Changes to this public version of the submission have been made in order to protect confidentiality. For example, where numbers are less than 5 they are written as <5, some totals and percentages have been omitted, and identifying details of personal experience have been removed. Where these changes would render elements wholly uninformative, they have been omitted.

Name of Institution	University of Kent
Department	School of Computing
Focus of department	**STEMM**
Date of application	May 2018
Award Level	Current: **Bronze**
Institution Athena SWAN award	**Date:** November 2013 (Bronze)
Contact for application	Professor Richard Jones
Email	cshos@kent.ac.uk
Telephone	01227 827943
Departmental website	https://cs.kent.ac.uk

1. Letter of endorsement from the head of department

Ms Sarah Dickinson
Athena SWAN Manager
Equality Challenge Unit
Queen's House
55-56 Lincoln's Inn Fields
London WC2A 3LJ

28th May 2017

Dear Ms Dickinson,

I fully support this application for an Athena SWAN Silver award and endorse the principles of the AS Charter. I value the award as recognition of our commitment to addressing unequal gender representation within the School. The information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the institution/department.

The School aspires to excellence in education and research: it is strategically vital to hire the best talent, to support School members, and for our graduates to fulfill their potential. Women are severely underrepresented at all levels within the School, representing both a loss of talent to us, and the denial of an excellent career to women.

On a personal level, I am fully committed to the process of analysis, reflection and change. Within the School, I am a SAT member; and externally as conference chair, I introduced (against opposition) double-blind reviewing to reduce gender bias in two leading international conferences (ISMM 2008, ECOOP 2014).

The School successfully applied for AS Bronze in 2014 wherein we recognised our stark gender imbalance and planned several changes. Some of these -- like the introduction of the intercalated Year in Computing programme (YinCo) -- have led to a demonstrable change for the better, and recognition of our actions as best practice (Section 7).

Summarising change since 2014:

- In 2016 we introduced the YinCo for students from other disciplines.
- We provide female role models for girls considering computing as a career, in our outreach (through our Computing in the Classroom BSc module, commended by the BCS), and by using female speakers, guides and interviewers on UCAS days.
- We have revised our staff recruitment literature.
- All School committees include representatives of both genders.
- I have encouraged and supported female staff to apply for leadership training programmes (e.g. Aurora), promotion, and to take on roles of responsibility within the School and Faculty.
- Following a successful trial of our maternity leave policy -- its first use in 12 years -- we have formalised the support provided directly by the School (Sections 5.5 and 7).

We can now see these changes having an effect:

- Last year, over half of our YinCo intake was female, creating a noticeable uptick in the proportion of women studying overall.

- Two female lecturers took Aurora leadership training in the last two years, and both have been promoted.
- Female staff hold positions of responsibility within the School, e.g. Director of Graduate Studies (Research); Head of Research Group; the Directors of Undergraduate Studies and Senior Tutors at both campuses; Director of PhD Admissions; Director of Internationalisation; School Administration Manager, Student Experience Manager and Communications and Marketing Manager.

- A Daphne Jackson Fellow at the School was appointed as a Reader at Canterbury Christ Church University.

In this application we recognise problems with the gender representation among staff and students, gaps in attainment, and pipeline issues. We develop actions to tackle each of these, and I have ensured that our Action Plan has been well resourced (including three new posts) to ensure success.

Yours sincerely,

Richard Jones

Head of School

List of Tables

Glossary

AO	Admissions Officer
ASWG	University of Kent Athena SWAN Working Group
DoE	Director of Education
DoGS-R/DoGS-T	Director of Graduate Studies - Research Students / Taught Students
DoO	Director of Operations
DoR	Director of Research
DUGS	Director of Undergraduate Studies
ECR	Early Career Researcher
EDI	Equality, Diversity and Inclusivity
FoS	Faculty of Sciences
FWG	Faculty Working Group
GTA	Graduate Teaching Assistants (PhD students)
HoG	Head of Group
HoS	Head of School
HPL	Hourly Paid Lecturer
MCM	Marketing & Communications Manager
PGCHE	Postgraduate Certificate in Higher Education
PGR	Postgraduate research (students)
PGT	Postgraduate taught (students)
PI	Principle Investigator
PRP	Primary Responsible Person(s)
RA	Research Associate
RAE	Research Assessment Exercise
REF	Research Excellence Framework
RPD	Reflect, Plan, Develop (appraisal)
SAM	School Administration Manager
SET	Science, Engineering and Technology
SL	Senior Lecturer
SoC	School of Computing
SPP	School Promotion Panel
T&R	Teaching and Research (contract)
T&S	Teaching and Scholarship (contract)
TEF	Teaching Excellence Framework
UoK	University of Kent
UPC	University Promotions Committee
WAM	Work Allocation Model
YiI	Year in Industry
YinCo	Year in Computing

2. Description of the department

Picture 2.1 A selection of PhD students, research, technical, academic and administration staff in the School of Computing

Overview

The School of Computing (SoC), split between Kent's Canterbury and Medway campuses (30 miles apart), this year celebrates 50 years of teaching and research in Computer Science. Beyond academic excellence and world-class research, we take pride in our connections to industry and our placement scheme which leaves our graduates with excellent employment prospects.

In the last 4 years -- during a period of growth -- we have made an effort to balance gender representation by including a more deliberate presentation of the school as a place for women's careers, formalising our maternity policies, and introducing a new intercalated Year in Computing (YinCo) course.

These changes follow our AS Bronze award in 2014, when we found the proportion of female academic staff to be below the ECU national average (22% 2015/16) at 16% (6/38 FTE) and the proportion of female undergraduate students to be well below the HESA national average (15% 2016/17) at 11% (76/661 FTE). We have had some impact, raising the proportion of female academic staff and students. Nevertheless, the proportion of female students is still below the HESA national average, less than 5 of our administrative staff are male, less than 5 of our technicians are female, and women remain seriously underrepresented in both academic and research staff, particularly in senior roles.

Picture 2.2 Vice-Chancellor Karen Cox (right) awarding the YinCo team with a University Teaching Prize in 2017

Table 2.1 Staff numbers from 2014 to 2018

			2014		2018	
			Male	Female	Male	Female
Staff Role	Academic	Number	33	6	40	10
		FTE	31.90	6.00	36.02	9.12
	Researchers	Number	11	<5	14	<5
		FTE	10.80	<5	13.50	<5
	Administrative	Number	0	14	<5	18
		FTE	0.00	11.07	0.80	16.32
	Technical	Number	6	0	6	<5
		FTE	5.40	0.00	6.00	0.52

Administration

Notwithstanding its Medway/Canterbury split, the School works as one entity, with common goals and a shared philosophy. Staff are appointed to work at a particular campus, but teleconferencing and travel between sites is common, with care taken to minimise commitments outside core hours.

Table 2.2 Student numbers from 2014 to 2018

			2014		2018	
			Male	Female	Male	Female
Course Level	UG	Number	634	84	801	118
		FTE	585.39	75.54	725.88	107.00
		%	89%	11%	87%	13%
	PGT	Number	118	15	132	31
		FTE	117.80	14.10	130.92	27.73
		%	89%	11%	83%	17%
	PGR	Number	39	11	30	7
		FTE	36.50	9.50	26.50	7.00
		%	79%	21%	79%	21%

The committees and groups that make up the School are presented in Figure 2.1 -- arrows represent roles with responsibility for reporting (see glossary for abbreviations). Core Management Group carries responsibility for day-to-day running of the School; Strategy and Planning presents a formal strategic plan to the University. Relevant faculty committees are included.

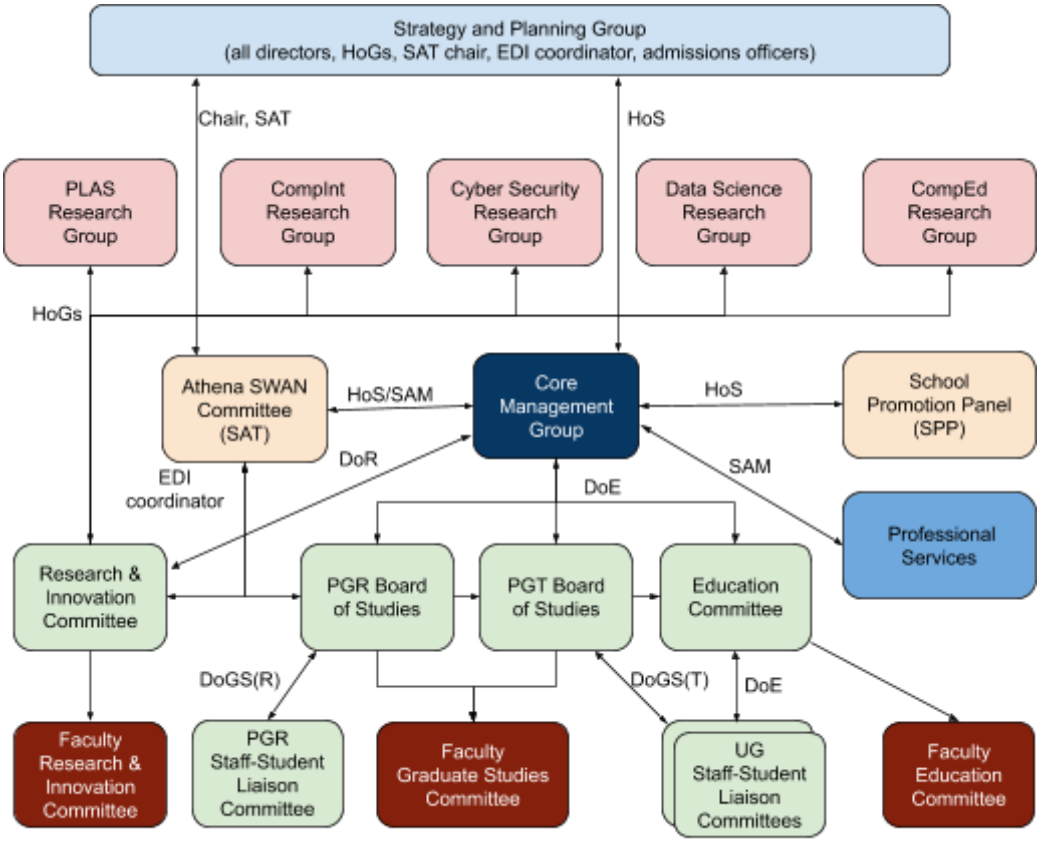


Fig 2.1 The Structure of SoC with reporting lines shown

Research

The School hosts 5 research groups, one led by a woman, four by men: Programming Languages & Systems, Computational Intelligence, Security, Data Science and Computer Education.

Picture 2.3 Lecturer demonstrating her research at an outreach event at the Wellcome Trust

We have a strong reputation for research: top quartile of 89 UK departments for research power but 12th by intensity in 2014, which augurs well for the next REF. Our research income has grown (£3m awards, 2015/16) after some years being relatively constant (~£1m pa).

Approximately 13 PhD research students are recruited each year, and are located at the same site as their supervisor (currently 35 at Canterbury and 11 at Medway).

Teaching

The School has eight UG programmes at Medway and Canterbury and eight taught PG programmes at Canterbury. We have a well-supported YiI which is chosen as an option by over 100 students each year, significantly improving their employment prospects.

We have recently added the YinCo an as an option for students from other schools. Other innovations include our Maker Space, and a MOOC initiative, where we have partnered with FutureLearn to deliver functional programming courses.

Our UG programmes are accredited by the BCS, and our MSc Cyber Security provisionally by GCHQ.

Picture 2.4 2017/18 UG students returning from their Year in Industry in March

3. The self-assessment process

(i) a description of the self-assessment team

The SAT is made up of members of the school from all career stages, from a PhD student to the Head of School. It comprises academic, administrative and technical staff, and representatives who work at either, and both, campuses. (Table 3.1.1)

The only formally distinct role within the SAT is that of the chair, Batty, who selected the current team intentionally, aiming for representation from all quarters, institutional memory from the 2014 AS round, and a breadth of relevant personal experiences. For academic staff, there is a workload allocation for membership.

The lack of formal roles has accommodated varied working patterns between members, with champions emerging for particular issues, some focussing on technical aspects of document preparation, and others ranging across the document. These informal roles have evolved over time, and the process has been a positive one.

(ii) an account of the self-assessment process

Following our 2014 Bronze award, the SAT met termly to monitor actions and progress. At least one member of SAT has attended and reported on each AS related workshop provided by the University.

The current chair was appointed in March 2017. Since then, the SAT has had monthly meetings to analyse data, discuss strategy and develop an action plan for the future. These meetings were held face-to-face within campuses, with the two campuses connected via teleconferencing. Each member of the SAT took ownership for specific sections of the application form. Meetings have focused on reviewing progress, and discussing the issues raised by the process.

The SAT has sought external support:

- from the University through its Athena SWAN working group,
- through discussions with staff in other schools who have submitted, or are in the process of submitting, their own AS applications,
- by adopting best practice from the School of Mathematics Statistics & Actuarial Science (see Section 5.5),
- by attending external conferences, such as the Women in Higher Education Network,
- by discussing best practice externally, taking inspiration from Birmingham to develop the YinCo, and receiving recognition for the actions of the school from the University of Stirling (see Section 7).

SAT members ensure that all analysis and actions are factored into the School's strategic planning.

- Seven of the SAT members are members of the School's Strategy Group (see fig 2.1).
- AS forms part of the School Plan.
- AS progress is regularly discussed at the Core Management Group (CMG).

Table 3.1.1 The SoC SAT

	Name	Position
	Mark Batty	Senior Lecturer, SAT Chair Canterbury-based
	Laura Bocchi	Senior Lecturer, PGR Admissions Officer Canterbury-based
	Angela Doe	School Administration Manager University wide
	Orla Garratt	Marketing and Communications Manager University wide
	Keith Greenhow	Shed Technician Canterbury-based
	Ayah Helal	PhD student Medway-based
	Richard Jones	Professor, Head of School University wide
	Anna Jordanous	Lecturer, EDI representative University wide
	Andy King	Professor Canterbury-based

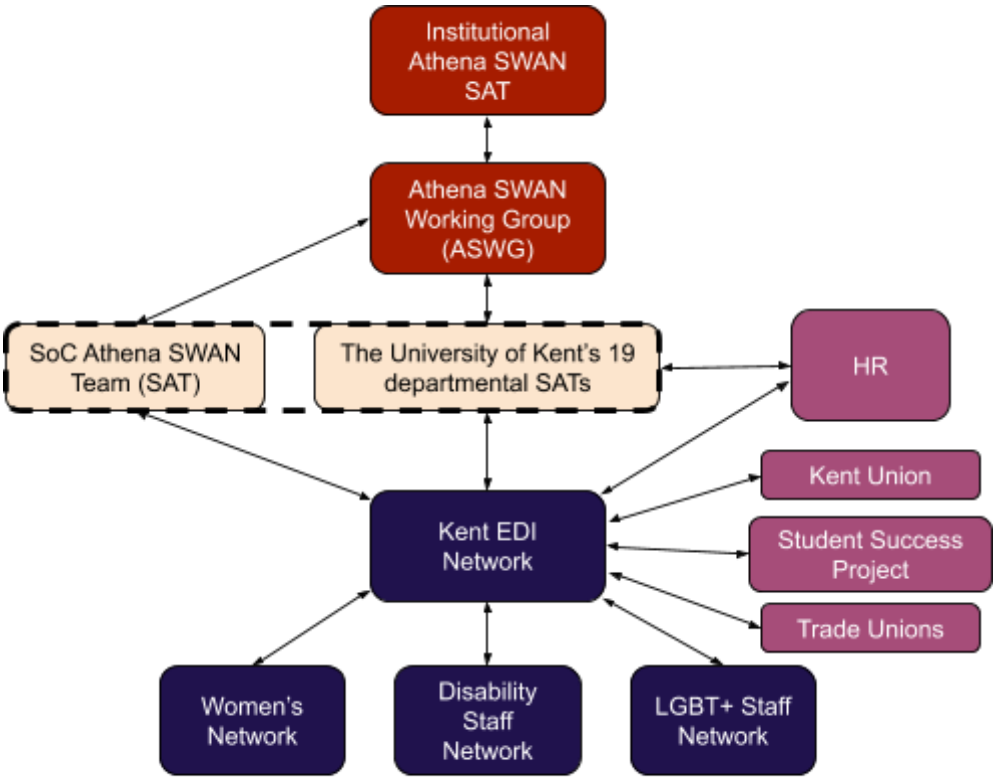


Fig 3.1 The SoC SAT and its relation to other University equality committees

To embed the ethos of AS issues across the School, and to gain broad support to realise the vision, academic and professional services staff are consulted via:

- regular AS progress reports and discussions at staff meetings,
- AS being a standing item on the agenda for most School committee meetings,
  (Action 3.1.a - AS/EDI as a standing item on all School committees)
- annual staff surveys.

Consultation with students is via:

- discussing Athena SWAN at Staff Student Liaison Committees (standing item),
- equality, diversity and inclusivity issues raised in school presentations during week one.

The SAT feeds in to the University ASWG, Equality Network and institutional SAT, as shown in Figure 3.1.

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

If successful in gaining an Athena SWAN award, the SAT will become the EDI (Equality, Diversity and Inclusivity) Committee, which will meet termly and continue to report to the CMG. Membership will be recognised with a workload allocation.

The remit of the Committee will include:

a) reviewing all the School's policies and procedures to ensure that they embed the principles of AS in them;

b) measuring the impact of these changes through annual surveys of staff;

c) monitoring the student gender ratio;

d) being the custodians of the AS Action Plan and revising it periodically in the light of the progress that is made towards improving the proportion and position of women in the School.

We will continue to seek support from central services, particularly HR, the Planning and Business Information Office and the Athena SWAN group, who provide the overarching data for us to analyse and address. We anticipate continuing to benefit from a periodic meeting of SAT chairs sharing experience between schools.

The school will seek to institutionalise lessons learned locally. Post submission, we have meetings proposed with the data analyst of the Athena SWAN group, where we will discuss which data and analysis might be gathered on behalf of the school by the centre, to be provided as an annual summary to the SAT. In addition, through the SAT chairs' meeting, we will help more schools to achieve AS recognition.

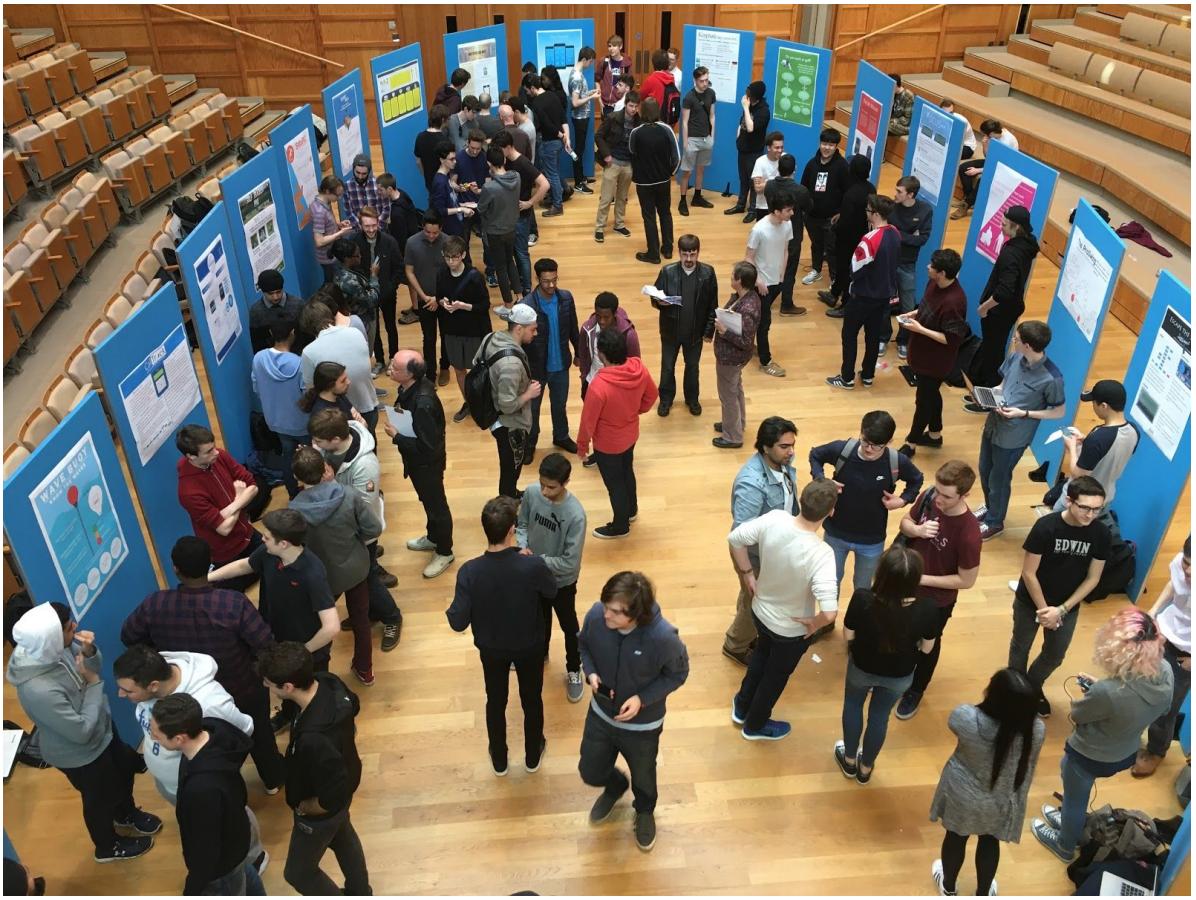
4. A PICTURE OF THE DEPARTMENT

4.1 Student data

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

We do not provide access/foundation courses, but annually 1-5 students from the Mid-Kent College Foundation Degree join the Medway BSc Computing final year (2013/4 5M, 2014/5 <5M+<5F, 2015/6 <5M, 2016/17 <5M+<5F).

(ii) Numbers of undergraduate students by gender

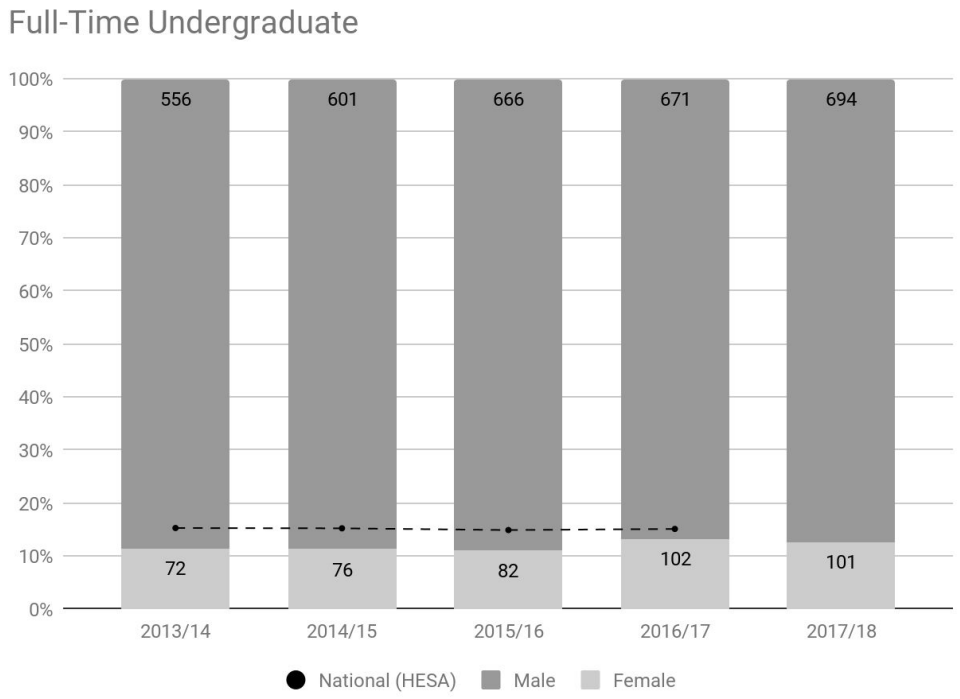


Picture 4.1.1 A UG poster fair at Canterbury Campus, Spring 2017

The School offers an array of programmes that share core components, and all of which offer YiI variants: (in order of cohort size) Computer Science set, Computing set, and Business Information Technology set. Each admits full-time students only, but some students transition to part-time for re-taking an academic stage or due to special circumstances. We also report the numbers for our intercalated YinCo.

Computer Science for Health (started 2017/18) has the highest proportion of women of our full-time degrees and it is planned to grow, but due to lack of data, we do not analyse it further.

All undergraduate courses



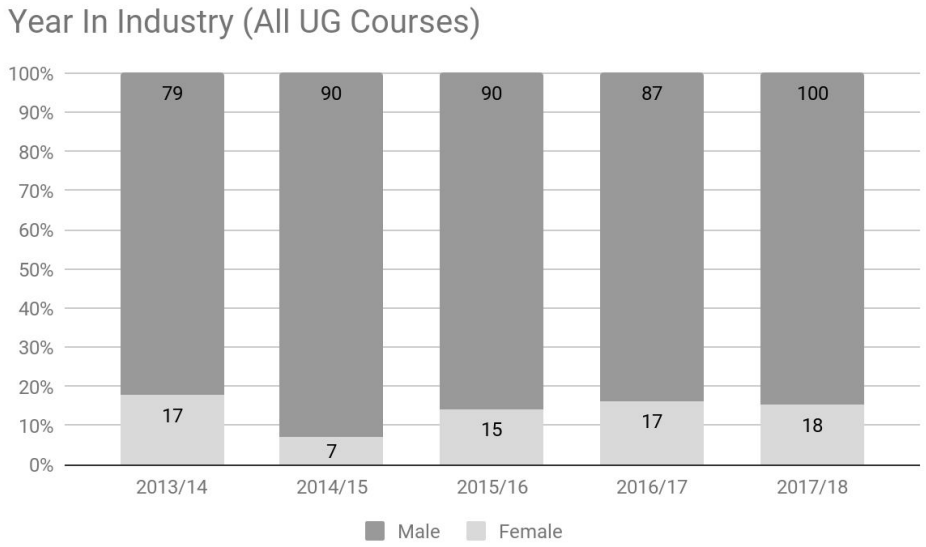
In aggregate, the proportion of women undergraduates has risen from a low base, so that it is approaching the sectoral average. This is driven by a slow improvement in the proportion of women on our main Computer Science programme and the growth of courses that feature a higher proportion of women, especially YinCo. We will argue that the first will bring diminishing returns without intervention, and the second should gain in strength: the YinCo and Computer Science for Health are slated for growth.

The proportion of women resitting or with special circumstances is consistently low. The DUGS suggests that women are less likely to change status to cope with adversity. This is matched by a higher proportion of women failing to complete when compared with men (see Degree Attainment below). We are concerned that women are not taking advantage of this mitigation strategy.

Action 4.1.a - Narrowing the Attainment Gap

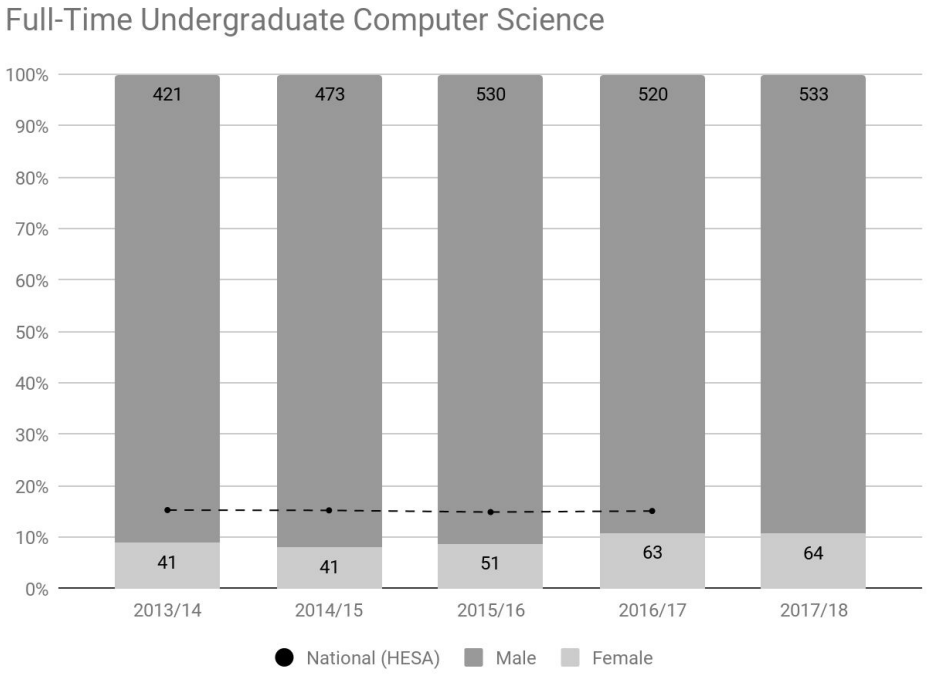
The SoC appointed two new lecturers as part of a Student Success Project in early 2018. These lecturers, one based at each campus, will make research-informed decisions on identifying interventions and activities to narrow the attainment gap within the School. They are particularly concerned with disparities that follow lines of ethnicity, and intersectional issues. The findings presented here have been forwarded to members of the Student Success Project and the DUGS. Additionally, the issue of women missing out on Firsts has been raised (see Degree Attainment below), and will be tackled. Furthermore, the SAT will ask the Student Success Lecturers for their observations in developing further policy.

Year in Industry



Undergraduates can spend a year working with one of our industry partners as part of their course, giving them excellent employment prospects. The proportion of women taking this opportunity has been higher than that of women undergraduates for the last 3 years.

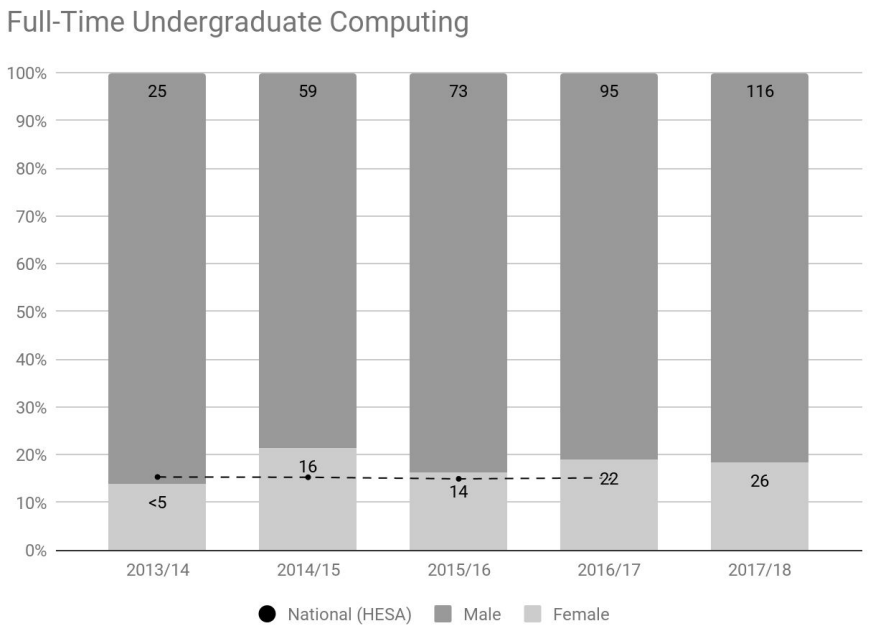
Computer Science



Our Canterbury full-time Computer Science programme (and variants thereof) is our largest. There has been a gentle rise in the proportion of women taking the course, but it remains below the HESA sectoral average. Despite rapid growth, the recruitment of women has kept pace.

The number of students with special circumstances or resitting as part-time students has grown too. These students are overwhelmingly male.

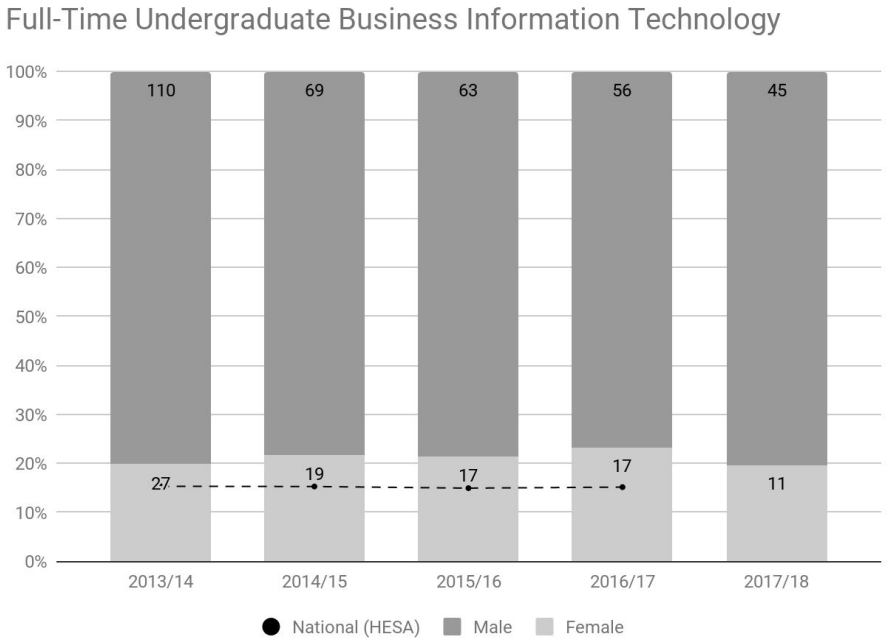
Computing



Our Medway full-time Computing programmes focus more on skills than theory. The proportion of women appears static, despite strong growth in enrolment, at just above the HESA sectoral average.

The number of students with special circumstances or resitting as part-time students is small and few, <5, have been women: the proportion is similar to overall numbers on the course over the same time, 19% (78/421).

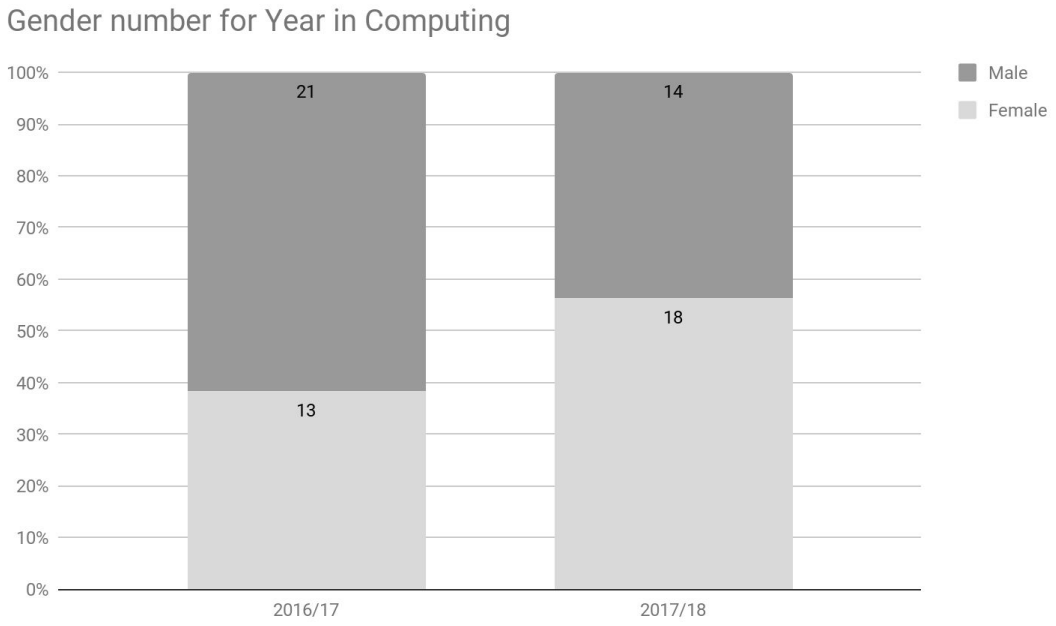
Business Information Technology



Our Medway full-time Business Information Technology programme has a higher proportion of women than the HESA national average. It is declining in size as the school focuses on single-honours programmes.

The number of students with special circumstances or resitting as part-time students is small and few are women: 15% (5/34) over the last 4 years, lower than the proportion of women on the course.

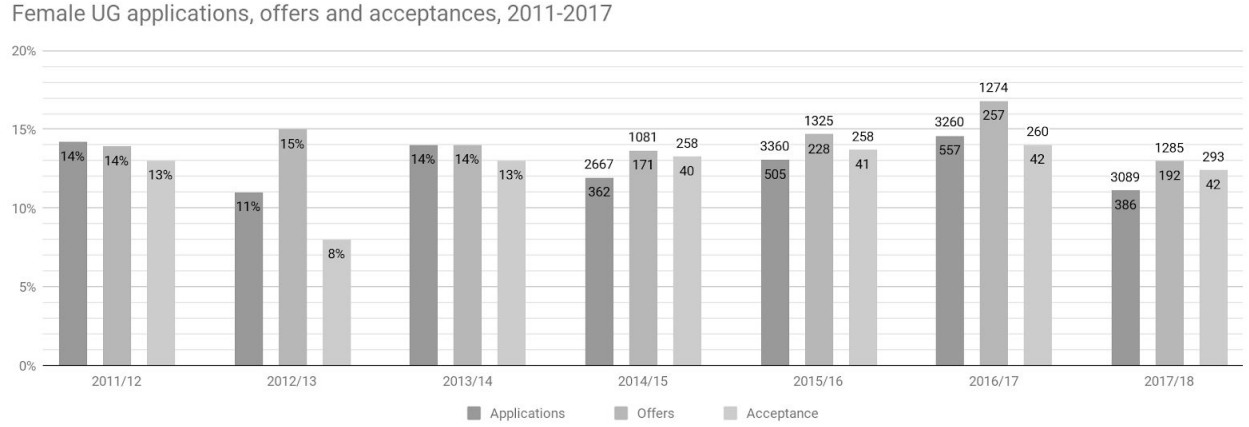
Year in Computing



Any Kent student can apply to study Computer Science for one year by joining the YinCo, modifying their base degree with the words "with a Year in Computing". So far the YinCo has had the highest proportion of women of all programmes, exceeding 50% in 2017/18. It follows ideas developed at Birmingham, has been recognised as best practice by Stirling (see Section 7), won a Kent teaching prize, and other Kent departments have replicated it.

Picture 4.1.2 An invitation given to the first cohort of YinCo students to encourage conversion to the programme.

Applications, offers, acceptances



Above, we present the proportion of women amongst those applying for, offered and accepting UG places (with absolute numbers from 2014/15). There is a stubbornly low proportion of female applicants (below the HESA sectoral average), a rising proportion of women receive offers, but

acceptance does not match this trend. This is the driver for numbers on our Computer Science programme: we must improve acceptance to approach the HESA national average. UCAS public benchmarking aggregates subjects, this section omits it.

Picture 4.1.3 Student Ambassadors at an Applicant Day in 2018.

Following AS 2014, our marketing presents women in positive and active roles, both as students and staff, and our recruiting and outreach feature female role models. We propose further actions on outreach and to sway acceptance.

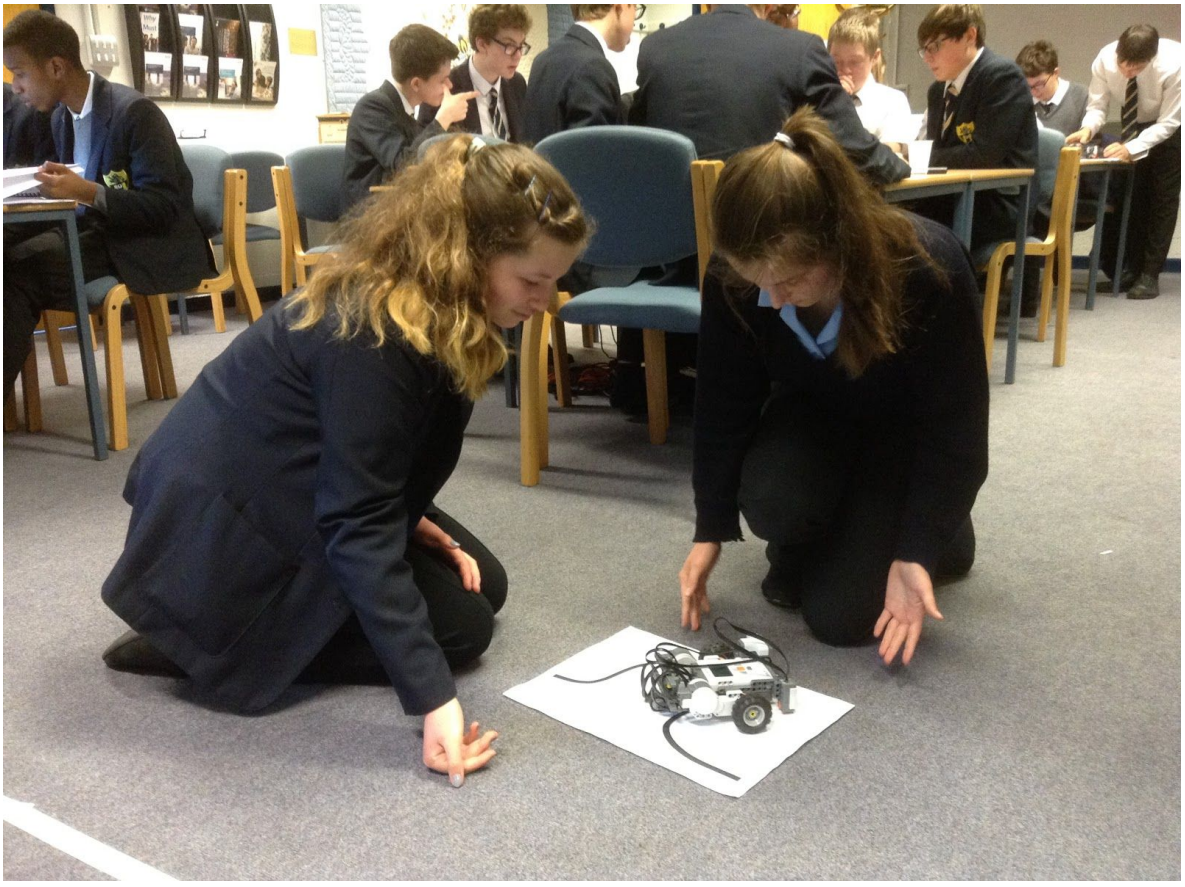
Action 4.1.b - Market Analysis

To inform our outreach program planning, we plan an investigation of the distribution of female students in computing degrees in the UK. The aim is to identify places with substantially higher proportions of female student than HESA (this will likely include institutions being awarded Athena SWAN Silver or Gold), and increase our awareness of successful practices.

Action 4.1.c - Develop a Targeted Outreach Programme

Our outreach programme is shifting from central to departmental funds over the next two years, providing more control and an opportunity to refine the School's offering. Activities are currently ad hoc and reactive: we respond to most requests and adapt set activities to them. We will develop a new approach, following a model developed by Kent's School of Physics, which is part of the South East Physics Network (funded by the Higher Education Funding Council for England), whereby outreach is linked to the student curriculum and gives a glimpse of the university topic. Our approach will target later stages of compulsory formal education and in particular, decision points in the education pipeline (where the Higher Education Access Tracker indicates that girls move away from STEM subjects). This outreach

will target girls at feeder schools, it will present female computer scientists as role models, and it will stress the social relevance of computing. We have two outreach officers responsible for this.

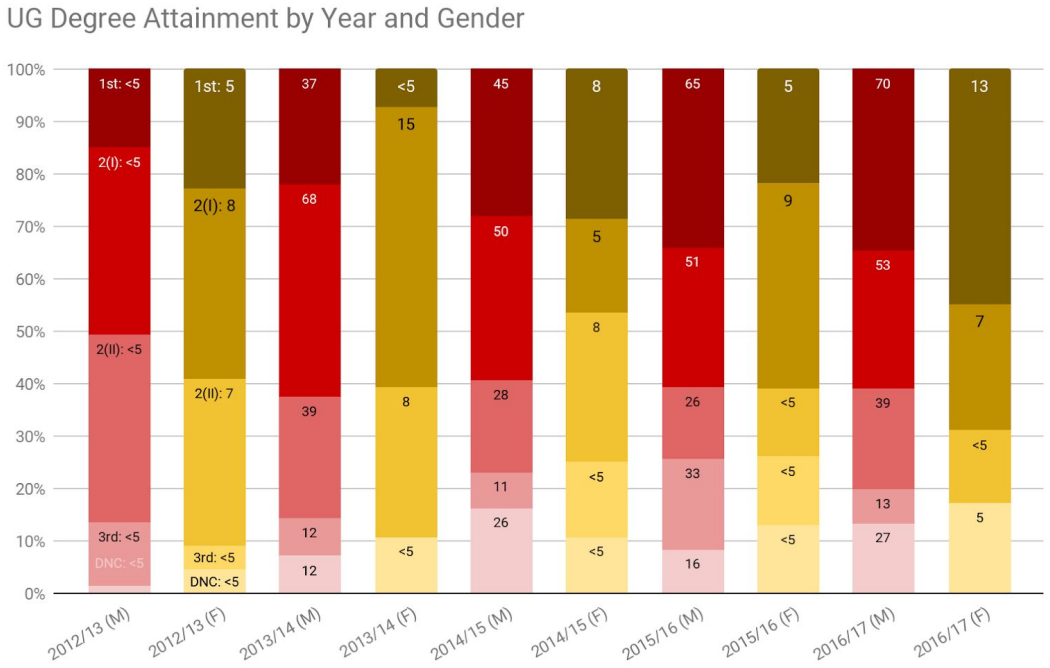


Picture 4.1.4 School pupils taking part in outreach activities in the SoC

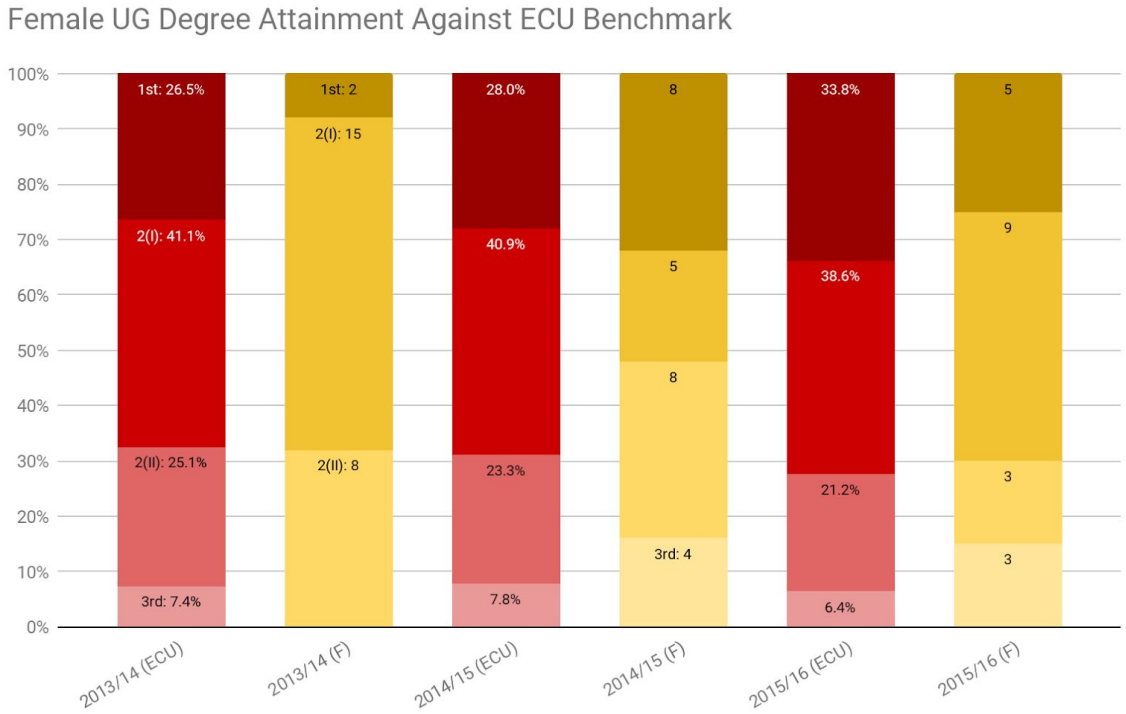
Action 4.1.d - Stress the advantages of study at Kent with each offer.

Our students benefit from excellent prospects for employment. We will stress this message when we make offers, and we will tailor the presentation to be welcoming to women.

Degree Attainment



Above, we present degree attainment for men and women separately for each academic year (1st, 2:1, 2:2, 3rd, DNC). Attainment is similar with a rising trend for firsts overall. There are two discrepancies: women appeared to miss out on firsts in 2013/14 and 2015/16, and women fail in a higher proportion in three of the last four years with an apparent upward trend.



ECU benchmarking mirrors the growing trend for firsts identified above. Small numbers make our data noisy, but we see little of concern.

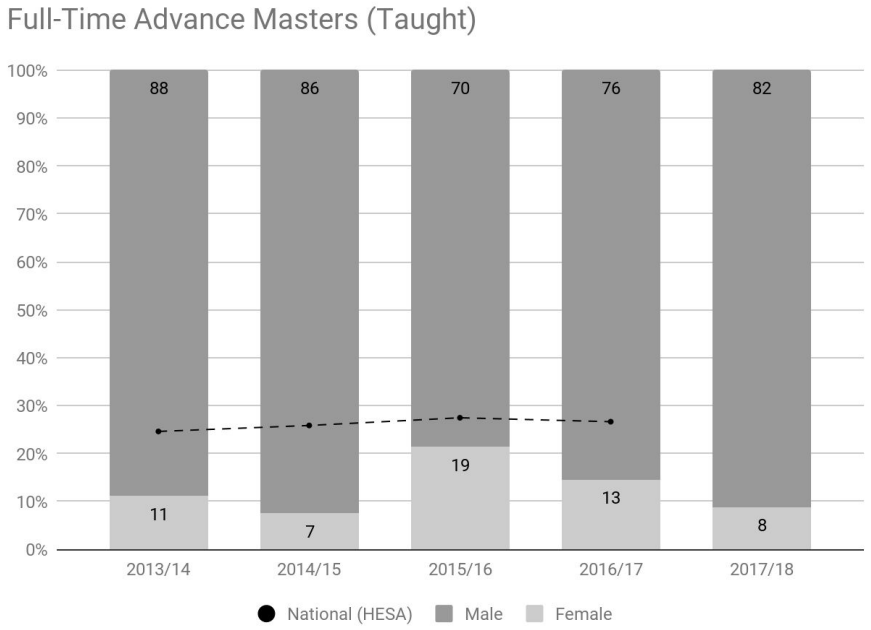
Looking at men and women's reasons for leaving indicates little difference. There are approximately 6 male leavers for each female, and the two most cited reasons, 'Academic failure' and 'Personal', are proportioned as expected.

For those at risk of failure, we have noted different tendencies between men and women: men resit in a higher proportion than women. Action (4.1.a) addresses the attainment of both groups through our Student Success Project.

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

We currently offer advanced and conversion masters programmes at Canterbury only.

Advanced Masters in Computer Science



The proportion of women taking the Advanced Masters fluctuates below the HESA national average. Approximately 40% of students come from a French institution (EPITECH) where only 3% of their students are female. After a peak in 2015/16, there has been a declining proportion of women on the course.

Our EPITECH students are drawn from an overwhelmingly male cohort. Strategies for improving the gender representation amongst the EPITECH students will be different from the remainder of our PGT students, so we would like to have separate monitoring for the two parts of the cohort. This is not currently possible. We will

Picture 4.1.5 Epitech students on the Advanced Master's Programmes in 2015

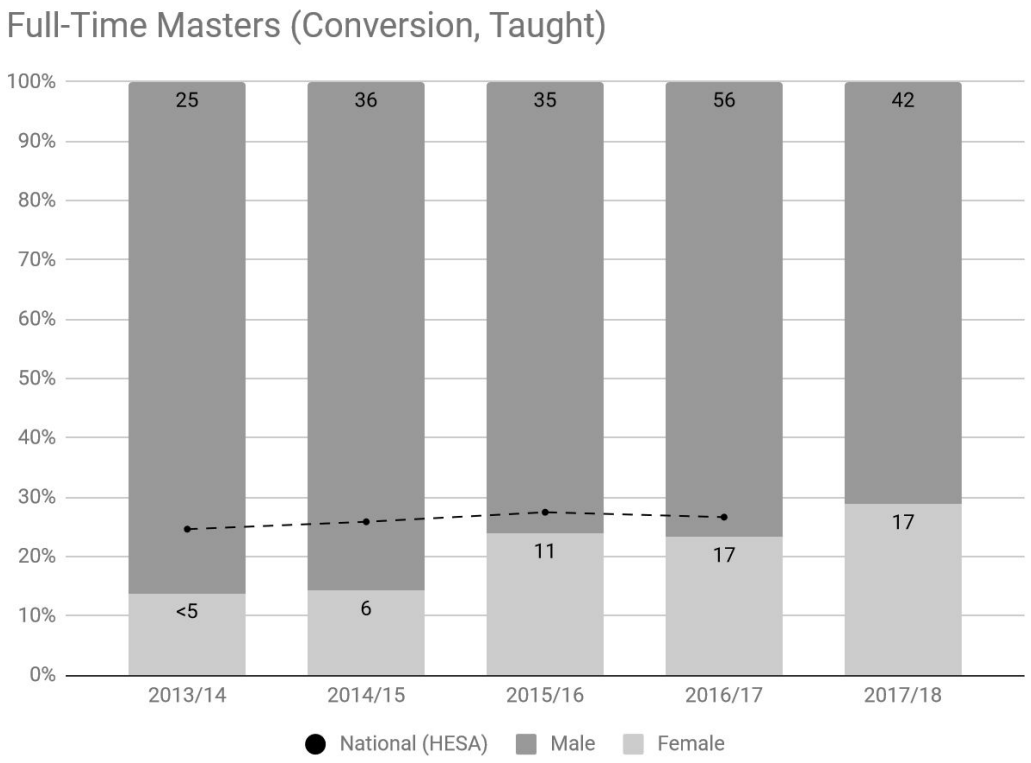
make these groups distinct in our recording of the data.

Action 4.1.e - Separate recording of EPITECH students

> Create a monitoring for EPITECH student numbers and gender-balance so Masters relating strategies can be targeted appropriately.

From 2013/14 no women moved from full-time study, but women's attainment on our masters programmes is excellent so we see little need for action.

Masters in Computer Science (Conversion)



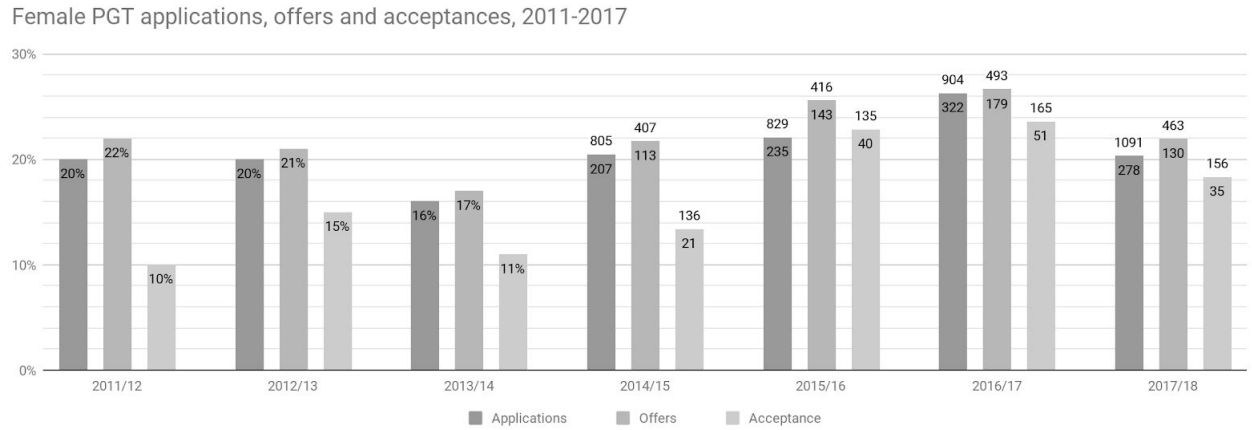
An increasing proportion of women are taking the conversion masters: nearly 30% in 2017/18 - above the latest HESA benchmark.

There is a rising trend in the proportion of women moving from full-time study, but women's attainment is excellent so we see little need for action.

Year in Industry

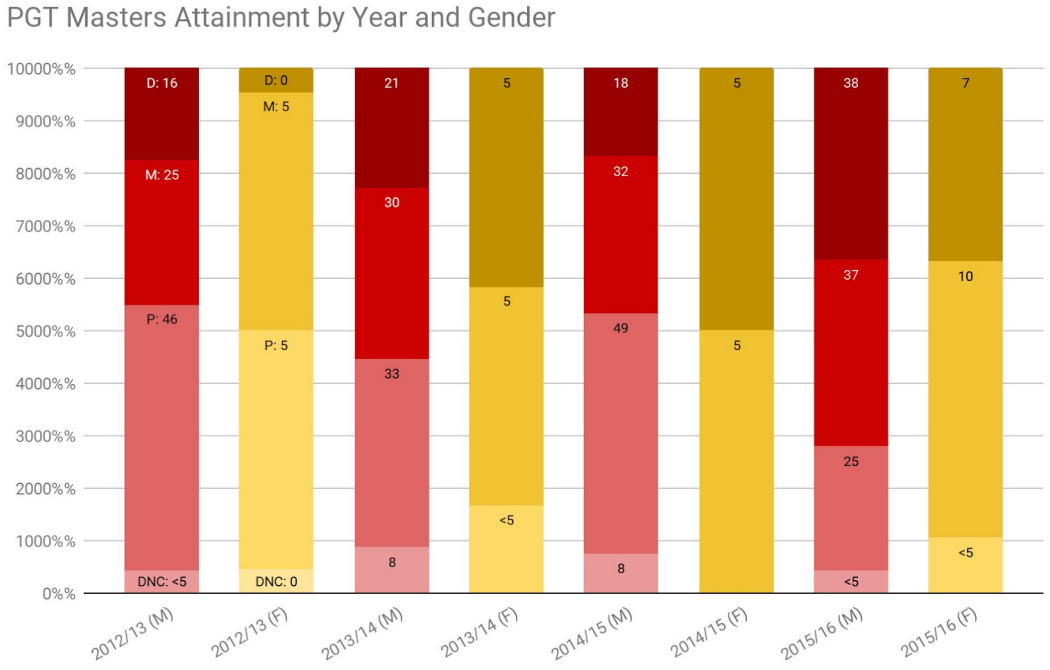
Women taught postgraduates have benefitted from the YiI in a high proportion in recent years.

Application, offsets, acceptance



Acceptances includes the (nearly all male) EPITECH students (≈40%), whilst the Applications and Offers do not, as these are processed locally in the School and not centrally. Excluding EPITECH, female Acceptances are running between 16-20%. Nevertheless this is below the HESA national average.

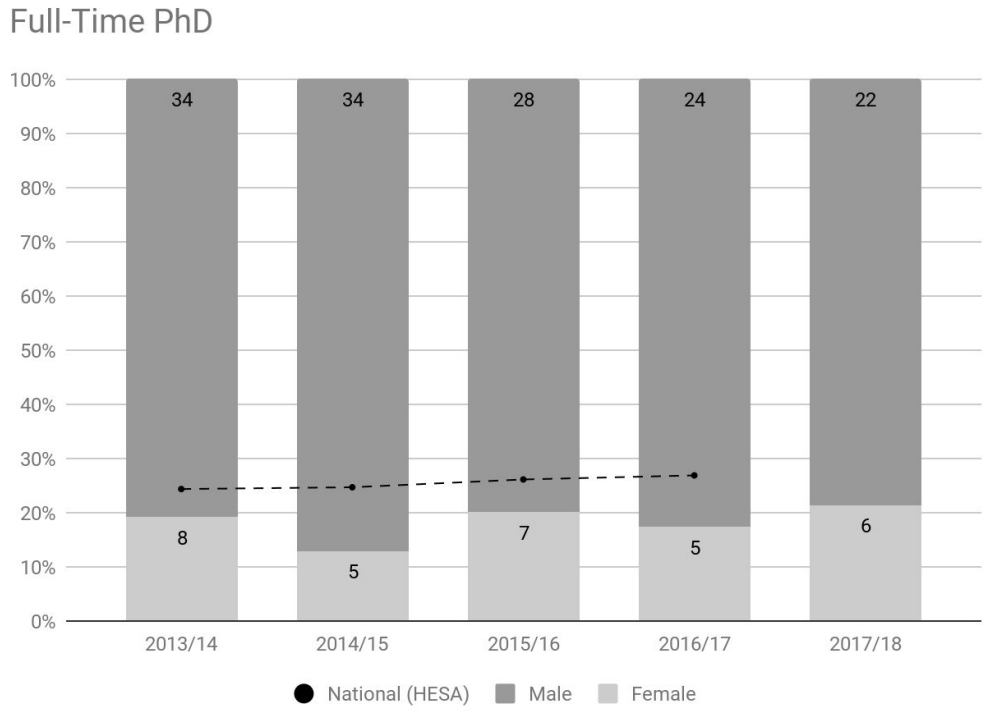
Masters Completions



Above, we present degree attainment for men and women separately for each academic year (distinction, merit, pass, fail). Over the last three years, women achieved distinctions in a higher proportion than men, and very few women fail. Women's attainment is excellent on our masters courses. ECU benchmarking excludes PG attainment.

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

Doctorate



The proportion of women on our PhD programme is consistently below the HESA sectoral average, with a mild positive trend. We draw many PhD students from UG and masters, so this is a pipelining issue (action in the next section).

Similar proportions of PhD students move to part-time study, although the numbers are small.

Applications, offers, acceptance

Due to small numbers the gender percentages tend to fluctuate significantly. The proportion of women applying in the last four years has been close to the HESA sectoral average and there seems to be a rising trend in offers (albeit with much noise). Acceptances fluctuate, but are below the HESA average in most years.

PhD Completions

The proportion completing is similar for men and women with a positive trend towards completion overall.

(v) Progression pipeline between undergraduate and postgraduate student level

Several of our BSc third year options and MSc modules feed the PhD pipeline by delivering research-related content on eg., Data Mining (CO649*), Neural Networks (CO636/836), Programming Languages (CO658, CO663), Security (CO634), Computational Creativity (CO659*), Semantic Web (CO644*), e-Health (CO816*). While some of these modules (marked *) are convened by female lecturers, we acknowledge that we could have more female role models to attract female students towards a career in research.

A few steps have been taken in this direction. In 2018/2019 we will be starting a new research-oriented module (CO661 - Theory and Practice of Concurrency) which will (1) be convened by a female lecturer and (2) host one or two guest lectures by an external female researcher. Moreover, a woman took on the role of PGR Admission Officer in August 2017 -- so that information about the opportunities of a PhD provided by the School (eg., the yearly pitches to last-year BSc and MSc students) will be delivered by a research-active female lecturer. Below, Actions 4.1.f and 4.1.g are targeted at increasing, respectively, the number of internal and external female applicants for PhD positions in our School.

Action 4.1.f - Provide Support Lectures by External (gender-balanced) Guests

> Actions outlined elsewhere aim to increase the number of research-active female academics in the School. Besides these, to ensure a systematic presence of female role models in the short term, the School will encourage and support the practice of inviting a gender-balanced set of external guest lecturers.

Action 4.1.g - Advertise PhD scholarships on female mailing lists

> To increase the number of external female applicants we plan to advertise our PhD scholarships on female-only or female-targeted mailing lists (eg., "women in science and engineering").

4.2 Academic and Research Staff Data

NB For this section, national benchmarking data is aggregated from ECU/HESA reports 2013/14 to 2015/16. 2016/17 data is not yet available.

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

We favour T&R, open-ended contracts, except for specific reasons, e.g. maternity cover or posts with finite project funding. For some, T&S contracts better reflect their work. T&S staff are allocated 200 hours p.a. for research and scholarship cf. 400 for T&R staff.

Research-only contracts are held only by researchers on fixed-term grant awards (see 5 for researchers' career progression).

Our Hourly Paid Lecturers (HPLs) are predominantly PhD and MSc students are are always on teaching-only contracts. We discuss HPLs separately from academic staff in section 4.2(ii). Researcher data is included.

20% of female staff are post-docs on research-only contracts, 46% are academics on T&R contracts and 34% academics on teaching-only contracts (see Table 4.2.1). This is close to ECU national benchmarks for all disciplines -- 25% research-only, 44% on T&R, 31% on teaching-only -- but we have proportionally more female teaching-only and fewer female teaching-and-research contracts against benchmarking for IT-relevant disciplines -- 24% research-only, 54% T&R, 22% teaching-only. While 20% of male staff have research-only contracts, a higher proportion of men are on T&R contracts (69%).

Of <5 female T&S academics in 2018, some have open-ended contracts at their choice (research is not part of their career plans), and some have fixed-term contracts with ambitions for open-ended T&R contracts (we support this). Staff may request changes to contract type. Historically, changes have been from T&R to T&S, and always because the latter better reflects activity, and some cases (both male and female) have led to prompt promotion.

Table 4.2.1 Academic Staff Population

Job	Category	2012/13		2013/14		2014/15		2015/16		2016/17	
		F	M	F	M	F	M	F	M	F	M
Researcher	Research only	<5	<5	<5	7	<5	11	<5	10		14
Lecturer	Teaching and Research	<5	13	<5	12	<5	8	<5	9	<5	12
	Teaching only	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Senior Lecturer	Teaching and Research		5		<5		6		8		8
	Teaching only		<5	<5	<5	<5	<5	<5	<5	<5	<5
Reader	Teaching and Research		<5		<5		<5		<5		5
Professor	Teaching and Research	<5	8	<5	10	<5	10	<5	10	<5	10

Action 4.2.a - Undertake Contract Survey

Conduct a survey to obtain clearer data if individuals are on the contract type of their choice (research-only, teaching-and-research, teaching-only). (To be included in the main staff survey).

Action 4.2.b - Make RPD more proactive

Use RPD to discuss individuals' contract types and how to proceed if a change is desired.

Action 4.2.c - Support Academic Aspiration

Project PIs to work with post-doctoral researchers on an individual case-by-case basis (during annual review or as requested by the post-doctoral researcher) to identify and support those staff that aspire to academic teaching-and-research contracts, but who do not have enough teaching experience to allow this career transition. Follow up by the PI arranging opportunities for the post-doctoral researcher to give guest lectures on their modules or colleagues' modules, as appropriate.

The University was unable to provide the SAT with ethnicity data, which leaves us unable to comment on intersectionality.

Action 4.2.d - Record Staff Ethnicity Data

Request that the ASWG records this data for future analysis throughout the institution.

Table 4.2.2 Job Type as % of gender-based cohort

	Researcher	Lecturer		Senior Lecturer		Reader	Professor
	R	T&R	T&S	T&R	T&S	T&R	T&R
Female Staff	20%	31%	23%	0%	11%	0%	14%
Male Staff	20%	25%	6%	14%	6%	8%	22%

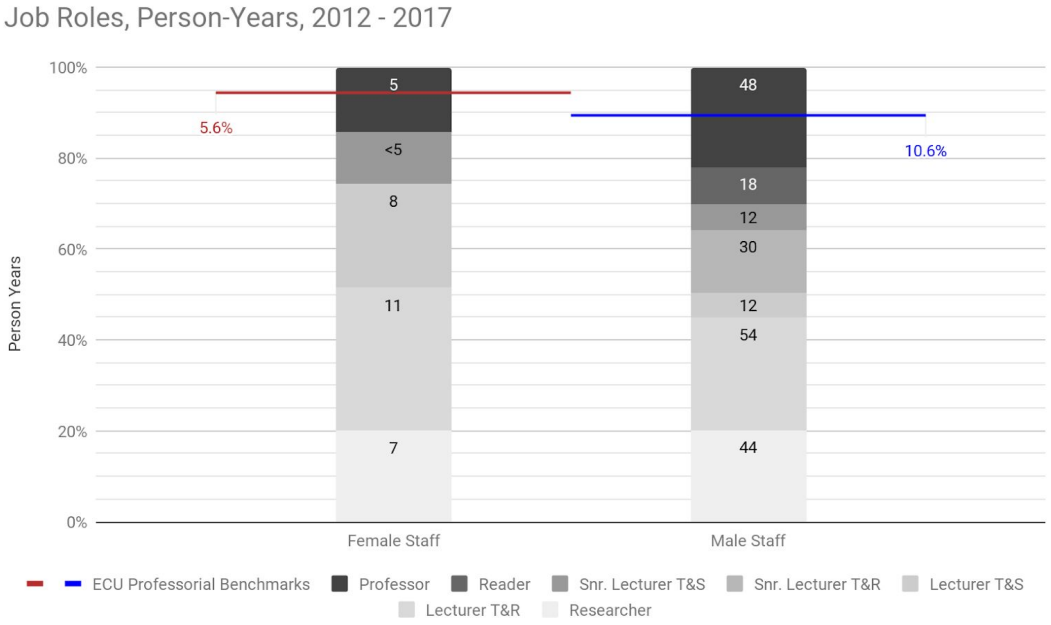


Table 4.2.2 and the figure above show Men are better represented in grades at SL or above.

- 74% of female academics at Lecturer or Researcher compared to 51% of males.
- 30% of male staff are Readers or Professors, versus 14% of females.
- We have had <5 female professors in the past five years, versus 8-10 males. With no female readers in the past 5 years, our rate of 14% of female professorial staff compares well to the national average of 5% of female SET academic staff being professors. Although lower than our fraction of male professors, small numbers mean the granularity in the figure above is very coarse.

Of 5 female, non-professorial staff, some have been in post for less than 7 years, and the rest are on T&S contracts.

Promotion success is decided by the UPC, not the School. While the University has revised its criteria for promotion several times over the past decade and regularly runs workshops for staff, the criteria for promotion beyond SL on grounds other than research have lacked clarity/achievability (typically, it is more straightforward to demonstrate external impact of leadership in research than in teaching). Kent's Recognising Excellence in Education Project (REEP) has recognised this, and is developing guidelines to address it. The School fully supports this initiative and will seek to take early advantage.

Action 4.2.e - REEP Review for Non-Research Promotion Prospects

SPP to consider the outcomes of REEP as soon as they are published, and develop plans to support staff who could prepare cases based on teaching contribution.

Female academics have been / are being supported by the School through discussions with the HoS on plans to achieve the promotion criteria. In Section 5.1, we discuss in more detail the issues of lack of female representation in higher-grade posts at both the appointment and promotion stages, and the initiatives we put in place to address these issues.

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

Researchers are almost always appointed on fixed-term contracts. Fixed-term appointments at Reader or Professor level are unusual, but there were <5 in the last five years, all males on a part-time basis or funded by an external contract.

HPL contracts are always fixed-term. The majority of HPL contracts have been held by the School's own PhD and MSc students for small group teaching. Table 4.2.4 shows the numbers of HPLs contributing lectures (rather than classes). Women are underrepresented as guest lecturers. GTAs are required to do some teaching in exchange for internal funding of tuition fees and stipends. PhD students with ambitions for academic careers, whether GTAs or otherwise funded, are encouraged to gain some teaching experience, as we recognise that lack of any teaching experience is likely to be an obstacle to an academic appointment. Kent no longer offers zero-hours contracts, but ones that guarantee a minimum number of hours each term.

Table 4.2.3 Academic Staff Population

Job	Contract	2012/13		2013/14		2014/15		2015/16		2016/17	
		F	M	F	M	F	M	F	M	F	M
Researcher	Fixed Term		<5	<5	6	<5	10	<5	9		13
	Open Ended	<5	<5	<5	<5		<5		<5		<5
HPL	Fixed Term		5		6	<5	7	6	8	5	7
Lecturer	Fixed Term	<5	<5	<5	<5		<5		<5		<5
	Open Ended	<5	14	<5	14	<5	9	<5	10	<5	12
Senior Lecturer	Open Ended		7	<5	6	<5	9	<5	11	<5	9
Reader	Fixed Term		<5								
	Open Ended		<5		<5		<5		<5		5
Professor	Fixed Term		<5		<5		<5		<5		<5
	Open Ended	<5	7	<5	8	<5	8	<5	9	<5	9

However, we not only recognise that some of our non-student HPLs desire more secure contracts, but want to retain these valuable staff, and we have offered some fixed-term and part-time contracts.

The School has also recently made other fixed-term appointments: T&S contracts funded by the Student Success Project and T&R contracts for maternity cover.

Overall, the fraction of women appointed either as HPLs or on fixed-term contracts is higher than the fraction appointed on open-ended academic contracts. However, we note that we employ more female (and male) staff on open-ended contracts compared to national benchmarks for IT-related subjects (data available for 2014/15 and 2015/16 only, HPLs not included). Nationally 63% of female staff are on open-ended contracts, 37% on fixed-term (with 65% of male staff on open-ended contracts and 35% fixed-term). But the numbers are small.

Action 4.2.f - Work with our HPL cohort to identify motivations for undertaking HPL contracts

Offer support where possible for those who wish to engage with the school more and/or pursue more secure academic careers. To understand our HPL cohort better, we will run a staff survey with our HPLs and analyse the results. We will ask line managers to monitor their HPLs and also encourage HPLs to speak to their line managers, to allow HPLs to access additional support where this is desired. From initial conversations, while some are looking for low commitment working hours to supplement other working commitments, others have aspirations for more secure academic jobs. This can be guided to some extent by the support we offer our researchers in terms of networking support, inclusion for research group activities, access to School and University training schemes, more inclusive communication and representation e.g. representation on the School Education Committee. HPL staff can choose to opt in or opt out of these provisions depending on their preferences.

Table 4.2.5 Comparison of distribution of gender-based cohorts by job/contract type

Job Type as % of gender-based cohort	HPL	Researcher		Lecturer		Senior Lecturer	Reader		Professor	
	FxT	FxT	OE	FxT	OE	OE	FxT	OE	FxT	OE
Female cohort	50%	7%	3%	3%	24%	6%	0%	0%	0%	7%
Male cohort	38%	11%	1%	2%	17%	12%	0.3%	5%	2%	12%

FxT Fixed-term contract **OE** Open-ended contract

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

Table 4.2.6 Academic and research staff leaving the school (by year - all academic roles excluding HPL)

	2012/13	2013/14	2014/15	2015/16	2016/17
Female		<5	5		
Male	5	<5	5	6	<5

Table 4.2.7 Academic and research staff leaving the school 2012/16 (by fixed-term or open-ended contract)

	Fixed-term contract expiry	Retirement	Other reasons (e.g. resignation)
Female	<5		<5
Male	6	5	9

HR data is aggregated to avoid identifying individuals. Due to small numbers we were unable to use staff grades as this would be identifying. No permanent female staff have left in the 5 years covered by the data.

The retirement data fits with the profile of the School, where older members of academic staff are more likely to be men. National benchmarks for UK academic staff leavers (across all disciplines), indicate 14% of female staff leave employment due to retirement. (No further national benchmarking data could be located for comparison).

Fixed-term contract expiry: Fixed-term contracts are given for Researchers attached to externally-funded grants. Two events also affected the number of fixed-term contracts in this period: a rapid growth in student numbers (particularly at Medway) and REF2014.

1. The growth in student numbers meant some fixed-term appointments were made to cover immediate extra teaching requirements while recruitment took place for a permanent member of staff.
2. Some members of staff were on fixed-term contracts in 2014. Furthermore, more staff left in 2014 than in other years because some delayed retirement beyond the REF census date, and because of pre-REF push on research grants that completed shortly thereafter.

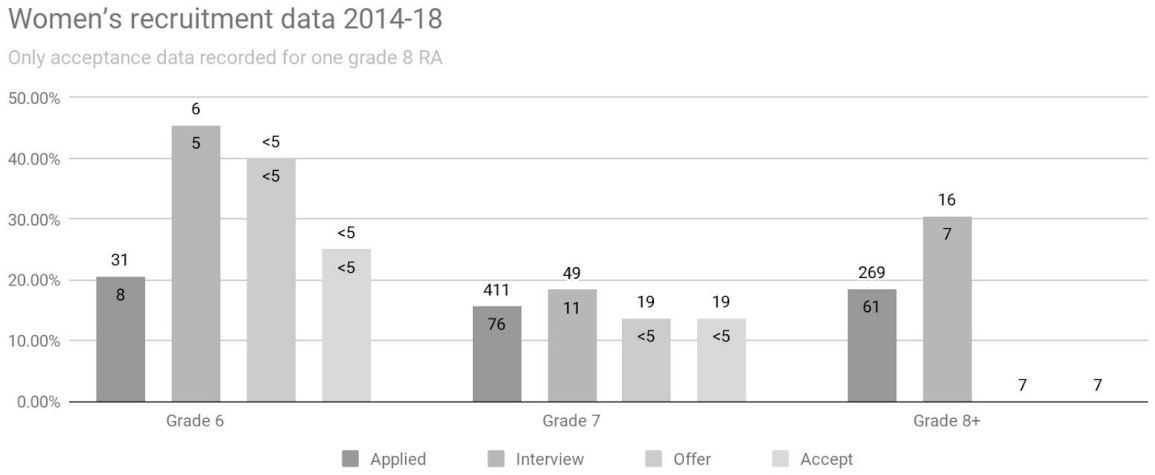
Action 4.2.g - Improve leavers' benchmarking

We will work with ASWG to consider best practice for gathering data from leavers, such as exit interviews, in the hope that we can have more robust School- and University-level reporting and benchmarking.

5. Supporting and advancing women's careers

5.1 Key career transition points: academic staff

(i) Recruitment



We shortlist men and women in a similar ratio to those who apply, but proportionally interview more women. Offer ratios fluctuate per year and most women accepted our job offers. We are concerned that (1) fewer women than men apply, and (2) few women are appointed to senior posts, although we rarely make such appointments.

Addressing (1): research by Kent's Information Services found application strategies to differ by gender: women applied when they fit all criteria, whereas men applied regardless. Consequently, our job adverts (from 2013/14) have reduced the essential criteria and include a statement encouraging female/minority applicants (see extract).

> Our staff and students come from all over the world, and we are proud of our friendly and inclusive culture. We support colleagues through a number of family-friendly policies, including a core hours policy and the right to apply for flexible working, and support for staff returning from periods of extended absence (for example, maternity leave).

Addressing (2): In 2014/15, all School staff completed "Valuing Everyone" training, tackling unconscious bias. The University provides training on Diversity in the Workplace; Recruitment and Selection; Transgender Awareness, and these courses are a probation requirement for new staff.

https://www.kent.ac.uk/hr-equalityanddiversity/training/e-learning.html

Furthermore, following University practice, academic recruitment panels are gender mixed. Following a push in 2015, panel members are trained on recruitment best practice, including avoiding unconscious bias.

(ii) Induction

The University provides induction training:

https://www.kent.ac.uk/hr-learninganddevelopment/programmes/new-staff/index.html

New Lecturers are assigned a Supervisor for a 3-year probation: probation plans and annual reviews are agreed with the Supervisor and HoS. Supervisors are typically senior and from same research group and campus. This criteria avoids overloading senior females, but leads to mostly male supervisors.

New academics are assigned an advisory Mentor through consultation (from 2017), aiming to provide effective working partnerships.

New colleagues are welcomed in an email from the HoS to all staff and postgrads; they are also introduced at their first (monthly) staff meeting.

(iii) Promotion

From 2014 to 2017, the proportion of unpromoted women, 50%, was higher than that of men, 40%. 47% of men applied for promotion and 33% of women, a significant discrepancy.

The University's promotion processes have developed over this period: the SPP was introduced to support academics developing promotion cases, and the promotion criteria now require 'good citizenship' (e.g. SAT membership), leadership within one's discipline, and activity (enterprise, community engagement, service, teaching and research).

An annual email from the HoS calling for draft applications describes the promotion process, the role of the SPP, the timetable and links to HR. The SPP assesses drafts and advises on how to make the best case, sometimes suggesting delaying application to take specific action to improve one's case (thereby avoiding a one year cool-off period between applications). It also considers all staff who have not been promoted recently, and may also approach individuals to encourage application or to point out activities that would support an application, e.g. grant applications or study leave. The SPP reports to the UPC on applications and on how it has considered staff who have not applied.

The University's Recognising Excellence in Education Project (REEP) addresses a historical undervaluing of teaching.

Action 5.1.a – Discussing promotion prospects.

> Remind appraisers and probation supervisors to discuss promotion prospects with all their staff (not just the female staff, and not just the staff they think should be applying for promotion that year, to avoid any discrimination) at the start of each promotion application cycle. Aim of this discussion is to allow the staff member to decide whether to apply for promotion, and either (i) identify key strengths they should emphasise in their application, (ii) Identify what they need to work on in order to improve their prospects for a future year's promotion application, or (iii) recognise that the staff member chooses not to show interest in promotion, discuss this with them, but respect their wishes while being willing to discuss further if the staff member changes their mind.

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

We are proud to have submitted nearly all eligible staff to REF 2014. This included <5 women out of 32 Category A staff. <5 of 8 ECRs included were female. For comparison, in RAE 2008 we submitted 27 Category A staff (26.7 FTE) including <5 female staff (3.0 FTE) and 11 Category B staff (including <5 female staff).

We hope to increase gender representation on for REF 2020 in impact case studies. In REF 2014, submitted impact case studies focused on research led by male staff. For REF 2021, <5 out of 8 candidate impact case studies being supported by the School focus on research led by female staff.

5.2 Key career transition points: professional and support staff

(i) Induction

All new University staff have a formal induction process which is the responsibility of their line manager. Staff are encouraged to take advantage of any informal support provided by colleagues. They are welcomed to the School in same way as academics (Section 5.1(i)).

(ii) Promotion

<5 members of admin/technical staff have applied for promotion since 2012. All were successful.

The School supported all these applications, with statements from line managers and the HoS.

Since the last round of promotions, the University has changed its upgrading procedures to be more transparent and led by the line manager, rather than the individual. The School hopes that this will encourage more staff to apply for promotion when appropriate.

5.3 CAREER DEVELOPMENT: ACADEMIC STAFF

(i) Training

The University provides training in numerous areas, some of which are mandatory, ranging range from EDI (on appointment) to GDPR (from 2018). Academics appointed without a formal teaching qualification study for the PGCHE; some PGCHE modules are also taken by GTAs. Staff are notified of optional University workshops via email alerts, but the School does not hold attendance records for these events. Passing the PGCHE is a requirement for completing probation. PGCHE teachers solicit feedback from students (our staff) in a process managed by UELT.

The School nominates staff for leadership programmes eg., the women-only programme Aurora (we provide financial support and WAM time commitment), and also Kent's Leadership for Areas of Specific Responsibility (LASR) and New Senior Leaders (NSL) programmes. Since our Bronze award, some have participated in the Aurora programme, LASR and NSL.

The School organises training events for its staff, including *Valuing Everyone* (EDI), autism spectrum disorder, grant writing, and teaching and research away days.

(ii) Appraisal/development review

The University's RPD appraisal system centres on an annual conversation with a reviewer, **reflecting** on activities undertaken in the previous year, **planning** for the next 12 month, and identifying opportunities for career **development** and training needs.

There has been a lack of clarity within the university as to whether RPD is mandatory for all academics other than those on probation. Staff have differed in their perception of the usefulness of appraisal. Both contributed to variability in take-up. A number of changes were made in 2017.

To improve lines of communication and ensure that staff felt that their voices were heard, the number of appraisers was reduced from 12 to the CMG (5). This also ensured that post-docs were not appraised by their PI, thus providing an independant ear. The RPD cycle started with a briefing of appraisers by the HoS to reiterate the School's goals and ambitions, and to emphasise the expected support to appraisees. Appraisals should include discussion of all aspects of work, career plans and aspirations, work-life balance, any support needed to help individuals achieve their and the School's goals. This helps to foster an all-inclusive, non-discriminatory culture in the School (see Culture).

While RPD is confidential between appraiser and appraisee, the HoS receives a summary of its outcomes. Appraisers and appraisees are required by the University to have attended RPD training **(2014 Action P.8)**. RPD is not linked directly to promotion, reward and salary increase which are handled in a separate annual process (see Section 5.2).

Table 5.3.1 Academic Appraisals (including research staff)

	2014/15	2015/16	2016/17	2017/18
M appraised	32	39	14	35
F appraised	<5	<5	<5	6

Numbers exclude those not appraised because on probation or leave (maternity, sickness or study). The dip in 2016/17 fell into the handover period between HoSs.

(iii) Support given to academic staff for career progression

As well as the training described above, staff on their first academic appointment are given a reduced workload (50% year one and 25% year two) plus a tapering enhanced research allowance for the first 5 years.

The School monitors and supports progression of all staff through its research groups (which provide fora for discussion of work in progress), and annual meetings with the HoG and DoR. There is a collegiate atmosphere with shared lunches and the majority, including the HoS, operating an open door policy.

The School issues an annual call for applications for study leave. A gender-mixed panel discusses applications, and works with those it wishes to support to hone them before submission to the University. The School typically supports 4 terms of leave each year.

The University provides support to ECRs (academics and post-docs) through its ECR Network, established to provide mutual support, and which ties in with the Vitae Researcher Development Framework. ECRs with ambitions for an academic career are encouraged, without pressure, to undertake some teaching (guest lectures, classes).

The School has also supported a Daphne Jackson Fellowship (for women returning to academia from career breaks) in the past four years.

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

Training.

PhD students and RAs are eligible for the University's Researcher Development Programme (RDP), focussing on transferable skills. RDP was developed in response to national policy which produced the Researcher Development Framework. RDP:

https://www.kent.ac.uk/graduateschool/skills/programmes/tstindex.html

offers a variety of workshops and online courses covering data management, writing and publishing, grant applications, personal effectiveness and career development.

Over the last four academic years, attendance of RDP courses was as follows: 2013/14 [19M,7F], 2014/15 [17M,<5F], 2015/16 [16M,<5F], 2016/17[12M,<5F]. Uptake by women is consistently proportionally higher.

GTAs, part-time and sessional teachers are encouraged to register for two core modules of the PGCHE, which lead to the Associate Teacher Accreditation Programme (ATAP). During the last 4 years, <5 staff (one male in 2016 and one female in 2017) have undergone ATAP training.

The University offers a range of pastoral support services for all students, including Support, Health and Wellbeing Services:

http://www.kent.ac.uk/student/support-and-wellbeing/

that incorporate counseling and support for mental health, disability and international students. In addition, the Students' Union has an Advice Centre that offers 15-minute drop-in sessions to all students.

Undergraduates and Taught Postgraduate mentoring.

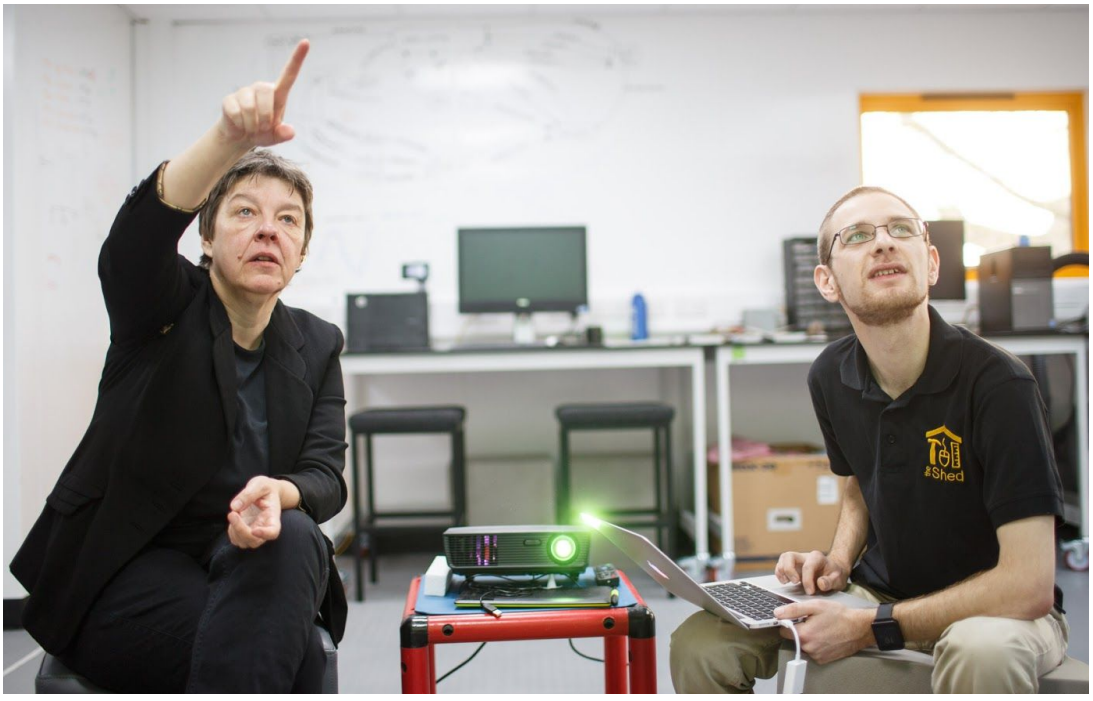
Academic and pastoral support is provided by academic tutors. The School has a female senior tutor at each site, to provide support to female students who do not wish to discuss particular (especially gender-related) issues with their appointed tutor.

First year UG and PGT students meet tutors in groups during Welcome Week, with solo meetings arranged termly thereafter. Students may request a change of tutor, without explaining the reason, by contacting the senior tutor.

Additional academic opportunities are provided by the Homework Club (Canterbury) and Computing Workshop (Medway), where students can discuss work and obtain help from trained students from the year above. We offer several 2-hour sessions for these peer tutors (who are paid).

Postgraduate Research mentoring.

Most School support is provided by the student's supervisor, who meets with the student regularly. Students are required to provide summaries (certified by the supervisor) monthly to an online reporting system.



Picture 5.3.2 PhD supervision meeting

The School holds regular research group seminars and the organisers try to ensure there is a good gender mix among the speakers. These provide opportunities for students to present their work, enhance their presentational skills and network with other researchers in the School.

Students of the SoC are served by a variety of training providers: the Learning and Development

Team within the University's HR department, the Graduate School, Research Services, the Unit for the Enhancement of Learning and Teaching, Kent Innovation and Enterprise, the SoC itself, and external providers funded by the University.

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

The School and a Faculty Fund provide support for initial experiments, grant writing, visiting potential project partners, or hosting workshops to raise visibility. Sabbaticals support grant development (Section 5.3(iii)).

The School supports applicants for first or large grants, or fellowships through a career development package (additional 6 months RA, PhD studentship, mentoring). Its annual Grant Writing Workshops complement the University's Grants Factory -- new academics are particularly encouraged to attend. Internal Peer Review helps strengthen grant applications, including by the DoR and HoS for first grants. Successful grants are celebrated within the School. Researchers are encouraged (by DOR, internal peer reviewers) to include the best aspects of unsuccessful applications in new ones. The WAM gives credit for all applications, whether or not successful

The Faculty runs research festivals on both campuses, allowing researchers to exchange ideas, establish collaborations, showcase their work and build networks, both professionally and socially.

5.4 Career development: professional and support staff

(i) Training

The School has a 'no reasonable request refused' policy for training rather than a per-head budget. This applied to staff at all levels for internal and external training. Training opportunities are highlighted to staff as they become available but colleagues are also encouraged to work with their line managers to identify and address training needs. Training uptake is inline with the gender balance of professional and technical staff.

New staff are supported and inducted by their line manager and the team as a whole but are also allocated a mentor in a similar role in a different School. This helps with networking and sharing best practice across the University. It also leads into the faculty system of Special Interest Groups where staff in similar roles meet to discuss pertinent issues, changes in systems, regulations, legislation, etc. to share ideas and lobby for changes. These have proved successful support mechanisms for admin staff at all levels.

Picture 5.3.3 Professional services staff celebrating with graduating students

All staff are trained on the University's IT systems by their peers and in regular workshops. All staff have completed online training relating to data protection and, more recently, implications of the new GDPR. Similarly, all admin staff have attended training on the implications of UKVI legislation on HE, ensuring compliance and managing any areas of concern.

The School arranges specific workshops, usually with external facilitators, to address areas identified by any member of the team, e.g. recently, effective working relationships; autism and how to support affected students. All admin staff attended these sessions.

(ii) Appraisal/development review

All staff are appraised using the RPD scheme. The emphasis is on the individual guiding the annual conversation with their line manager to touch on achievements in the past year, immediate plans in their role and longer term job and personal development. The records of this conversation are confidential between staff member and manager, so could not be analysed here.

Action 5.4.a - Appraisal of Technical Staff

In the process of gathering data for this application it was clear that not all technical staff were appraised annually, which the School will change by giving appraisers a timescale in which they need to talk to their staff and record the conversation.

Table 5.4.2 Appraisal by Gender (Professional and Technical staff)

	2014/15	2015/16	2016/17	2017/18
M appraised	<5	<5	<5	6
M appraised%	33%	20%	33%	100%
F appraised	14	15	11	10
F appraised%	100%	100%	91%	100%

Numbers exclude those not appraised because of maternity or sickness leave. The dip in 2016/17 fell into the handover period between HoSs.

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

All administrative staff in academic schools take part in a biennial conference. Staff are able to choose from a range of workshops, from those directly related to their roles, to personal development workshops.

An even gender mix of members of the team have undertaken the University's in-house middle-management training. 'Developing Management Skills' had 6 day-long sessions over several months to share best practice, encourage networking and develop confidence in management skills.

> "The training gave me the confidence to overcome the 'impostor syndrome' feeling that everyone else knew what they were doing and I was just winging it! The vast majority of the trainees (male and female) had no management training either and we were all as competent as each other."
>
> Female participant, Developing Management Skills course

5.5 Flexible working and managing career breaks

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

The FWG (now ASWG) recognized that some Science Schools have little experience of managing maternity and adoption leave. In response, it produced the Family Friendly Leave Checklist, defining best practice for planning leave and setting out considerations and responsibilities of staff and managers.

In the last 12 years, <5 members of the School have taken maternity leave, all in the last few years. As well as following institutional procedures, the School has offered additional "common sense" support that was, at the time, not formally documented. Following this experience, the SAT reflected on the appropriateness and effectiveness of the support provided, and has defined ***guidelines*** (best practices for maternity/adoption/paternity leave) and ***process*** (integrating the HR's Family Friendly Checklist with School-specific actions) documents, published internally, intended particularly to support academics to re-engage with research answering [Actions P.1, P.5, 2014].

This systematic planning process is designed to include early meetings with the leaving member, HoS, and Head of Health and Safety; risk assessments that offer an opportunity to raise concerns or request arrangements; and a possible workload reduction from CWB-15 weeks or earlier depending on the course of the pregnancy.

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

Members retain their own office and use of all services while on leave. This was already in place and has now been formalized (Guideline 7). A named colleague (typically the Head of Health and Safety) helps handle contacts with the School during leave.

A lecturer hired to cover the leave helps the member to keep up with responsibilities (Guideline 6). This also benefits the supervision of PhD students (Guideline 5) as well as allowing the member to retain previous teaching on return (Guideline 9). This arrangement also allows the member to be represented at School's meetings and other administration- and research-related activities.

The School offers up to 10 Keep In Touch days during maternity leave, with the purpose of facilitating members' return rather than School duties. The opportunity and role of KIT days has been made clearer (Guideline 8).

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

Following the recent experience of maternity leave, the School has increased the reduction in workload from 75% to 50% in the year following return. It has also committed to improving the quality of workload by avoiding giving new teaching on return wherever possible; this had been felt to add a considerable toll in an already delicate phase of the leaving member's career. The School also offers options of returning to work part-time and/or with flexible working arrangements for at least two years after the return date.

On return, academics have an enhanced travel budget, to help support them re-engage with research. This can be spent on visitors to Kent or for travel, including with child. Any unspent funds this year are carried forward.

Following recent experience, the School will solicit feedback from returning members on the guidelines and the effectiveness of their implementation, about six months after their return. This will be used by the Athena SWAN committee to reflect on the practices and amend them, if needed. Because the School lacks experience, these processes are intended to be flexible, and the School will be alert to issues raised by members taking or who have taken leave in order to cater for specific needs wherever possible.

(iv) Maternity return rate

Fewer than 5 members took maternity leave in the last three years, most returned.

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

In the last four years, <5 academics have taken paternity leave - all returned full-time. No shared parental, adoption or parental leaves were taken.

The School's guidelines for maternity leave also apply, in part, to paternity leave. In some cases, the practices are the same: retaining their office and other services, the offer of part-time and/or flexible working, supporting funding after return (depending on the period of leave taken), soliciting and gathering feedback, and ad hoc support when needed.

The guidelines on load reduction apply partially. Prior to leave, members can request flexible working to support their partners. The load reduction offered will be negotiated depending on circumstances.

(vi) Flexible working

The Flexible Working Policy details examples of the different ways in which staff can work flexibly, including working part-time. Academic and research staff generally work flexibly informally as noted above, though they are also included in the formal Flexible Working Policy.

School administrative staff manage requests from academics to alter and balance their teaching timetable against their personal commitments. Requests from staff are received sympathetically and facilitated whenever possible.

The School is proactive in supporting colleagues with child care responsibilities. Before the start of each academic year, the School seeks notifications of specific time constraints. These are accommodated wherever possible.

The views of a female academic and a female PhD student, both being mothers, were sought to provide exemplar qualitative data on the School's approach, which can be found in Section 5.

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

In general, the School supports mobility between PT and FT to accommodate the life constraints of its staff. In the last four years, <5 members working part-time requested a transition to full-time work, e.g. due to children getting older. In all cases, transition was granted.

5.6 Organisation and Culture

(i) Culture

"Collegiate and helpful atmosphere. Very good and responsive administrative support"
Staff survey

UoK has always been seen as a good place to work. A Code of Conduct launched in 2016 provides a framework of standards and behaviour. AS events are held regularly on both campuses, and Kent's EDI Network was selected by the ECU as an example of innovative sector-leading practice in advancing equality and diversity. The SoC is an active participant in events, including the Valuing Everyone programme of workshops exploring issues of inclusivity and team dynamics (shortlisted for a 2015 Times Higher Education Award). In the most recent survey, 91% stated they were treated the same regardless of gender, ethnicity, religion etc (up from 85%).

The School is very conscious of the poor representation of women in computer science, at all levels. Athena SWAN is becoming embedded in school culture, recognising that this is a matter we must address rather than blaming the pipeline. The HoS (academic lead) and SAM (administration lead) both sit on the SAT. The School gives credit in its WAM for the EDI coordinator, and the Chair and members of the SAT. As part of the University's Student Success Project, the School has hired a lecturer at each campus (2.0 FTE) with remits to address student attainment gaps, including that between men and women.

"The culture in the School goes beyond the University's family friendly policies. One feels that commitments outside of working life are taken into consideration and respected"
Staff survey

A central theme is to encourage more women into computing; we do so in a variety of ways, from attention to recruitment literature, including female students as role models in outreach activities in schools, focussing on earlier education before girls appear to be "put off" computing, and initiatives such as YinCo. All interview panels include both genders. The School actively encourages female staff to take on roles of responsibility (all female academics currently hold such roles), and to undertake leadership training. The SPP actively seeks out and supports applications for promotion.

"The university has very supporting maternity and paternity policies. The school has fulfilled them well"
Staff survey

Input from both University and School level SATs have shaped the School's way of working, improving the School's recognition of family life, flexible working, support for new

parents and others with caring responsibilities (eg., core hours policy for meetings).

The School is very conscious of how to make all staff feel included. From 2017, all including administrators and technicians are encouraged to attend School meetings. Separate campuses make communication more difficult.

Action 5.6.a - Multi-Site Conferences

> The School has invested substantially in better teleconferencing to avoid travel between campuses. We plan to alternate chairing of meetings between campuses to improve feelings of inclusivity.

(ii) HR policies

University policies are published on the HR site, and staff are directed toward these. In addition to one day of HR training for an incoming HoS, HR has termly meeting with the HoS and the SAM where they are briefed on new HR policy. HR also has two named members of staff responsible for liaising with the SoC, with whom issues are referred to ensure consistency with University practice. Our EDI rep also liaises with HR and widely across the university.

(iii) Representation of men/women on committees

Membership of all committees is by role. Selection for administrative roles follows a standard process: a call for written expressions of interest, interview by a small gender-mixed panel chaired by the HoS, followed by prompt notification and feedback to unsuccessful candidates.

Role-based membership has consequences: currently all academic members of the CMG are men whereas all members of the PGR SSLC are female. Other committees (Education Committee, Medway SSLC) comprise all teaching staff. The RIC comprises the HoS, DoR, HoGs but also includes the EDI rep and ECR representatives (RA and lecturer), both to hear their voice and as a training experience.

(iv) Participation in influential external committees

Within the University, the DOR and DOI, both men, represent the school at the Faculty Research and Innovation Committee. The DOE (male) represents the SoC on the Faculty Education Committee. The SoC members of the Faculty Graduate Studies Committee are the DOGS(T) (male) and the DOGS(R) (female).

(v) Workload model

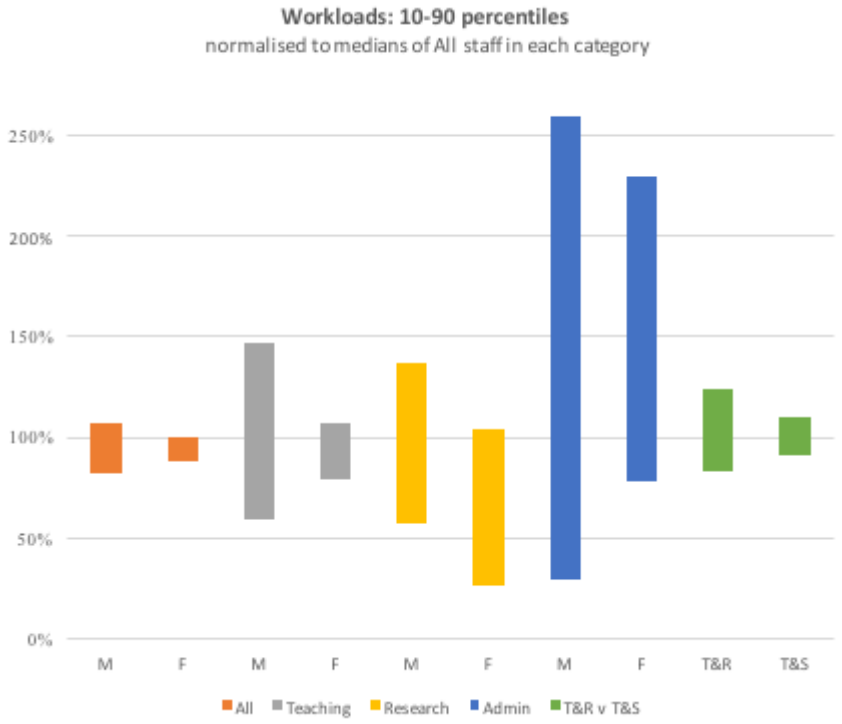
The School has a comprehensive WAM for academic staff that has evolved over many years. It includes all aspects of work including

- Teaching (discriminating between new or existing material)
- Marking (taking account of student numbers)
- Undergraduate and postgraduate project supervision
- Time funded by grants
- Supervision or research students and research assistants
- Major roles such as director of studies, DoR, examinations officers, head of research group, outreach officer, AOs, chair Athena SWAN team, EDI officer

- Other administrative duties such as module convenor, pastoral support, outreach, membership of committees, interviewing (staff and students), service to the broader research and teaching community.

In line with University policy, early career staff are given a reduction of 50% in their first year and 25% in their second year in order to study for a PGCHE, and to develop their teaching portfolio. In addition, T&R academics are given an additional 250 hours/year in year 1, decreasing by 50 hours in each subsequent year, to develop their research.

The model is determined by the HoS, in consultation with the DoR, DoE and DoO, and reviewed annually. The WAM is not prescriptive but acts as a guide to the DoO, who is responsible for its implementation. The WAM is published online, where staff can see principles and activity weights, and breakdown of their WAM hours, including a comparison of their load against an anonymised histogram of all academic staff loads. The WAM is not linked to the promotion process, but workload is discussed at appraisals annually.



(Excludes staff appointed mid-year)

There is a difference in overall workloads between men and women (All, $p=0.0185$), but the variations for Teaching, Research and Admin are not statistically significant ($p \geq 0.173$). Apparent differences for M and F Research workloads are largely due to 2 out of 6 female staff having T&S contracts.

(vi) Timing of meetings

In the past, staff meetings were held from 4-5pm in Canterbury. This arrangement predated the opening of Medway and put unreasonable demands on its staff having to travel between campuses. (Action P.12, 2014) established intention to (1) hold important meetings within core hours (10-4pm) following the University policy, and (2) hold at least 20% of meetings at Medway.

Since 2014, we have gradually brought major meetings and seminars within core hours. Other meetings may run outside core hours, only upon agreement of all staff involved. We have met objective (2) for meetings requiring physical attendance (eg., Boards of studies) and facilitated

participation of other meetings (eg., staff meetings) through an investment of £10k in conference-call facilities.

Social gatherings, e.g. staff leaving parties, Christmas celebrations, usually take place at lunchtime, accompanied by food, allowing all staff to participate. Both Canterbury and Medway campuses have weekly a `Cake' event during core hours to promote interaction between staff at all grades.

Action 5.6.b - Meeting room at Canterbury

Currently, the Canterbury campus does not have a common room reserved to members. We plan to have a common room set up by summer 2019.

> Would be great to implement a (mostly followed but occasionally forgotten) strategy from last year, of keeping meetings between 10-4.

The 2017 staff survey provided no quantitative feedback, but two useful comments on timing of meetings. The first is about our core-hour policy.

Action 5.6.c - Quantitative data for timing of meetings.

To provide quantitative data on the timing of meeting we will introduce explicit questions in the annual staff survey from the next academic year.

Action 5.6.d - Remind core-hours to staff members

To address the "occasional forgettance" of the core-hour policy, we will continue reminding it at staff meetings, encouraging attendants to raise scheduling issues timely should they occur.

The second comment was about accessibility of meetings across campuses. This was addressed soon after via teleconferencing. A concern on balancing intervention between campuses remains.

> Meetings being held at both campuses on an alternating basis, or skype calls for remote attendance.

Action 5.6.e - Balanced chairing.

We are working at defining better ways to chair these meetings to harmoniously balance interventions coming from across Canterbury and Medway campuses during open discussions. We aim at an equal share of chairing responsibilities between the two campuses.

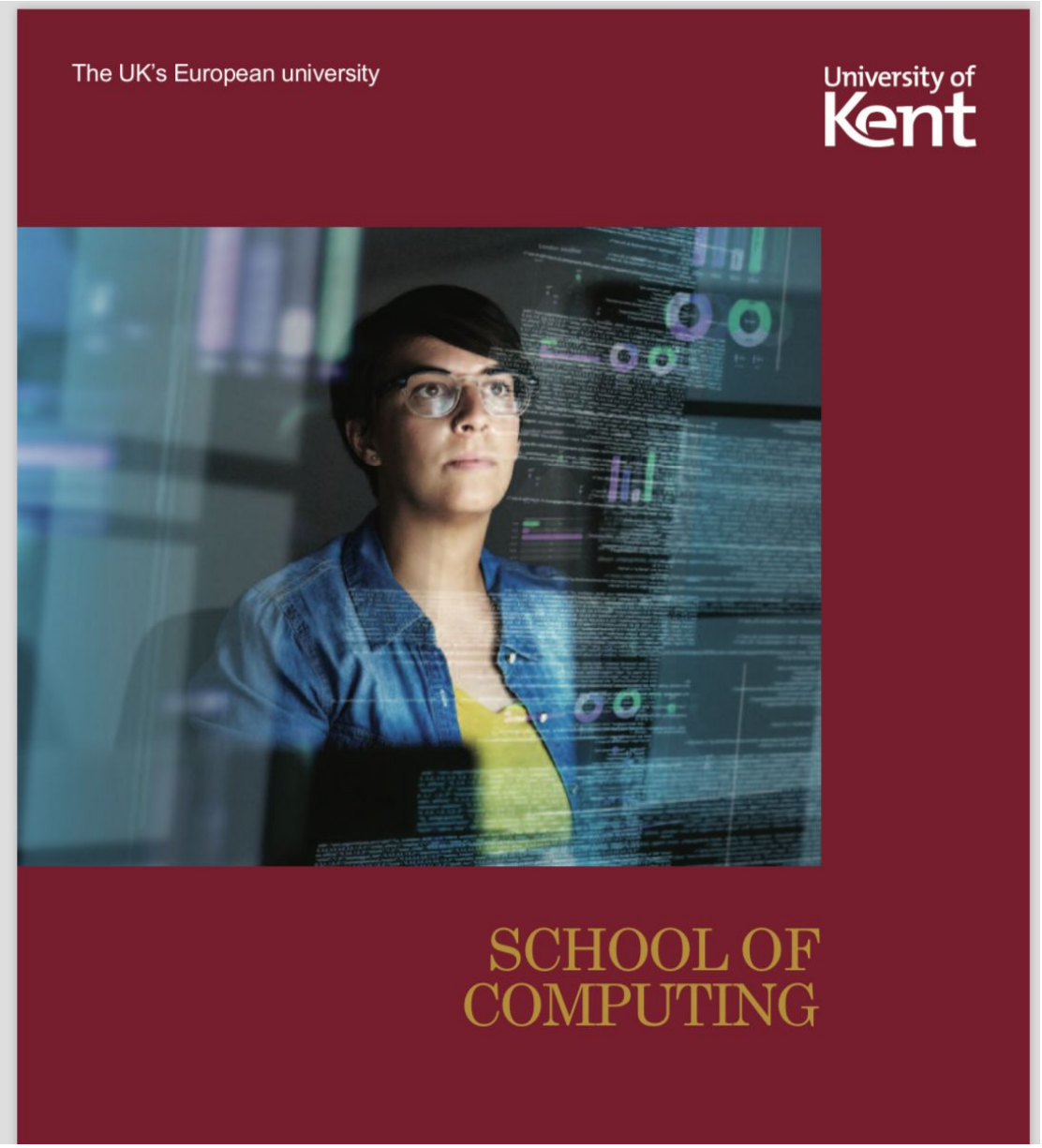
> "I want to do this job because coming to the Applicant Day is what made me want to study at Kent. A female student gave me a tour of the campus and I realised that if she could do this degree then I could too."
>
> Student ambassador

(vii) Visibility of Role models

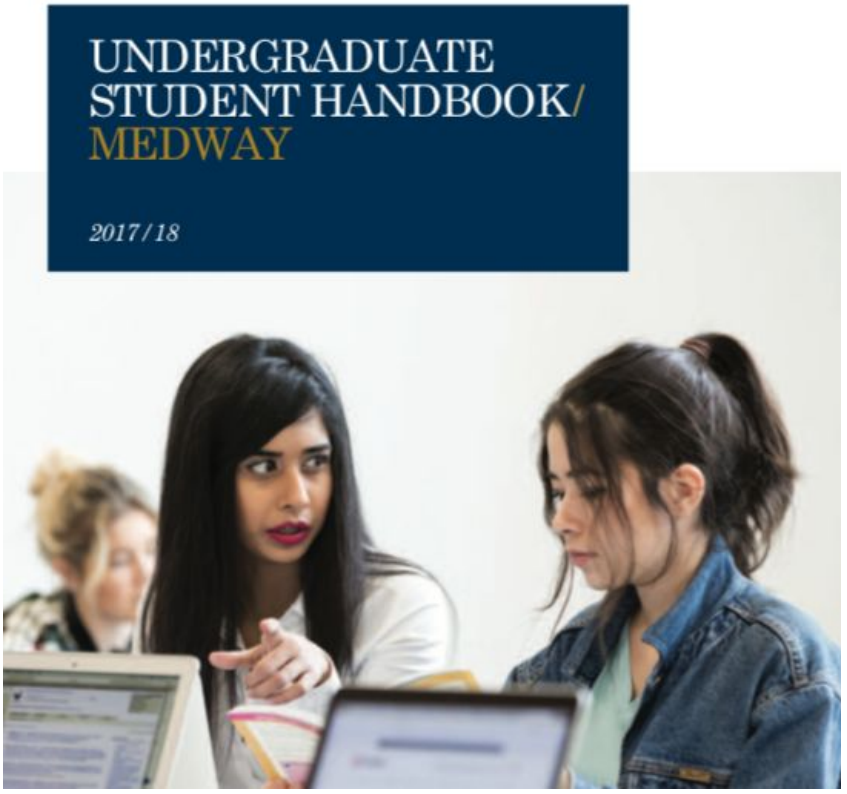
The School is aware of the importance of visibility in role models, particularly in ensuring that women are represented at events and in publicity materials. The reason for this is best summed up by a female first year student, being interviewed for the role of School Ambassador.

At events such as Open Days, where our current demographic makes it difficult to get a gender balance of staff and students, we ensure that female members are given prominent roles, e.g. having both male and female students on question and answer panels.

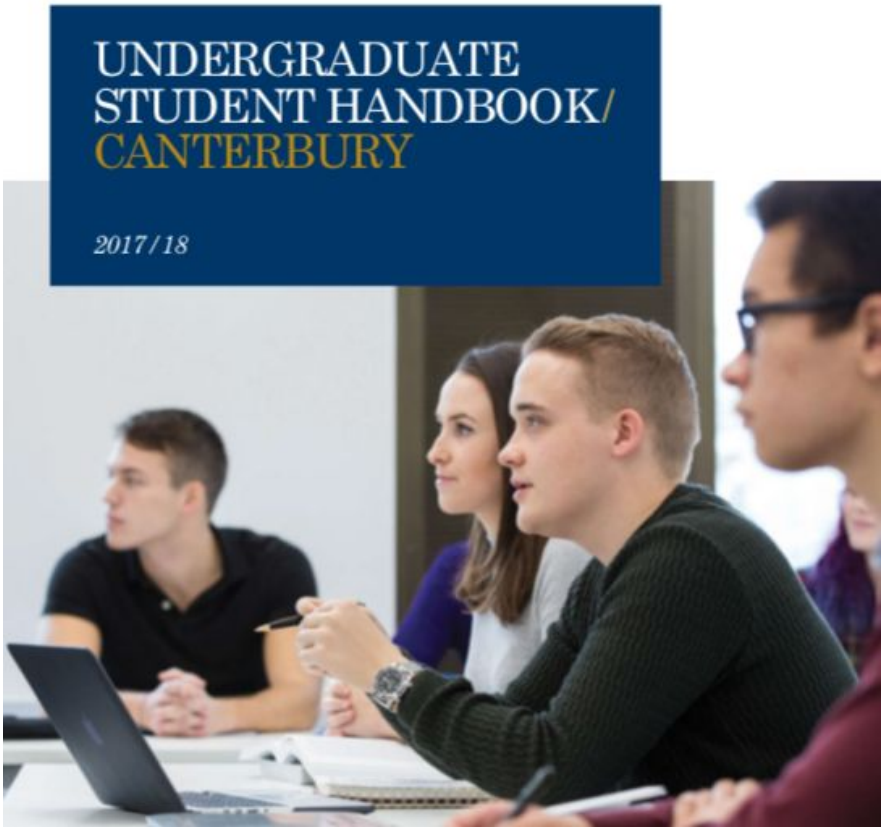
The School's Marketing Team act as gatekeepers for all promotional material and ensures that a variety of role models are represented. The team occasionally challenged central departments to highlight issues of representation (e.g. a recent suggestion of images for a handbook cover showed only male students). We strive to show a mix of students, in active roles.



Picture 5.6.1 The front cover of the latest postgraduate brochure



Picture 5.6.2 The most recent handbook for Medway-based undergraduates



Picture 5.6.3 The most recent handbook for Canterbury-based undergraduates, showing a gender mix

The School has a culture of celebrating achievements. It actively seeks 'good news' stories about the students and staff, and staff are particularly alert to celebrating the achievements of the female students. We publicise achievements through the School website, social media and on screens at both campuses.

Picture 5.6.4 A slide that appeared on School screens as part of the publicity celebrating alumna, Charlotte Hutchinson's award.

Table 5.6.9 Speakers per research group in 2016/17

Research Group	Female speakers	Male speakers
Programming Languages and Systems (PLAS)	6	18
Data Science	<5	5
Cyber Security	<5	23
Computational Intelligence	<5	11
School Seminars	0	3

Approximately one quarter of speakers in research group and School seminars were female in 2016/17, with a greater female representation in Computational Intelligence, and a moderate representation in PLAS where there are few female researchers.

(viii) Outreach

Outreach in the School is led by a lecturer supported by a Senior Technician with outreach as part of his contract. Additional support for ad hoc events comes from lecturers, RAs and paid student (18 females and 54 males).

Gender mix is typically tailored to suit the environment of an outreach event. Most events employ one of the outreach staff (both male) and three Student Ambassadors. For a male dominated environment, we attempt to have at least one female Student Ambassador, for a female dominated environment, the gender ratio will be skewed towards women.

The Lecturer has outreach recognised as 10% of his time in the WAM. The WAM does not cover volunteers, whose participation is sporadic and limited. Student Ambassadors are invited to support an event and can choose to accept or decline.

Picture 5.6.5 Makerspace outreach in the local community

Activities have focused primarily on secondary schools in the University's Partnership Scheme (local schools struggling to meet academic targets). The School's Outreach activities are currently in transit as the outreach budget moves from a partially centrally managed system to purely departmental budgets (Action 4.1.c). We are well aware of stereotypes in schools: our Outreach events over the last few years demonstrate that, at least locally, the gender imbalance starts at the selection of GCSEs in Year 9 and is further exaggerated at A-level and Degree selections.

Typically local schools making requests for activities. Most come from non-selective secondary schools within the Partnership scheme plus a few selective or primary schools. The School has also hosted for many years the county finals for the First Lego League which pulls from a larger selection of schools and participants aged 9-16 years Table 5.6.10). The FLL has a broadly balanced gender mix wheread a recent event for Year 9 pupils starting GCSEs was male dominated.

Table 5.6.10 The gender balance in pupils interested in Computing before and after GCSE selection.

Gender	Lego League Participants (Aged 9 - 16 years)						Year 9 GCSE ICT or CS
	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2017	2017 - 2018
Female	15 (48%)	43 (57%)	69 (56%)	69 (53%)	44 (32%)	62 (50%)	10 (29%)
Male	16 (52%)	33 (43%)	54 (44%)	62 (47%)	93 (68%)	62 (50%)	24 (71%)

One of our tools for tackling the pipelining issue is a taught module 'Computing in the Classroom', taken by selected third year UG students, who spend time as a TA/observer in one class per week at a primary or secondary school. Each student is assigned to a single class to provide a consistent environment, primarily for our students, but also for the pupils to encourage interest in taking computing further.

Our aim is to offer more events at earlier stages of education, to expose more pupils to computing and ICT before any cultural biases in school or home environments are exaggerated by GCSE selection.

8. Action Plan

Actions are recorded here with reference to the sections where they are mentioned.

UoK School of Computing Action Plan

High priority actions are marked with †.

Actions/Rationale	Outputs milestones	Time frame	PRP	Success criteria and outcome
Section 3.1				
3.1.a **AS/EDI as a standing item on all School committees**				
Consider gender representation at each committee, to target every aspect of the running of the department.	Inform committee chairs of change.	2018	Committee Chairs	AS/EDI a standing item on committee agendas.
Section 4.1				
4.1.a **Narrow the attainment gap †**				
Ensure all women who are at risk of failure, are aware of the possibility of resitting or moving to full-time study, and discuss alternate strategies for improving academic performance or dealing with special circumstances.	Annual monitoring, 4-year period analysis.	2018-2022	DUGS DoGS(T)	Balanced use of resits and improvement in balance of attainment between male and female BSc and MSc students
4.1.b **Analyze market as to recruitment practices**				
Investigate the distribution of female students in computing degrees in the UK. The aim is to identify places with substantially higher proportions of female students than HESA, increase our awareness of successful practices, and inform our outreach program planning.	Initial survey with observed best practices. Adoption of best practice.	summer 2018 (survey) 2019 (adopt practices)	MCM	Increased number of female applicants to the CS undergraduate, and identifying limiting factors beyond marketing.
4.1.c **Develop a targeted outreach programme †**				
Refocus outreach programme based on gender and key decision points in the educational pipeline (eg., A level choices).	Develop activities linked to the degree in computing. Run activities.	2019- 2020 (develop) 2019 (start activities)	Outreach Officer	Increased number of female applicants to the CS undergraduate. Activity uptake, feedback, repeat requests from outreach users.
4.1.d **Stress the advantages of study at Kent with each offer**				
Our students benefit from excellent prospects for employment. This message and our employment statistics will be stressed when we make offers, and tailor the presentation to be more welcoming to women. In particular, we will ensure that welcoming female helpers have roles of high visibility on our open days.	Redrafted offer letters and associated marketing.	from 2018	UG AO	Increased proportion of offers accepted for women CS undergraduates.

Actions/Rationale	Outputs milestones	Time frame	PRP	Success criteria and outcome
4.1.e **Separate recording of EPITECH students**				
Our PGT cohort is recruited from two streams: EPITECH and from own programmes. These two streams are currently mixed together in our monitoring system. We will disaggregate them so that we will be able to monitor and address gender imbalances differently across the two streams.	Create a new category in our student information database.	from 2018	SAM	Effective separate monitoring of PGT students.
4.1.f **Provide Support Lectures by External (gender-balanced) Guests †**				
Encourage and support convenors of research-related modules to include a gender-balanced set of guest lectures to increase visibility of female research-active role modules.	Calls at staff meetings. SAT analysis on effects.	from 2019	HoS	Guest lectures delivered. Increase in women applying internally for PhD.
4.1.g **Advertise PhD scholarships on female mailing lists †**				
Increase visibility of PhD funding opportunities to potential female applicants.	List of female-oriented mailing lists.	from 2019	MCM PG AO	Advertisements done. Increase in women applying internally for PhD.
Section 4.2				
4.2.a **Undertake contract survey**				
Conduct a survey to clearly determine if individuals are on the contract type of their choice (research-only, teaching-only, teaching-and-research).	Include related questions in the main staff survey.	from 2019	SAM	Data available after next staff survey.
4.2.b **Make RPD more proactive**				
Use RPD to discuss individuals' contract types and how to proceed if a change is desired by an individual member of staff. The discussion shall point out the possible options and paths, and foster ambition across gender representation. This is also important for those employed on a short-term project who need to be proactive on the next steps.	Briefing material and information provided	from 2019	HoS	HoS is notified by appraiser of discussions which relate to contracts. Increase of migration between different contracts and contract-types, both internally and externally, in a positive trajectory.

Actions/Rationale	Outputs milestones	Time frame	PRP	Success criteria and outcome
4.2.c **Support academic aspiration †**				
Project PIs to work with post-doctoral researchers on an individual case-by-case basis (during annual review or as requested by the post-doctoral researcher) to identify and support those staff that aspire to academic teaching-and-research contracts, but who do not have enough teaching experience to allow this career transition. Follow up by the PI arranging opportunities for the post-doctoral researcher to give guest lectures on their modules or colleagues' modules, as appropriate.	Briefing material and information provided	From 2019	DoR	Improved trajectories of employment for post-doctoral researchers.
4.2.d **Record Staff Ethnicity Data**				
Request that the ASWG records ethnicity data for future analysis throughout the institution.	Gathered ethnicity data Data analysis	Autumn 2018 (data) 2019 (analysis)	SAM	Reflective report on ethnicity
4.2.e **REEP Review for Non-Research Promotion Prospects †**				
SPP to consider the outcomes of REEP as soon as they are published, and develop plans to support staff who could prepare cases based on teaching contribution.	Report analysis Plans developed	pedning REEP publication	SPP	Non-research promotions made
4.2.f **Work with our HPL cohort to identify motivations for undertaking HPL contracts**				
Run a focus group to gather information about HPL aspirations and solicit support and action towards permanent or longer-term roles.	Report of HPL	From 2019	HoS	
4.2.g **Improve leavers' benchmarking**				
To work with ASWG to consider best practice for gathering data from leavers, such as exit interviews, in the hope that we can have more robust School- and University-level reporting and benchmarking.	Report on best practices Renewed data gathering material	Autumn 2018 From 2019	SAM	Improved quantitative and qualitative data on leavers.
Section 5.1				
5.1.a **Discussing promotion prospects.**				
Alert line managers (RPD) or probation supervisors to discuss promotion prospects with all their staff.	Develop briefing for RPD supervisors and distribute.	From 2018	HoS	Raise application rates for promotion, particularly among female staff at all levels.

Actions/Rationale	Outputs milestones	Time frame	PRP	Success criteria and outcome
Section 5.4				
5.4.a **Appraisal of Technical Staff**				
In the process of gathering data for this application it was clear that not all technical staff were appraised annually, which the School will change by giving appraisers a timescale in which they need to talk to their staff and record the conversation.	Inform appraisers.	From 2018	HoS	Appraise all technical staff each year.
Section 5.6				
5.6.a **Multi-Site Conferences**				
The School has invested substantially in better teleconferencing to avoid travel between campuses. We plan to alternate chairing of meetings between campuses to improve feelings of inclusivity.	Announce policy at School Meeting.	Ongoing	HoS	Positive feedback in the next staff survey.
5.6.b **Meeting room at Canterbury**				
Build common staff room at Canterbury. Support experience sharing/gathering on campus during core hours. **Dependency:** Information Services moving out of planned space	Agreement of work by University	09/19	HoS, SAM	A new common room is accessible to staff and PGR, in Canterbury campus, by 2018.
5.6.c **Quantitative data for timing of meetings**				
Include explicit questions on timing of meetings in Staff Survey. No availability of quantitative data on satisfaction on timing of meetings.	Survey form Survey data	2018	MCM	Availability of quantitative data on staff satisfaction for timing of meetings by 2018.
5.6.d **Remind core-hours to staff members**				
Address inconsistent application of core-hours policy reminding organisers (to ensure this) and attendants.	Survey	2018	HoS	Positive quantitative data in staff survey 2019.
5.6.e **Balanced chairing**				
Balance chairing responsibilities in phone-conf involving both campuses. Remote attendance may disadvantage attendants remote w.r.t. session chairs (less chances of intervening).	Event system (for talks) Staff Event Calendar (for meetings)	10/18	HoS	All meetings co-chaired if possible. Or 50% of meetings requiring one single chair will be chaired at each site.