Figure 14: SEBE staff by grade and gender for each year

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

SEBE employs 20 Grade 5 lecturers on zero-hours contracts (Table 26). The University recognises that zero-hours contracts can have a detrimental effect on career development and are reviewing current zero-hours usage. The new guidance and contract types developed by the University will be adopted by SEBE. **AP[7]**

Thirteen staff have fixed-term contacts, predominantly Grade 5 or 6 researchers. All staff, regardless of contract type, receive fair treatment (e.g. induction, PDR, access to appropriate training).

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

The turnover data presented in Table 27 shows that three female members of staff (10% of turnover) left over the three-year period, which is below the SEBE staff percentage (Table 25). Over three years the turnover of academic staff is low (29 staff members). With proportionately more male staff at the top of the age spectrum, retirements have accounted for many of the male staff leavers.

[5] Supporting and advancing women's careers *(word count 5967)*

5.1 Key career transition points: academic staff

(i) Recruitment

SEBE's recruitment and selection processes follow and are compliant with the University's equal opportunities policy and legal requirements. An online application process is used with HR: (1) advising managers on role profiles and adverts (which include the Athena SWAN institution bronze award), and (2) sourcing appropriate advertising routes. All staffing requests are submitted by the line manager via an online authorisation system. A transparent selection process is employed. Shortlisting is carried out by a panel (for academic roles this is typically the Dean, line manager and subject specialist) who, using a standard matrix, check application evidence against essential criteria, aligned to the published academic framework. For all academic roles a member of the ULT and the Dean of School sit on the interview panel together with additional academic staff from the subject area. These additional staff help ensure that an acceptable gender balance is present in the interview panel. Each academic generic role profile recognises education, pastoral and welfare role duties.

All recruitment panel members are required to complete mandatory recruitment and selection training. All applicants provide Equality and Diversity data at application stage, and upon offer of position, an additional E&D questionnaire is completed alongside a Health surveillance questionnaire to identify any reasonable adjustments needed for new employees ahead of start date. The University has also recently converted from the two ticks disability scheme to the new "Disability Confident Scheme"' at level 2 status and remains committed to supporting the scheme.

SEBE encourages applications from women. In addition for senior appointments, consideration of gender demographics is made when screening direct applications. Here relevant agencies are given a brief to specifically include female applications where the role level University-wide is below 50%. Final offers of all roles are, however, clearly made on the grounds of merit for the role. HR anticipates that this emphasis on gender demographics will shortly be taken forward across all levels of role.

The University advertises role as per the need within the business. However, consideration is given to applicants who (through the application process), request a flexible working need in hours, working pattern etc. and accommodations are granted where possible.

Tables 28-33 provide an overview of the number of applications for, and appointments to, advertised job vacancies in the past three academic years. In this period 18 appointments were made from 515 applications. The genders of the applicants are given as totals for the three-year period and as percentages.

Gender	Number	Percentage
Female	83	16
Male	432	84
TOTAL	515	100

Table 30: Applicants to advertised job vacancies over 3 year period – Gender summary

Gender	Number	Percentage
Female	5	28%
Male	13	72%
TOTAL	18	100%

Table 32: Appointments to advertised job vacancies over 3 year period – Gender summary

Advertised position	Declared Gender	Total Applicants %	Total Appointees %
Grade 4	Female	23.5	60.0
	Male	76.5	40.0
Grade 5	Female	28.2	50.0
	Male	71.8	50.0
Grade 6	Female	9.4	12.5
	Male	90.6	87.5
Grade 7	Female	18.2	-
	Male	81.8	-
Grade 8 & above	Female	7.1	0
	Male	92.9	100.0

Table 33: Percentages of application and appointees by gender in the 3-year period.

(ii) Induction

There are two levels to the induction process: *university* and *local*. Local induction is role specific and led by the manager and takes place over the first 3 months.

The induction process commences in the offer letter as new staff are provided with information on working at the University. On their first day new members of staff receive links to all online induction material. New staff are advised that all training events attended are recorded on their personal learning account. HR collate developmental learning requirements centrally and source and deliver training solutions based on demand and requirement.

The University induction includes a half-day workshop "*Working at Edinburgh Napier"* organised by the University's Capability Team. A full day, two-part event is organised for new lecturers by the Department of Learning & Teaching. This focuses on the key aspects of academics' teaching role, and provides an opportunity to network with colleagues from across the University. New research staff benefit from a RIO led research specific induction programme. Overall attendance at induction events is fairly poor across the University (refer to Tables 34 and 35) This is possibly because of the perceived higher relevance of the local induction. SEBE had 31% attendance at the two mandatory events and an analysis by gender shows that female staff attendance was higher than male. Work is planned to improve participation in these induction events. **AP[9]**

EVENT		Workshop		LTA		Attendance %
	Total	Attended	Absent	Attended	Absent	
SEBE	13	4	9	4	9	31%
University	131	43	88	47	84	52%

Table 34: Induction event attendance by new academic staff (2013/14 to 2015/16)

Induction Event	Expected		Attended		Absent	
	Female	Male	Female	Male	Female	Male
Workshop	3	10	2	2	1	8
LTA	3	10	3	1	-	9

Table 35: Academic staff induction event attendance by gender (2013/14 to 2015/16)

(iii) Promotion

The University has two career promotion routes:

1. The new academic promotion framework process for both academic and research staff.
2. Professional, support and research staff can apply to be re-graded due to increased responsibility, or can apply for promotion if a vacancy exists at higher grade.

In Session 2014/15 the University introduced a new academic appointment and promotion framework with four pathways: Research, Learning and Teaching, Professional Practice and Enterprise. Prior to 2015, staff applied for promotion based on achievements to date. To assist all staff with the new framework, staff guidance and training was provided. Workshops were held to provide all staff the opportunity to learn about the new promotion criteria.

All Academic Promotion and Award of Title applications are assessed by a gender-balanced panel chaired by the Principal. Award is based on merit, and unconscious bias is considered in all decision making. Within the promotion guidance there is provision for applicants to submit details of any mitigating factors such as certain disabilities, extended periods of illness, maternity leave etc. The panel considers mitigating factors only if they have impacted on an individual's ability to meet the volume of academic output. The panel comprises Professors from Napier and other UK Universities. External references are also sought. Both successful and unsuccessful applicants are provided with face-to-face and written feedback on their application and career development plans are then developed from this. The outcomes of the three most recent promotion rounds for SEBE staff are summarised in Tables 36 and 37.

The female promotion success rate is considerably better than that for males, although the numbers of females in the promotion process is small. The expectation is that improvements in female REF contribution (see below) and influential committee representation (Section 5.6), together with SEBE and University initiatives (Section 5.3), will have an ongoing positive impact. **[AP20]**

(iv) Department submissions to the Research Excellence Framework

In November 2013, 108 Napier staff were submitted to REF: 44 (41%) were female and 64 (59%) male. These figures were slightly out of line with the University's 45:55 gender split amongst research and academic staff. The detail of the REF submission for the STEMM schools is given in Table 38, with data on RAE2008 provided for comparison.

Research assessment submission ratios	RAE2008 Female	RAE2008 Male	REF2014 Female	REF2014 Male	% of female SEBE staff who were part of the REF submission
Other STEMM	28	39	19	26	53%

schools[*]	(42%)	(58%)	(42%)	(58%)	
SEBE	6 (11%)	49 (89%)	6 (19%)	26 (81%)	25%

Table 38: Edinburgh Napier University submissions to RAE2008 and REF2014
[*] (a) Computing (b) Applied Sciences (c) Health & Social Care

SEBE has seen the percentage of female staff in its submissions rise from 11% to 19%. Yet the percentage of SEBE female staff who were part of the REF2014 submission was 25% which was below the other STEMM schools. The number of SEBE female staff will increase for the 2020 REF exercise, in reflection of the growth in research activities. **AP[8]**

5.2 Key career transition points: professional and support staff

Not applicable to this Bronze Award submission.

5.3 Career development: academic staff

(i) Training

The School benefits from the University led training on academic leadership and management, research funding application and project management, exam boards and quality aspects, and other LTA and research areas. Discipline specific training and development needs are identified and agreed during the PDR (see Section 5.3 (ii)) and, subject to available funding and line management approval, staff can attend external courses and events to develop their subject areas. SEBE's close interaction with Equate ensures that all SEBE staff are aware of their courses, workshops and career clinics and coaching opportunities.

Postgraduate Certificate (PgCert) in Learning and Teaching in Higher Education

All new academic staff must undertake the PgCert LTHE, which is delivered by DTLE. This recognised qualification ensures all new staff learn best practice and emerging developments and technologies to enhance their LTA work. Completion of the PgCert is a key PDR objective (see Section 5.3 (ii)) for all new staff.

Unconscious Bias Training

The University's Head of Capability is currently reviewing all learning and leadership development resources, delivery methods, access, uptake and impact. The HR Capability Team has recently launched new Unconscious Bias training following emphasis from an Athena SWAN Institution bronze award action. This training is to form an enhancement to the mandatory induction programme. Separate training will be provided in 2017 for existing staff (regardless of grade and/or gender).

Academic Leadership & Management Development

The University is reviewing its Leadership and Management Development Curriculum for employees. Currently, the Institute of Leadership and Management has been the sole provider of training. HR are determining if alternative training methods would be more suitable. This is part of continuous improvement; and recommendations will be made by December 2016.

Leadership Training - Aurora

The Aurora leadership programme provides an opportunity for female staff to develop core leadership knowledge and skills. The University has invested resources in Aurora with 13 female senior staff attending over the period 2013 to 2015. Following a fresh University call to increase participation, 18 additional staff are enrolled on the 2016/17 programme. This includes 3 staff from SEBE. **AP[13]** This University-wide group will form the foundations for the first Napier "Women in Leadership" network. This development arises from the institutional Athena SWAN action plan.

Staff Mentoring Programmes

The DTLE offers mentoring and coaching development opportunities for those engaged in teaching and supporting learning. There are also opportunities for colleagues engaged in academic practice to be mentored or coached by ENMCA participants or completers. This is also an area being reviewed by the HR to determine an action plan to join up mentoring across function, by requirement, across the University. The RIO also has a dedicated support officer within SEBE and the Action Plan includes work to examine the SEBE take up of RIO research support activities by gender **AP[11,13]** especially given the recent decrease in female research staff (and poor PGT female attainment) (Section 4.1).

(ii) Appraisal/development review

The School recognises the value of conducting Professional Development Reviews, and all staff have an annual PDR. Agreed objectives are SMART and align to the academic framework, the University values and support the achievement of the strategic objectives. An account of PDR completion for 2015/16 is given in Table 39. Tables 40 and 41 provide completion data for SEBE for the same session.

Staff group	University			SEBE		
	Numbers		% Completion	Numbers		% Completion
	Eligible	Participants		Eligible	Participants	
All staff	601	428	71	87	78	90
Female	283	190	67	13	10	77
Male	318	238	75	74	68	92

Table 39: PDR completion rate: SEBE v University (academic & research staff: 2015/16)

	Female			Male		
	Numbers		% Completion	Numbers		% Completion
	Eligible	Participants		Eligible	Participants	
University	256	181	71	286	217	76
SEBE	10	9	90	59	56	95

Table 40: PDR completion rate (academic staff: 2015/16)

	Female			Male		
	Numbers		% Completion	Numbers		% Completion
	Eligible	Participants		Eligible	Participants	
University	27	9	33	32	21	66
SEBE	3	1	33	15	12	80

Table 41: PDR completion rate (research staff; 2015/16)

Fewer female staff participated in PDR than male staff, both at University (67%: 75%) and SEBE (77%: 92%) levels. However, the percentage of uptake of female academic staff in SEBE (90%) is higher than the University level (71%).

The existing PDR process is currently under review at University level following a self-instigated review of process and external audit on performance management (2015). In 2016/17 academic year, paper based PDR's will be replaced with an online process and system named "My Contribution". This will enable a more tailored and in depth conversation between manager and employee, and is expected to improve PDR uptake across the University. **AP[10]**

(iii) Support given to academic staff for career progression

It is in the School's interest to develop the academic staff in order to grow the University's academic reputation and to provide the best student experience possible. Through the PDR and ALD (see below) the necessary support and development for academic staff is identified.

A career development plan forms part of the PDR process, driven by the ALD framework, and identifies training and development needs for individuals. The School recognising that its greatest resource is its staff, and has a philosophy of identifying clear career paths.

Academic Leadership Development (ALD)
The University has recently introduced a leadership development process which is aligned to the new promotion framework. Of 112 applicants in 2014/15, 50% were female, of which 16% were successfully granted award of title and 3% awarded promotion. This compares to 11% men awarded title and 9% awarded promotion. In 2015/16 there were 32 applicants, 15 were female of which, 33% were successfully awarded title and 6% awarded promotion. In comparison, 29% of men were successfully awarded title and 24% awarded promotion. The drop in applications in 2015/16 was a result of staff becoming aware of the clear expectations for evidence aligned to the ALD framework to accompany applications.

(iv) Support given to students (at any level) for academic career progression
Undergraduate and postgraduate students benefit from the School's Open Door policy whereby academic staff make themselves available for academic and pastoral support when available. Students also have a Personal Development Tutor assigned to them. **[AP38]** Career advice is offered by academics as appropriate including of course those interested in a career in academia.

The School runs a weekly research seminar series where PGR students, research staff and academics present their work at a lunchtime meeting with sandwiches provided. All students of the School are welcome to attend and discover more about careers and the nature of roles in academia. Summer placements are offered by the School's research groups for both UG and PGT students, giving students unrivalled opportunity to engage with research and gain a deep insight into the work of the researchers.

PGR students, many of whom are starting their academic careers, benefit from a full research training and support programme running alongside their studies. This programme has input from RIO and the School and equips the students with research skills such as literature critiquing, analytical training, publishing academic papers and thesis writing and preparation for a career in academia **AP[11]**,

(v) Support given to those applying for research grant applications
All academic and research staff are encouraged to be involved in research grant applications. It is recognised that this can be an area where there is significant indirect gender bias arising, relating to ability to work out of normal hours and to rearrange working schedule in response to grant calls. In addition to gender balance in staff hierarchy and within research networks. With this in mind, SEBE has a support system that aims to help everyone, particularly ECRs:

- RIO provides specific assistance to SEBE, available to academic and research staff, providing funding opportunities information, and technical support in application planning and preparation
- SEBE have an internal peer review system for grant applications so that all potential applicants have access to advice and support from more experienced staff
- There is a workload allocation model that recognises time for preparing applications, recognises ECR status and allocates additional time to new staff for developing research.
- Unsuccessful applicants can obtain support and advice via the SEBE peer review system and from RIO. This covers encouragement, advice for improving grant writing, and opportunities for resubmission or other funding sources.

5.4 Career development: professional and support staff

Not applicable to this Bronze Award submission.

5.5 Flexible working and managing career breaks

The University's Equality and Diversity Statement states that recruitment, training and promotion opportunities will be open to all staff on a fair and equitable basis. The University monitors the use of the maternity policy to ensure that it is applied fairly and to ensure that employees are not unreasonably denied access to suitable opportunities. The policy for maternity leave is governed by employment legislation and a University policy.

The University is committed to ensuring that employees on a fixed-term contract of employment whilst on maternity leave are treated no less favourably than comparable permanent employees in respect of their terms and conditions of employment. Fixed-term staff are paid contractual and statutory payments based on entitlement.

Open discussions regarding opportunities for requesting any changes to working pattern, such as part-time or flexible working on return from leave, take place both prior to and after the maternity leave commences. Expectant staff are also encouraged to contact HR at any point with queries, plan changes, or to discuss alterations to work pattern.

(i) Cover and support for maternity and adoption leave; before leave
The University ensures that staff and managers are aware of rights and responsibilities.
Before leave these include:

- *Specific Pregnancy Risk Assessment* – must be carried out for pregnant employees or who have recently given birth or are breast feeding;
- *Time off for Ante Natal Classes* - antenatal care may include relaxation and parent craft classes and if the staff members partner is also a University employee paid time off will be allowed for the partner for up to a maximum of three appointments, subject to the operational requirements of the school/service;
- *Occupational Health assessment and support* - for pregnant staff available if required.

Work cover is arranged by the line manager in consultation with the employee prior to leave and, based on the role and needs of the School; this is normally covered by the appointment of a fixed-term contract employee.

(ii) Cover and support for maternity and adoption leave; during leave
The agreed cover is implemented from just before maternity leave commences and will end a short time after the employee returns to work. Towards the end of the maternity leave the employee, working with their line manager, will agree their "*keeping in touch"* days. The employee will also discuss training needs and/or changes that have occurred which may lead to a request to change working pattern or hours.

(iii) Cover and support for maternity and adoption leave; returning to work
A period of handover from the fixed-term cover employee to the returning member of staff is structured so that the academic provision and support to the students is continuous. In the last few years in SEBE this has proven highly effective with the returning employee. Discussions can commence (or continue) with the line manager on changing the employee's working pattern or hours, which may have become required as a result of childcare. In SEBE, such requests are prioritised and arrangements are made within the teaching team to enable the request to be granted.

In recognition of the substantial costs (which are relatively high in Edinburgh) and availability of childcare and its potential impediment to career progression, the University provides an elective childcare voucher system (based on a salary sacrifice process).

(iv) Maternity return rate

The maternity return rate in SEBE over the past 3 years has been 100%, as shown in Table 42.

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

Policies for paternity, adoption and parental leave are governed by statutory employment legislation. In 2014 the University implemented an enhanced scheme with several benefits such as enabling eligible staff an entitlement to share up to 50 weeks shared parental leave (SPL). During the child's first year, staff with at least one year's service accessing this SPL can receive up to 11 weeks' leave at full pay.

In SEBE the take up of paternity leave is encouraged (principally by the relevant line manager with, if necessary, guidance from HR). The data shows five new fathers took paternity leave, with each taking either one or two weeks' leave (see Table 43). The extent of leave taken is a personal choice for each staff member. The School's flexibility ensured all requests were honoured.

(vi) Flexible working

Napier's Flexible Working Policy allows staff choice in working in a manner conducive to managing work and personal responsibilities within a mutually beneficial framework. Staff are entitled to request flexible and/or part-time working. (The policy also provides support staff with flexitime options). All new SEBE staff are advised of the policies at Induction and consideration is given to all staff who request flexible working. SEBE managerial staff are supported on any issues via the HR Partner (Section 5.6 (ii)).

Wherever possible, accommodation of requests is given. Data is recorded by HR, but it was not possible to access the number of requests. (This is being addressed as part of Napier's Athena SWAN Action Plan). It is known that within SEBE a few flexible working patterns are locally agreed, which in all cases improve work-life balance for the staff **AP[6]**.

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

Three such transitions were requested (all by female staff) and approved in the past three years. Requests to increase from part-time to full-time after a career break benefit the academic output and, therefore, the Dean will almost certainly approve all requests. Implementation will consider any flexible working requests and will include an assessment of whether or not the new arrangement works in practice.

5.6 Organisation and culture

(i) Culture

Culture encapsulates the language, behaviours and other informal interactions that characterise the atmosphere of SEBE.

In recent years the School has become an increasingly diverse, inclusive and international community. Several factors have influenced this, including the friendly and cooperative working environment strongly promoted by the former Dean (with the associated behaviours having become well established in day-to-day working practices). Others include: six international staff members recently joining the CTR and MEC subject groups, together with students from across the globe, and staff interaction with University initiatives (see below). All have had a positive effect. A SEBE Newsletter from the Dean is distributed monthly to all staff, which has proved important for general communications and sustaining a sense of community (especially in a time of on-going changes which SEBE is experiencing). SEBE has a female Disability Contact and students have ready access on campus to wellbeing and inclusion advisers.

The communication channels through the subject groups and the committee structure ensure that information flows well. An atmosphere of mutual respect and support for each other is rooted in the School culture. This is in part due to the work of the previous Dean, and was reflected in the enthusiastic and positive responses from the Focus Groups and internal consultations (Table 6: SGs, LTAC etc). The latest Employee Engagement Survey (EES) (2015) evidenced parts of this, with high scores on issues such as feeling part of SEBE, respect for all staff, approachable/fair managers and equality. The EES results also helped shape the Focus Groups.

Various University level initiatives influence the culture within SEBE, both aligned to the principles of the Athena SWAN Charter and in a more general sense:

- **Employee Engagement Action Group** - set up in January 2016 to take forward actions from the EES. The 19 members (12 of whom are female) are drawn from across the University. The SEBE representatives are active in promoting gender equality and influencing policy for career progression routes for research staff.
- Staff forum called **"Have you Heard"** launched by the EEAG, as a "you said, we listened and did" communication tool. Staff now take part in polls to determine which ideas the University should take forward.
- Re-accredited in July 2016 for the **Healthy Working Lives** Gold award.
- **Investors In People** - 14 SEBE staff contributed to assessments (May 2016) which led to the University's IIP re-accreditation (July 2016). No issues specific to SEBE were raised
- The University joined **Stonewall Scotland** as a Diversity Champion in 2016 - this was to consciously display commitment to equality for all LGBT staff, students and potential staff and students.
- **Inclusivity Week** - run for the first time in October 2016 (SEBE contributed to this; see Outreach activities).

SEBE has discussed the Athena SWAN principles with different internal and external audiences (Sections 3 & 7.2) and focus groups. Together these allowed the SAT to glean first hand opinions and feelings around the culture of the School. The continued work of the SAT beyond November 2016, direct linkage to SLT and implementation of the Action Plan (Section 8) will ensure the principles are properly embedded into SEBE's the culture and working.

Focus Group 1 (14th September 2016)

The Connect "Welcome Lunch" was combined with Focus Group 1. Eighty people participated (Napier & visiting students, Napier and colleges staff, and representatives from industry), 78 of who were women. Gender equality within SEBE and the wider industry sectors was discussed, together with how to best support female students. An active workshop on means to attract female students into the different engineering and construction disciplines followed. The questions were drawn from SAT discussions, student statistics, meetings with subject groups and feedback from a similar event held with the School of Computing. Questions and discussions were also shaped by the findings of the most recent EES which for SEBE (50% response rate) highlighted concerns over: pace of change, lack of social/rest space, demanding workloads, poor career progression and staff retention.

QUESTION/THEME	EXPLANATIONS OFFERED	SELECTED QUOTES
[1] Why do you think fewer women are choosing to study STEM subjects?	• Too few scholarships. • Not enough publicity. • Advice is often negative.	*"It's for men only"* "*Numbers are boring"* *"Stereotypes"* .
[2] What advice were you given about subject choice at school? - and what advice would you give now to girls at school?	• Family advice (brother in law is an engineer. Girls don't do engineering. • Negativity. Advice focused on how hard it would be. • Be prepared to be the only girl in your class. • Do a mixture of science & technical subjects.	"Parents told me to do what I wanted" "Not a girly thing" "Engineering careers do not always have to be all technical" "Don't be intimidated, as the boys in your class will respect you" "Good subject choices can ultimately lead to financial independence"
[3] How could we encourage more female students to join SEBE? (to improve the gender balance) **AP [14,17,29,31,32,33,34]**	• Bring more groups of (primary and secondary) school children into SEBE to experience facilities. • Don't wait until High School before talking to potential students. • Partner with other existing external STEM projects. • Work with industry to develop "taster days" . • Increase involvement with existing initiatives (e.g. STEM champions, primary engineer) and professional bodies.	"More TV coverage - a reality TV "
[4] Why does the Building and Surveying subject group have a higher percentage of female students? Are there lessons to learn?	• Surveying subjects do not require Higher Maths and thus are perceived as less mathematical (which in turn is likely to lead to higher appeal amongst schoolgirls).	"Architectural Technology has always attracted a high proportion of female applicants"

[5] How can we improve the support for female students in the School? **AP[12,16,26,27]**	• Connect is excellent. They must continue their excellent work in the School. • Introduce female PDT for female students. • Consider gender allocation for tutorial and project groups. • A specific direct entry mentor system could help.	"More fellow female students in the class would help/reassure me" "Direct entry female students may feel especially lost" "Can we get involved in Equate, it's part of SEBE or Napier?"
[6] Advice from staff and students from outwith the UK	• Raise the esteem of engineering. • Professional bodies, industry and government all have a role. • This will be a cultural shift which will take generations to filter through. • Have more flexible entry requirements as non-UK qualifications are sometimes not recognised or understood correctly in UK. • First explain the broad concept of engineering.	.

Table 44: Summary of principal comments from Focus Group 1

Note Several actions from the Action Plan have been noted as relevant to the issues raised.

Focus Group 2 (21st September)

The facilitated meeting concentrated on five questions circulated to all staff beforehand (Table 45). A question on female progression and attainment was introduced (see Section 4.1) with work-life balance introduced by the SAT following discussions (June meeting) based on the Chair's particular knowledge of work-life balance across SEBE. Fifteen staff and PGR students attended with 5 written replies also received. The gender split of all the participants was 14 female, 6 male.

QUESTION/THEME	EXPLANATIONS OFFERED	SELECTED QUOTES
[1] How could we encourage more female students to join SEBE? (to improve the gender balance) **AP [14,17,29,31,32,33,34]**	• More female engineering role models. • University and Professional bodies need to do more outreach. • Change entrance requirements (e.g. reduce maths). • Influence the parents (never underestimate their influence). • Continue to treat all prospective students the same.	"Educate Career Advisers - absolutely essential" . "Don't make a fuss about potential female applicants." "I'm involved with Connect, but what about Equate?"
[2] Why does the Building and Surveying subject group have a higher percentage of female students? Are there lessons to learn? **AP [17,29,37,39]**	• No modules on technical/engineering subjects. • A lesson worth applying is that BSV make an effort to promote female role models (e.g. staff & students are in the Prospectus) (staff) • The BSV corridor has photos & information on the walls about jobs, student prizes,	"Many women prefer -softer- less technical subjects"

	Chartered Bodies, successful alumni etc.	
[3] How do we encourage (a) female student progression and (b) female student attainment? AP[4,5,12,19,38]	• More and wider Equate coaching. • Extend Connect activities. • Offer female PDTs for female students. • Gender allocation / balance in tutorials. • University could offer more childcare assistance.	"Look at the excellent female UG stats and see what that suggests?"
[4] How do you find the work-life balance at SEBE?	• Good/excellent. • More social student spaces needed. • PGR student events are great, but could SEBE organise them and widen the programme? • Staff space would be good; help us exchange ideas and update each other etc • Introduce inter-campus mini-bus (staff with childcare or the school run end up having to bring their car and pay for parking)	"The WAM is positive; it allows your workload to be seen and measured" "Good. I know that if I had any childcare issues then I could approach my line manager who would do his utmost to help" "The flexibility of work is good and I know I could formalise things if needed with HR"
[5] Do you feel this work-life balance could be improved? **AP [7,,21,23]**	• Not really - but SEBE could organise PG student social events. • A staff common room would be a real benefit. • It's good that the staff kitchen/room is back. • Give priority to annual leave allocation for staff with children. • More clarity from SGL on who can request certain timetable "slots".	
Comments	• Mandatory PGR coffee breaks. • Better meeting times. • Don't make too much fuss about female applicants and students. • Working from home to reduce commuting costs and facilitate childcare. • Edinburgh's school half-day Friday puts pressure on staff with young children	"Let's look to the School of Computing downstairs –they get their timetables right" "Best advice I ever had was treat the PhD like a 9 to 5 job" "SEBE should offer final year PGR students some Equate training or activities (might help us in our career)". "I am the main child carer in my family so flexibility at work is extremely important to me as juggling the two things can be really stressful"

Table 45: Summary of principal comments from Focus Group 2

Note Several actions from the AP have been noted as relevant to the issues raised.

THE focus groups revealed that SEBE female staff and PGR students are content with the flexibility they have in their working arrangements and the friendliness of colleagues in the School, both of which are critical in ensuring a pleasant working atmosphere.

(ii) HR policies
The University has comprehensive HR policies and procedures for activities relevant to this submission, e.g. childcare, flexible working, parental leave, wellbeing, equality, values & behaviours, bullying & harassment, grievances.

All policies and procedures are readily available via the University intranet (as is noted to staff during their Induction, Section 5.1(ii)). Staff are widely aware that SEBE has both a dedicated HR Client Partner (partly based on campus) and an HR Adviser.

All HR policies are monitored by the ULT and updated to reflect external or legislative changes. The School routinely feeds back to HR and ULT on areas where policy should be reviewed and/or updated. The HR Client Partner's representation on SLT is the primary conduit to achieve this. There have been no notable examples in SEBE in the past few years where issues have arisen with any policies.

The University undertook its most recent equal pay audit in 2015.Gender was considered and equal pay confirmed. No issues were identified for SEBE.

(iii) Representation of men and women on committees

Since June 2016, Dr Sandra Cairncross (Assistant Principal, Student Experience) has provided leadership to SEBE in the absence of a permanent Dean. The positions of School Academic Lead (SAL) were introduced in 2015 to lead particular areas and two of the five SAL positions ("Quality" and "Student Experience") are currently held by female members of staff. These appointments are one reason behind the improving gender balance on SEBE's senior committees (Table 46).

2013/14					
Committee	Members	F	% Female	M	% Male
Management Team	13	2	15	11	85
Quality	8	1	12	7	88
TOTALS	21	3	14	18	86

2014/15					
Committee	Members	F	% Female	M	% Male
Management Team	12	1	8	11	92
Quality	11	2	18	9	82
TOTALS	23	3	13	20	87

2015/16					
Committee	Members	F	% Female	M	% Male
Leadership Team	15	5	33	10	66
LTA	12	7	58	5	42
Research	16	4	25	12	75
TOTALS	40	15	38	25	62

Table 46: Gender balance on SEBE influential committees 2013 to 2016

Between 2013 and 2015 the gender balance broadly reflected the overall school balance, but changed significantly in 2015/16 as committee structures were revised (during the university

restructure) and the opportunity to refresh memberships arose. More details of the committees' present gender and grade compositions are given (Tables 47 to 49).

Membership of influential committees

Role	Staff Grade	Male/Female
Dean	8 & above	F
Prof Learning & Teaching *	8 & above	M
SAL LTA	7	M
SAL Quality	7	F
SAL Student Experience*	7	F
SAL Research*	7	M
SAL International	7	M
Director of TRI	8 & above	M
Director of ISC*	8 & above	M
HR Client Partner*	7	F
School Support Manager *	7	F
SGLs (x4)	7	M (x4)
Total	*15 people*	*33%F*

Table 47: School Leadership Team: role, grade and gender (2015/16)
Notes (1) The SLT was formerly the School Management Team. (2) * SAT member.

Role	Staff Grade	Male/Female
SAL LTA	7	M
Prof Learning & Teaching*	8 & above	M
SAL Quality	7	F
SAL Student Experience*	7	F
SG representatives (x4)	6 or 7	M(x2) F(x2)
Programme Leaders (x3)	6	M(x1) F(x2)
School Quality Manager	5	F
Total	*12 people*	*58%F*

Table 48: Learning, Teaching & Assessment Committee: role, grade and gender (2015/16)
Notes (1) The LTAC was formerly the Quality Committee. (2) *SAT member.

Role	Staff Grade	Male/Female
SAL LTA	7	M
Prof Learning & Teaching*	8 & above	M
SAL Research*	7	M
SAL International	7	M
Director of TRI	8 & above	M
Director of ISC *	8 & above	M
Head of ERG	7	M
Research Profs (x4)	8 & above	M(x2) F(x2)
School RIO officer	5	F
PGR student coordinator	7	M
PGR student representative	-	F
Research Associates/Readers Associate Profs (x3) *(one)	7	M(x2) F(x1)
Total	*17 people*	*29%F*

Table 49: Research and Innovation Committee (SRIC): role, grade and gender (2015/16) Note (1) * SAT member.

Self-assessment team

Including Professor Hall in place as an adviser, the 14 member SAT had an even gender balance; which changed in May 2016 to 8:6 female to male (57%:43%), (Section 3). Six of the SAT are members of the SLT (Table 47). This helps to ensure that Athena SWAN will continue to be embedded within SEBE (Section 3.3 & the Action Plan) and that SEBE feeds upwards on areas where HR policies/issues may need reviewed. The SAT is also represented on the SRIC and LTAC.

Advisory committees

Within SEBE there are four advisory committees. Health & Safety is the responsibility of staff from across the Campus (including two SEBE members of staff). The three other committees each comprise external and internal members to advise on research and professional relevance of teaching (Table 50).

2015/16					
Committee	**Members**	**F**	**% Female**	**M**	**% Male**
Health and Safety	7	3	43	4	57
ISC Advisory Board	10	2	20	8	80
TRI Advisory Board	11	1	9	10	91
IPAC	10	1	10	9	90

Table 50: Gender balance on SEBE's advisory committees 2015/16

The three advisory committees clearly display high male membership. This is recognised and action will be taken to adjust the memberships to improve the gender imbalance **AP[25]**.

(iv) Participation on influential external committees

All staff regardless of gender are encouraged to participate on relevant external committees, which is formalised as part of the ALD and PDR processes. Gaining external "esteem" is imperative for academic promotion, so external committee membership is highly encouraged by line managers. To an extent the activities of Connect help encourage female participation with external committees (Table 51), but more needs to done by SEBE (while not overburdening the relatively small number of female academic staff) **AP[24]**.

SEBE role	**Committee**
SAL (Student Experience)	Member of the Scottish Branch committee for the IMA (Institute of Mathematics and its applications) Member of the Scottish Maths Support network committee.
SAL (Quality)	Member of RICS Scotland Commercial Property Group Board RICS Assessor for 'Assessment of Professional Competence
Professor of Transport Engineering	Member - scientific committee of the International Symposium on Transportation Network Reliability
Lecturer in Transportation/Mathematics	Scientific committee member for the International Symposium of Travel Demand Management Represents TRI on the Edinburgh Transport Forum. Member of the Scottish Branch committee for the IMA
Lecturer in Water Resource Management	Member of Scotland Hydro Nation Forum
Research Project Manager (ISC)	French SNCF Research Rail Network projects
Reader in Energy Engineering	Member of Energy Research Network

Table 51: Examples of female SEBE staff on external committees.

(v) Workload model

SEBE operates within the University's workload allocation model (WAM). The WAM captures all elements of the academic role: teaching, research, pastoral, administrative and outreach responsibilities and is agreed by the SGL as part of the PDR process. Workload is pro-rata for part-time staff and is flexibly managed for staff with caring responsibilities.

The benefits of using a University led model are that it is fair, equitable, consistent and transparent. The model is linked to the promotion criteria and published guidance on WAM exists. Staff within SEBE can readily compare their level of work against each other. For these reasons the WAM is widely supported by all staff and acknowledged as a fair and transparent system.

(vi) Timing of departmental meetings and social gatherings

SEBE does not have specified "core hours" nor guidelines for timing of meetings. However, there is recognition (see Section 5.6 (i) Culture) that the School should introduce such a policy (e.g. replicate School of Computing's procedures for meetings within "core hours"). This would assist staff members with additional childcare/caring responsibilities **AP[21]**.

Relatively few social events are organised by SEBE throughout the session. The lack of on-campus social space (as raised in Focus Group 2, Table 45) restricts planned on campus events, so most activities take place off campus (meals, comedy nights, quiz nights, leaving events etc.). In every case, these events are made open to all staff, but a greater effort will be made to increase the number of social events **AP[23]**. SEBE's potential move to a new campus in a few years' time will offer opportunities for social spaces to be increased, in line with the University Estates Strategy which promotes the use of social and active learning spaces.

(vii) Visibility of role models

(a) Connect

As part of the remit of Connect, events are regularly arranged for prominent women in industry to visit the University to present, or for students to visit them in the workplace. These give opportunities for female students to hear about the background of these women and their career progression, and also a chance to meet them in their place of employment. Of all the events that Connect run these are often the most successful and positively received by the students. They not only give them an insight into what it is like working in industry, but also from a female perspective. The School's interaction with Connect is to increase. **AP[19]**

(b) ***Visibility at SEBE events***

Beyond the work of Connect in the School, all academic staff regularly invite practitioners and industrialists in to give guest lecturers to the students. There is no SEBE policy about gender balance for speakers **AP[37]**. However, where the guests are female, they are encouraged to talk to the students about their experiences as a woman in the profession and about their own time at university.

Four initiatives have been taken forward in recent months:

1. Newly appointed SEBE web-content editor working (with SAT members) on social media, publicity and website content to specifically promote study opportunities for women in SEBE. **AP[29,35]**
2. University web team working on improved images to better portray the equality agenda (including Stupart's University SAT work) **AP[17,34]**
3. Introduction of gender equality slides and speaker's script produced for Applicants', Open and College Days. **AP[15]**

4. Connect representation at events (as above) and greater emphasis on utilising female student ambassadors. **AP[15]**

Some of the female speakers who have presented to the School are listed in Table 52.

Date	Lecture	Speaker
AY 2015/16	Delivered 5 lectures to SEBE students on industry practice for acoustic design of buildings	Dr Eleni Kontesidou (Consultant, RMP Acoustics)
6th October	Females in Engineering and the Built Environment - Connect/SEBE evening event	Xxx (Project Engineer, Scottish Power)
		xxx (Structural Engineer, Wood Group
		Xxx (Technical Manager Selex ES) *{Immediate Past President of the Women's Engineering Society}.*
28th October	Employability skills for the construction industry	xxx Morrison Construction
8th, 9th & 10th March	Introduction to gender equality in engineering (presented to "Engineering with Management" students)	xxx , Equate
16th March	Edinburgh's property market and graduate opportunities	xxx (SEBE alumina) CBRE
5th May	Guest speaker Queen's Anniversary Prize celebration event (audience of students, staff and industry)	xxxx, FRSA (former British Female Inventor of the Year)

Table 52: Female guest speakers (2015/16)

(c) <u>Images</u>

The University SAT's 2014 audit of images used to illustrate STEMM subjects, both in hard copy and online, revealed that a disproportionate amount of men featured in the pictures (1:6, female: male). The imbalance was attributable to two schools' content, including SEBE. The analysis was repeated (August 2016) using the 2017 SEBE Course Prospectus, website and 12 course description sheets. The findings are presented in Table 53.

		Number of images		RATIO F:M
	Subject Group	**Female**	**Male**	
Course information sheets	BSV	43	30	
	MEC	56	39	
	ELE	21	20	
	CTR	17	14	
	TOTAL	**137**	**103**	1.3:1.0
Prospectus	**TOTAL**	**17**	**19**	0.9:1.0

SEBE Website (at 16/8/16)	Home	3	4	
	About us	1	6	
	Courses	8	2	
	Learning environment	0	1	
	Research	2	8	
	Case studies	2	3	
	International	1	0	
	TOTAL	**17**	**24**	0.7:1.0

Table 53: Summary of Female: Male representation in SEBE publicity

These are three key external facing routes for SEBE publicity and all show a significant improvement on the 2014 position (evidenced by Female to Male ratios close to 1.0). The improvement has been driven by SEBE, as while the Prospectus and website have significant input from the University, SEBE has led the changes and has "sign off". Course information sheets are prepared in-house by SEBE and the ease with which they can be changed means that further improvement in the balance of equal gender images is anticipated. **[AP17, 29]**

(viii) Outreach activities

SEBE actively encourages its female members of staff to act as ambassadors and participate in networking with external groups, and to feel part of the informal internal networks for female staff. As noted, such activities are formally accounted for in workload models, PDR, etc; therefore, ensuring that allocation is fair and recognised.

In 2012, Connect was set up to support female students in SEBE, assisted by Equate. The action plan includes increasing the use of the School website and social media to highlight the support offered via Connect **[AP35]** and having representatives from both organisations at Open Days **[AP15].** Connect is the principal means of gender equality outreach and the partnership, with SEBE providing additional funding, gives opportunities for female engineering staff and students to meet, network and undertake development opportunities. Discussions with Connect, Equate and colleagues and students (Focus Group 1) highlighted actions **AP[32.33,35]**. In response to reducing STEM student numbers and the University's appointment of a Community Engagement Officer (2015), SEBE's schools outreach work has changed. This has been done with the Widening Access team, to schedule interactive campus visits for six local secondary schools in 2016/17. The programme includes many hands-on STEM activities for S3 & S4 pupils, with the schools asked for a gender balance of students. Follow up activities (e.g. visiting the schools) will be undertaken with subsequent evaluation of this **AP[33]**. Examples of SEBE's outreach activities are shown (Table 54). The School is committed to developing these and other outreach activities. **AP[18, 33, 39]**

Date	Subject	Details
8th September	Visit to Forth Valley College *("Studying STEM at University")*	SEBE presentation
9th September	Visit from by Drummond High School (S3& S4)	12 pupils (5 female)
21st September	Visit to Fife College *("Engineering at University- what's it all about")*	SEBE presentation
28th October	Employability skills for industry (lecture & workshop) ;with Morrison Construction	Audience of 65 : including 31 FE college students (6 female)
7th January	*"World of work"* at Craigroyston Community High School (CCHS)	Half-day event
23rd February	Bright Club Edinburgh (360º)	Tom Rye (TRI) presented
26th February	Edinburgh College : *Science & Technology Open Day*	SEBE stand
1st March	*Recruitment & employability fair* (CCHS)	SEBE stand
3rd May	WLC event to increase female awareness & participation in STEM.	Napier WA team
26th April	Bright Club Edinburgh "backstage"	Dan Ridley-Ellis (ISC) presented
June	LEAPS school visits to SEBE	Various activities (lectures, group work etc)
June to August	Help with maths modules (reciprocal visits to Fife College and	Led by Dr Kate Durkacz

	creation of a Moodle support learning space)	
23rd August	WLC engineering student Induction Day - sessions from SEBE staff about articulation and female students in STEM	Kate Durkacz, Helen Young & Alastair Stupart (presentations)
31st August	"Fantastic Plastic" lecture (Edinburgh)	SEBE presentations to audience of school children
1st September	"Fantastic Plastic" lecture (Glasgow)	SEBE presentations to audience of school children

Table 54: Examples of SEBE outreach activities (2015/16)

2016 Highlights

Two particular activities undertaken for the first time demonstrate the extended outreach.

[a] SEBE took part in ***National Women in Engineering Day***, 23rd June. Three current female staff and students, together with seven female alumni provided commentaries of their experiences as a woman in STEM. They answered five specific questions:

1. What was your experience studying at Edinburgh Napier University?
2. What are you doing now?
3. What has been your experience of working in industry since you left university?
4. What was your experience as a woman on an engineering degree course?
5. What advice would you give to women wanting to work in engineering?

The result was a remarkable collection of videos and testimonies from a passionate group of women, all of who enthused about their careers and experiences in SEBE. The collection is available on the School's National Women in Engineering webpage (Figure 16).

[b] Edinburgh Napier's "*Inclusivity Week"* (19 to 24 October) with SAT members hosting a stall and giving presentations related to such as: "Changing Perceptions, Embracing Diversity" and "Introduction to Athena SWAN". These successfully raised awareness of SEBE's E&D ambitions.

Coaching

Equate Scotland are a leading organisation promoting and encouraging the advancement of women in science, engineering, technology and the built environment. They look to help facilitate gender equality and aim to make tangible and sustainable improvements for women studying and working in STEM. Equate are hosted by Edinburgh Napier and have their offices on SEBE premises. Inevitably the School works closely together on all aspects of promoting and practicing gender equality. Equate offer coaching support and advice, and several female staff are participating in their programme. SEBE has identified that more female staff (and possibly PGR students: FG2) would benefit from such training. This will be promoted and supported by the School. **[AP12]**

[6] Case studies: impacts on individuals

Not applicable to this Bronze Award submission.

[7] Further information *(word count 472)*

7.1 Building on the School's work with female students

It is welcome that this Bronze award submission requires evidence related to students, as this is in keeping with SEBE's well-established activities related to the support and mentoring of female students. This dates back to 2006 when SEBE and SoC staff acted on feedback from their female students that they often felt isolated within their programme (e.g. sometimes they were one of only a few female students). In response, a forum for female students was established, led by a group of students with support from staff (including Dr Sandra Cairncross, who currently provides leadership for SEBE; see Section 1). In 2008 the forum was rebranded as "Connect". This continues its work to make it possible for female STEM students to build links with industry, meet qualified women in their professional areas of interest, mix with other female STEM students and, improve their employability (e.g. through CV development). In addition, the network enables the students to keep up to date with news and events in their field whilst at the same time promoting their subjects to earlier year students. **[AP19]**

The success of Connect as a local initiative led to the establishment of InterConnect, the network for women studying science, engineering and technology subjects in Scotland, which is administered from the University through Equate Scotland.

These are proven and well-established activities which continue to contribute to the pipeline of women in STEM. In addition, Connect supports Napier's commitment to achieving one of its objectives of recruiting and retaining more students in STEMM. This work also indirectly supports Napier's commitment to recruiting and retaining students from diverse backgrounds with many Connect students being the first in their families to enter higher education.

7.2 Engaging our colleagues

The SAT is especially pleased that the self-assessment work allowed us to not only engage with SEBE colleagues (all four subject groups, researchers and support staff), but others such as the Widening Access and Student Recruitment teams and college partners. Colleagues in SoC helped us enhance the role of Connect, while links to both West Lothian and Edinburgh Colleges are strong (and hopefully are helping them shape their own E&D agendas). The E&D work undertaken has also extended into events such as Open Days and secondary school visits, allowing engagement on gender equality to extend to prospective students and their parents, guardians and teachers.

Within SEBE the Focus Groups provided genuine engagement with colleagues. This was demonstrated by the response rate and the range and quality of ideas put forward on subjects as diverse as attracting and supporting female students, and the need for social spaces and events in the School. These were coupled with positive statements on SEBE's work-life balance which was good to hear, especially given some of the poor findings in the 2015 University staff engagement survey.

[8] Action Plan

8.1 Ownership and responsibilities associated with the Action Plan

The Action Plan is owned by the SAT, and led by the new Dean of School (and in the interim by Dr Sandra Cairncross). The plan identifies an individual or group responsible for each action. In addition, each action will have a SAT sponsor. It will be that sponsor's responsibility to liaise with those charged with completing the action and to provide regular reports on the work being undertaken towards each action's goals.

The progress of all actions will be a standing agenda item at the three full SAT meetings per year (January, April and October). The progress reported here will be conveyed to the following SLT meetings. In addition, progress will be conveyed to the University SAT (chaired by the Vice Principal and Deputy Vice Chancellor) at its three meetings per academic year and then to University Court.

8.2 Levels of priority

1. Actions essential to underpin the continuation of SEBE's commitment to gender equality and recognition of this through the achievement of further awards. These provide the necessary infrastructure for actions labelled priority 2 and 3.

2. Actions that are key to (a) directly responding to findings uncovered during the course of the self-assessment work in 2016; (b) making explicit SEBE's commitment to gender equality, and (c) instigating positive change.

3. Actions that contribute to upholding the Athena SWAN principles within SEBE. While these may not be considered essential when compared with the actions labelled priority 1 and 2, their outcomes will contribute to the overall impact of the School's efforts in promoting gender equality.

It should also be noted that the Action Plan is a both a "live" document and an implementation tool. **AP[40]**