



**Department Application**  
Bronze Award

**CONFIDENTIAL**

Department of Computer  
Science  
University of York  
May 2020



## **ATHENA SWAN BRONZE DEPARTMENT AWARDS**

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

## **ATHENA SWAN SILVER DEPARTMENT AWARDS**

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

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

## **COMPLETING THE FORM**

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

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

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

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

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

## **WORD COUNT**

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

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

We have provided the following recommendations as a guide.

Department application	Bronze	Silver
<b>Word limit</b>	<b>10,500</b>	<b>12,000</b>
<i>Recommended word count</i>		
1. Letter of endorsement	500	500
2. Description of the department	500	500
3. Self-assessment process	1,000	1,000
4. Picture of the department	2,000	2,000
5. Supporting and advancing women's careers	6,000	6,500
6. Case studies	n/a	1,000
7. Further information	500	500

### GLOSSARY OF ABBREVIATION AND TERMS USED IN THIS SUBMISSION

Academic(s) (staff)	Refers to all personnel on Teaching and Research (T&R), Research only (RO) or TO (Teaching Only)/Teaching and Scholarship (T&S) contracts
(MSc) ACS	Masters in Advanced Computer Science
AP	Action Plan
BEng	Bachelor of Engineering
BoS	Board of Studies, the decision-making body of all teaching staff in the department
CPD	Continuing Professional Development
CS	(Department of) Computer Science
(MSc) Cyber	Masters in Cyber Security
DHoD(R)	Deputy Head of Department (Research)
DHoD(T)	Deputy Head of Department (Teaching)
DM	Department Manager
DMT	Department Management Team
DPM	Department Project Manager
DRC	Departmental Research Committee
DTC	Departmental Teaching Committee
ECR	Early Career Researcher
E&D	Equality and Diversity
FAccept	Firm Accept – student who has accepted an offer of a place on a course
(MSc) HCIT	Masters in Human Centred Interactive Technologies

HoD	Head of Department
HR	Human Resources Department
HRC	Department Human Resources Coordinatory
IGGI	EPSRC Centre for Doctoral Training in Intelligent Games and Game Intelligence
MEng	Masters of Engineering degree
Module Evaluation Form	At the end of each module, students are asked to complete a short evaluation form about the teaching, resources etc for the module; the module leader replies to any issues raised via the VLE and Student Staff Forum (SSF)
PDR	Performance and Development Review
PGCAP	Postgraduate Certificate in Academic Practice
PGR	Postgraduate research (student)
PGT	Postgraduate teaching (student)
PSS	Professional Services Staff
REF	Research Excellence Framework
RO	Research Only (Staff)
RSO	Research Support Office (in the department)
(MSc) SCSE	Masters in Safety Critical Systems Engineering
SLT	Senior Leadership Team
(MSc) SMIT	Masters in Social Media and Interactive Technologies
(MSc) SSE	Masters in System Safety Engineering with Automotive Applications
SSF	Student Staff Forum
“Stand Up” meeting	Short weekly informal meeting of all staff (academic and PSS) and PGR students for the exchange of information, requests for help, announcement of achievements etc. People stand up to make their announcements. The meetings last about 20 minutes, cake is provided by the department and staff who like to bake, staff bring their own cups of coffee and tea.
TO	Teaching Only (contract), known as Teaching and Scholarship (T&S) contracts at York
T&R	Teaching and Research (contract)
UG	Undergraduate (student)
VLE	Virtual Learning Environment All teaching materials, discussions, assessment information, module evaluation etc are provided to UG and PGT via the VLE

<b>Name of institution</b>	University of York	
<b>Department</b>	Computer Science	
<b>Focus of department</b>	<b>STEMM</b>	
<b>Date of application</b>	April 2020 -> May 2020	
<b>Award Level</b>	<b>Applying for Bronze</b>	
<b>Institution Athena SWAN award</b>	<b>Date: November 2018</b>	<b>Level: Bronze</b>
<b>Contact for application</b> <small>Must be based in the department</small>	Professor Helen Petrie	
<b>Email</b>	Helen.Petrie@york.ac.uk	
<b>Telephone</b>	Office (not currently accessible): 01904 325603 Mobile: 0771 2189040	
<b>Departmental website</b>	<a href="https://www.cs.york.ac.uk">https://www.cs.york.ac.uk</a>	

#### 1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT

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

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

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

17<sup>th</sup> April 2020

Ref: NCA/cej

Professor Neil C Audsley  
Head of Department  
Telephone: +44 (0)1904 325 571

Email: [neil.audsley@york.ac.uk](mailto:neil.audsley@york.ac.uk)

Web: <http://www-users.cs.york.ac.uk/~neil/>



Dear Athena SWAN Manager,

I am very pleased to support the Athena SWAN Bronze Award application from the Department of Computer Science at the University of York. I confirm that the information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the department.

This submission represents a great deal of hard reflection and planning on the part of many people in the department over a long period of time. When we started work on the current submission we were very aware that our department was one of the weakest in the Russell Group universities in terms of numbers or percentages of women students and staff (apart from a surprisingly high number of women professors), and had a very male-oriented culture. More worryingly, we did not seem to be moving in the right direction. It was therefore not surprising that we lost our previous Bronze Athena SWAN Award. However, that loss gave us the right incentive to reflect deeply on our situation and come up with an ambitious but I believe achievable Action Plan to improve the situation. One of the things that is most pleasing is that many (probably most) of the points on the Action Plan will not only support women in the department, but will greatly improve the study and work environment for everyone. We believe this will also make it very easy to expand our support to other under-represented groups, including staff and students with disabilities and from different backgrounds.

When I became Head of Department over two years ago, I personally made it one of my goals to make the department one of the best computer science departments in the country for women, both students and staff. Therefore, I set the goal of having a 50:50 gender balance for our student population at every level and at least 30% women academic staff (which coming from a position of less than 10% is truly ambitious given the slower rate of change in staff compared with students). I perhaps did not realise at the time how ambitious these goals are, but I still have the aspiration that by the end of this decade our department will be exemplary with respect to its support for women students and staff.

Working on the Athena SWAN submission and Action Plan has required a great deal of work from many people. It has highlighted numerous gaps and weaknesses in our systems, in our defence I would say that many of such gaps and weaknesses came from growing rapidly from a small department in a small university to a large department in a medium sized university. However, the Athena SWAN work has focussed our attention on issues as diverse as:

- the induction processes for new staff,
- the representation of women (and individuals from other under-represented groups) in our digital materials, and
- the organisation and content of our teaching programmes.

Although we have tried to create an Action Plan that is spread appropriately over four years, there has been such enthusiasm for many of the points raised in the plan, that they were implemented immediately and we can already see benefits from those actions.

Everyone in the department is already seeing the positive changes that have come about from this work and we are all committed to continuing to work towards our goals.

Yours sincerely

A handwritten signature in black ink, appearing to read 'NCAJ', written in a cursive style.

**Professor Neil Audsley**

Head of Department, Computer Science, University of York

Word count: 553

## 2. DESCRIPTION OF THE DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words

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

**Table 1: Overall numbers of staff and students in the department (10/2019)**

		Women	Men	Other	Total	% Women
Staff	Teaching (T&R, TO)	9	56	0	65	13.8
	Research Only (RO)	10	41	0	51	19.6
	Professional & Support (PSS)	26	20	0	46	56.6
	<b>Total</b>	<b>45</b>	<b>117</b>	<b>0</b>	<b>162</b>	<b>27.8</b>
Students	Undergraduate (UG)	100	568	2	670	14.9
	PG Taught (PGT) On campus	64	151	3	218	29.3
	PG Taught (PGT) Online	129	291	3	423	30.5
	PG Research (PGR)	50	120	0	170	29.4
	<b>Total</b>	<b>343</b>	<b>1130</b>	<b>8</b>	<b>1481</b>	<b>23.2</b>

The Department of Computer Science (CS) at the University of York is one of the UK's leading CS departments, excellent in both research and teaching. The most recent Research Excellence Framework (REF) in 2014 ranked the department as 7<sup>th</sup> overall in the UK, 5<sup>th</sup> for Impact and 6<sup>th</sup> for Environment. Our research focuses on four key themes that are central to our expertise and understanding of interdisciplinary computer science research: Critical Systems; People, Health and Wellbeing; Analytics; and Beyond Human Vision. The department is a very international community with staff from at least 23 countries and students from all over the world.

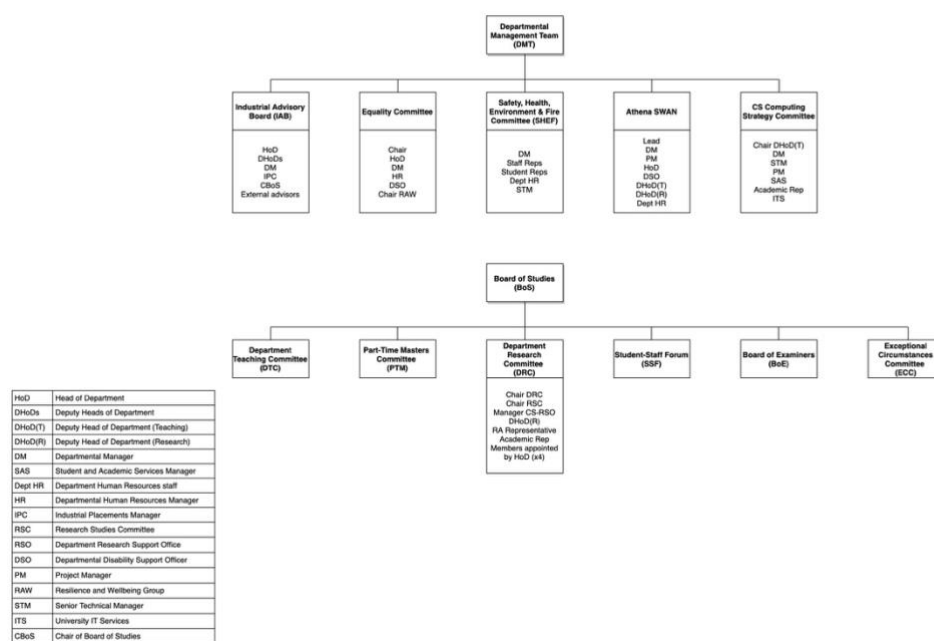
The Department has 162 staff, divided between Academic (which includes staff on Teaching and Research (T&R), Teaching Only (TO), and Research Only (RO) contracts) and Professional Services staff (PSS). The percentage of women on T&R and RO contracts is particularly low, but the department is actively working to improve this situation (see Section 5.1 (i)). The Department has nearly 1500 students, at undergraduate (UG), postgraduate taught (PGT) and postgraduate research (PGR) levels. The percentage of women is also low, particularly at UG level, again the department is actively working to improve this situation (see sections 4.2 (ii) and (iii)).



The department is led by a Head of Department (HoD), who chairs the monthly Department Management Team (DMT) meetings. Other academic members of DMT are Deputy Head Teaching (DHoD(T)), Deputy Head Research (DHoD(R)), Chair of Board of Studies (BoS) and Admissions Director. DMT is supported by the Department Manager (DM), who leads professional services in the Department, as well as central finance, planning and HR personnel. The HoD, DHoD(T), DHoD(R) and DM meet weekly.

All academic staff are members of the Board of Studies (BoS), which meets twice a term, underpinned by a committee structure which includes Teaching and Research Committees and Equality Committee (see Figure 1).

The Athena SWAN (AS) Self-Assessment Team (SAT) reports directly to DMT and the Equality Committee and keeps BoS informed of ongoing work, particularly the Action Plan (AP). After the AS submission, monitoring and development of the AP will be taken over by the Equality Committee.



**Figure 1: Department of Computer Science Committee Structures**

The Department is housed in modern accommodation on the University’s Campus East, including purpose-built research and teaching laboratory spaces. Particular attention has been paid to student spaces. There is a large student common room with a variety of study and socializing areas, and a number of smaller breakout spaces available for all students. In September 2019 a common room/study area specifically for PGR students was inaugurated to foster a better sense of community amongst this student group. The laboratories are open to students 24 hours a day. Safety of students is particularly important, all spaces are equipped with alarm buttons and students are encouraged to

use the University's SafeZone app, which will notify security staff if needed, particularly if they are in the building at quiet times.

**Word Count: 480**

### 3. THE SELF-ASSESSMENT PROCESS

*Recommended word count: Bronze: 1000 words | Silver: 1000 words*

*Describe the self-assessment process. This should include:*

- (i) a description of the self-assessment team*
- (ii) an account of the self-assessment process*
- (iii) plans for the future of the self-assessment team*

The SAT comprises 21 people (11F/10M) from all levels and groups within the department, including academic and research staff, PSS, and students (Table 2). The membership was created by a combination of individual invitations and requests for volunteers (made to all the whole department), with the aim of representing all groups and levels within the department and having a gender balance in the membership. Membership of the SAT is included in the workload for all staff.

The SAT was led by Helen Petrie, Professor of Human Computer Interaction, who has been a member of the department for 15 years. Over a period of two years the full SAT Team met 10 times. Most meetings concentrated on a particular aspect of the submission and two meetings specifically developed and discussed the Action Plan (AP). In addition, to gather opinions and attitudes more widely in the department, a number of different consultations and meetings were conducted. These included

- confidential focus groups with women UG, PGT and PGR students and with both women and men PSS staff;
- presentations to BoS and the termly full staff meetings (open to all academic and PSS staff, as well as student representatives);
- discussions with the UG and PGT Admissions Team;
- confidential interviews with men and women current and past members of the department; and
- discussions with the Industrial Liaison Team.

The interviews with women academic members of staff were particularly delicate, as the small number of women in this category meant that several individuals were worried about anonymity. Therefore, these interviews were all conducted by Professor Petrie, with a cast-iron guarantee of anonymity and great care has been taken not to reveal anyone's identity. As the AP was developed, it was presented to BoS and the staff meetings several times for discussion, and to DMT.

In addition to the main SAT, an AS Core Team was formed of the AS Team Leader, the Department Manager (DM) and the Departmental Project Manager (DPM); this team coordinated data collection and collation of information for the submission. The Core Team met face-to-face fortnightly for the last nine months of the preparation of the submission and had numerous email discussions.

The SAT reports to DMT and makes recommendations to them for points in the AP. All recommendation proposed have been accepted.

The department held a Bronze AS award from 2012 to 2015, but then lost the award. While this was a shock to the department, it formed the basis for serious reflection and discussions in the initial phases of planning this submission on why the award had been lost and how we needed to approach the situation differently. A number of key issues about the previous submission emerged from these initial discussions, particularly:

- it had not been adequately based on in-depth reflection of the issues about the situation of women students and staff in the department;
- it had not been sufficiently ambitious in addressing issues in the department;
- the AP had not been rigorously enough pursued.






Therefore, a long lead time and a considerable amount of planning has gone into this submission. In particular, an ambitious (but we believe achievable) AP has been developed and there will be careful monitoring of progress on it (see AP Objective 10).






During the preparation of this AS submission, as part of our reflection on issues of gender and equality in the department, a departmental Equality Committee was set up. This is currently also chaired by Professor Helen Petrie, the SAT Team Leader, to create continuity with the SAT. An invitation for a new Chair will be issued every three years. After the AS submission, the AP will be the responsibility of the Equality Committee (which will become the Equality and Diversity Committee). Through the work of the Equality Committee there will also be a widening of the scope of the AP to include the other under-represented groups, a topic which has already been part of the discussion for this submission.

Like the SAT, the Equality Committee comprises members of all groups and levels within the department, including ex-officio members (HoD, Chair BoS, and DM). Members have been recruited by requests for volunteers, supplemented by individual invitations. Membership of the Equality Committee is included in the workload for all staff. The Equality Committee meets monthly and will be responsible for the monitoring of implementation of the AS AP and refine it as needed. It will keep staff up to date on progress on the AP through a number of channels:

- monthly reports to DMT
- reports at termly Staff Meetings and weekly “stand up” meetings
- UG and PGT students will be kept up to date by reports at the termly Student Staff Forum (SSF)
- Announcements through all digital channels.

### Athena SWAN Self-Assessment Team (SAT)

	<b>Position and role in SAT</b>
	<p>Helen Petrie, Professor of Human-Computer Interaction. SAT Team Leader, Athena SWAN Core team member, liaised with SLT, coordinated submission preparation.</p>
	<p>David Hull, Departmental Project Manager (DPM). Athena SWAN Core team member, provided data, analysis, reports, general support for the submission.</p>
	<p>Jayne Lawrence, Department Manager (DM). Athena SWAN Core team member, provided data, analysis, reports, general support for the submission, and strategic overview.</p>
	<p>Rob Alexander, Lecturer in High Integrity Systems Engineering and joint departmental Disability Representative. Contributed particularly to discussions about student/staff well-being.</p>
	<p>Katrina Attwood, Lecturer in System Safety Engineering and joint departmental Disability Representative. Contributed to discussions about women students and staff.</p>

	<p>Neil Audsley, Professor, Head of Department. Contributed particularly to discussions on organizational aspects of the department, implementation the Action Plan.</p>
	<p>Iain Bate, Reader in Real-time Systems, Chair Board of Studies. Contributed to discussions on equality of teaching, curricula and assessment.</p>
	<p>Jen Beeston, Lecturer (Teaching &amp; Scholarship), PhD student. Contributed particularly to discussions on supporting women postgraduate research students.</p>
	<p>Luke Bryant, Industrial Placements Coordinator. Contributed to discussions on supporting women undergraduate placement students and career development.</p>
	<p>Paul Cairns, Professor, Deputy Head of Department (Research). Contributed to discussions on supporting research students and research support for staff.</p>



Sarah Christmas, Departmental HR Coordinator.  
Contributed to SAT meetings as minutes taker and providing HR data and knowledge.



Jenny Darzentas, Marie Curie Research Fellow.  
Contributed particularly to discussions about research staff, particularly women and international research staff.



Dawn Forrester, Business Partnerships Manager.  
Contributed particularly to discussions on externally delivered taught programmes and on campus CPD students.



Joanne Maltby, Graduate Students Manager.  
Contributed particularly to discussions on support for women and international postgraduate research students.



Jeremy Jacob, Senior Lecturer.  
Holder of many roles concerned with student welfare.  
Contributed particularly to discussions on student welfare.

	<p>Debra Lashua, Student and Academic Support Services Manager. Contributed to discussions about students and professional services staff, coordinated student data.</p>
	<p>Simon O'Keefe, Deputy Head of Department (Teaching). Contributed to discussions on student admissions and equality in teaching provision.</p>
	<p>Christopher Power, Senior Lecturer, Lead Curriculum Redevelopment. Contributed to discussions on transforming curricula to be more engaging to women students.</p>
	<p>Catherine Smith, Admissions Co-ordinator for the Department. Contributed to discussions on supporting women and international undergraduate and postgraduate applicants.</p>
	<p>Will Smith, Reader and Admissions Director. Contributed to discussions on improving admissions processes to make our student recruitment more inclusive.</p>



Dawn Wood, Lecturer (Teaching and Scholarship). Contributed particularly to discussions on issues for newly appointed academic staff.

**Word Count: 783**

#### **4. A PICTURE OF THE DEPARTMENT**

**Recommended word count: Bronze: 2000 words | Silver: 2000 words**

##### **4.1. Student data**

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

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

n/a

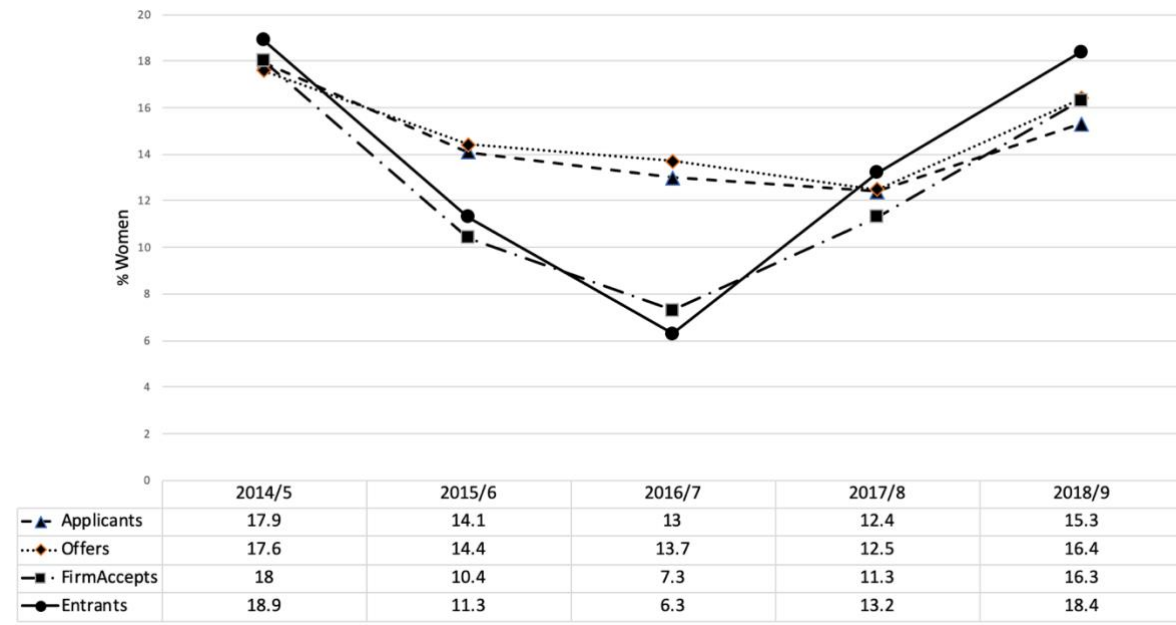
(ii) Numbers of undergraduate students by gender

The Department offers only full-time UG degree programmes, so no part-time figures are provided. However, students may study as “full-time in part-time attendance” if due to particular circumstances (e.g. disability, mental health issues) full-time study is not appropriate. This allows flexibility for students to complete their degree over a longer time period.

There are numerous different paths through the UG programme, including three-year BSc/BEng; four-year MEng paths (including CS with AI, Cyber Security); with a year in industry; and a combined major with Mathematics. As numbers are very small when broken down into these combinations, all paths are presented together. Some analyses of important different paths (e.g. with/without a year in industry) were undertaken, but no substantial differences from the overall picture were found.

We examined the pipeline of application to entrants for our UG courses, to investigate whether there were any blockages for women students, using a five-year period to clearly identify any trends. In a period of increasing numbers of applicants (Figure 2, 736 in 2015/16 to 1676 in 2019/20), initially the increase in women applicants did not match the increase in men (Table 2). However, in the most recent three intakes, the percentage of women applicants has steadily increased and now outstrips the increase in men applicants. We hope this is due to our recent efforts to make the recruitment process more attractive to women.





**Figure 2: Pipeline for UG students from applicants to entrants: % women**

**Table 2: % increase in women and men applicants**

% Increase in:	2014/5 -> 2015/6	2015/6 -> 2016/7	2016/7 -> 2017/8	2017/8 -> 2018/9	2018/9 -> 2019/20
Women applicants	-3.7	+ 2.9	25.2	30.6	53.1
Men applicants	+ 27.7	13.0	32.6	2.3	45.3

Our main problem is the percentage of women applicants (Figure 2), approximately 16% across the period. This translates into an average of 12.3% women entrants, which is well below the average for Russell Group (RG) CS departments (17.9%)<sup>1</sup>. Our target is to have 30% women UG students by the 2022 intake (A3.1)<sup>2</sup>. This is achievable if we maintain at least a 3% increase in women entrants year on year (over the past two years the average increase has been 6%). Our longer term aspiration is to have a 50:50 gender balance amongst the UGs by the end of the decade (Objective 3) which is also achievable with a steady 3% increase.

The percentages of offers to women have also tracked the percentage of applicants, so we are not discriminating against women in making offers. However, the percentage of women taking up Firm Accepts and becoming Entrants was lower than Applicants or Offers in 2015/6 and particularly 2016/7. This dip has been extensively discussed and

<sup>1</sup> All RG figures are calculated manually from HESA data

<sup>2</sup> Action Plan (AP) items are given in the text where they are relevant. Higher level objectives are labelled O1 – O10, specific actions within each objective are labelled A1.1 etc. The points relevant to each section are summarized at the end of the section and a full explanation of the Action Plan is given at the end of the document.

reasons are not clear. As until now we have interviewed all UG applicants, it suggests issues with the interview experience or that women CS applicants are in high demand and accepting offers elsewhere. We have been making considerable efforts to make our interview and open days attractive to women applicants, however from 2019/20 we will no longer interview applicants. Many applicants (and perhaps particularly women applicants) found being interviewed stressful and it was decided that having post-offer open days would be more appropriate, but important channels to communicate our support for women students (A3.3).

If we are to increase the number of women UGs, we must increase the number of women applicants, several AP items address this (A2.2 – A2.5, A3.1 – A3.3). One particular problem identified is that our entry tariff usually requires A at A-Level Mathematics, but the pool of women meeting this requirement is small (Table 3) and women applicants may be deterred by this requirement (although it is typical of RG CS departments). The possibility of changing this will be researched (A 3.1).

**Table 3: 2018 numbers/% of women/men taking A Level Mathematics and achieving A\* or A Grade<sup>3</sup>**

	<b>Number/% Women</b>	<b>Number/% Men</b>
A level	38,357 (39.3%)	59,270 (60.7%)
A* or A grade	15,841 (41.3%)	25,427 (42.9%)

<sup>3</sup> Figures from Joint Council for Qualifications, 2018 A Level summary.

<b>Action Plan items addressing issues of low women UG recruitment<sup>4</sup></b>	
<b>Objective 2 (O2): Communicate our commitment to women and other under-represented groups more effectively through our public website and other channels</b>	
A2.1	Create a position of Communications Director to oversee our digital communications <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Recruit a member of staff to take up the position</li> </ul>
A2.2	Make our public website more attractive and interesting to women visitors (including prospective staff and students), show our commitment to women and other under-represented groups <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Review and improve public website, particularly by including pages on Equality and Diversity (E&amp;D), our activities to support women staff and students</li> <li>Monitor visits to the website, particularly E&amp;D pages</li> </ul>
A2.3	Use our Twitter account more effectively to communicate our commitment to women and other under-represented groups <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Post at least two messages a month on Twitter about the department</li> <li>Monitor followers, “likes” and retweeting of messages</li> </ul>
A2.4	Use Instagram (as this is currently popular with young women) to communicate with our audiences <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Set up an Instagram account for the department</li> <li>Post at least two images a week on Instagram</li> <li>Monitor followers and “likes” of posts</li> </ul>
A2.5	Improve gender and under-represented group balance in images in all publicity materials <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Refresh the pool of images used in publicity, paying attention to gender/under-represented group balance</li> </ul>
A2.6	Promote women role models in computer science, interesting women alumni <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Run a competition for heroes in computer science</li> <li>Create webpage and posters about popular heroes (with 50:50 gender balance, range of under-represented groups)</li> <li>Create webpage and posters about interesting alumni (with 50:50 gender balance, range of under-represented groups)</li> </ul>
<b>O3: Achieve 50:50 gender balance in student population at all levels (UG, PGT, PGR) by the end of the decade</b>	
A3.1	Increase the pool of potential women applicants <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Review the possibility of lowering/removing the stringent A Level Mathematics requirement</li> </ul>

<sup>4</sup> Full details of the Action Plan items, including timescale, responsible personnel and success measures are listed at the end of the document.

A3.2	Publicise our support for women students at recruitment events <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Ensure that department and central University Admissions team are aware of our activities to support women students and publicise them at external events (e.g. UCAS fairs)</li> </ul>
A3.3	Ensure that women applicants/those holding offers are aware of our support for women students <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Publicise the department’s activities for women students at Open Days: <ul style="list-style-type: none"> <li>○ Mentions in talks</li> <li>○ Posters in the department about “heroines and heroes of computer science” and successful alumni (particularly women and those from under-represented groups)</li> <li>○ Videos of staff and students in foyer to highlight women and under-represented groups</li> </ul> </li> <li>• Publicise the department’s activities for women in post-offer newsletters, communications to women offer holders</li> </ul>

Turning to the experience of women once they become UGs, focus groups with women UGs found that they perceive the department as male-dominated and not particularly friendly to women. Points raised include:

- lack of women teaching UG modules,
- sexist attitudes of some male students and staff, and
- the small number of women students.

In addition, there have been a small number of complaints about sexist teaching materials and comments from male staff. Therefore, a number of AP points address the departmental culture for women UGs (O4, O5, O7, O8).

<b>Action Plan items addressing issues of the male-dominated departmental culture for UG women</b>	
<b>O4: Make the UG and PGT curricula and teaching environment more engaging for women students</b>	
A4.1	Make women UG students feel welcome when they join the department <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Continue to hold a welcome party for all UG women students at the beginning of each academic year</li> </ul>
A4.2	Encourage women students to participate in “women in CS” societies and activities in the department and the university <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Liaise with EDIT (Equality, Diversity and Inclusion in Technology Society) to continue expanding to CS students</li> <li>• Provide departmental funding to EDIT, HackSoc (the general UG CS society) for women’s events</li> </ul>

A4.3	Encourage women students to take part in events both at the university and beyond for women in CS <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Publicise any events e.g. via Twitter, Instagram</li> <li>• Provide funding for women students to attend events</li> </ul>
A4.4	Ensure that women students do not feel isolated in learning contexts <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Ensure that there are no sole women in assessment groups or tutorials whenever possible</li> <li>• Provide women students with women personal tutors whenever possible</li> </ul>
A4.5	Have at least one woman leading a module in each of the UG years <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Review teaching teams for each year of the UG programme</li> </ul>
A4.6	Encourage teaching using real world examples of relevance and interest to women students <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Review and revise core modules for each year and core PGT modules, consider materials</li> <li>• Add question to module evaluation form about relevance and interest</li> </ul>
<b>O1: Promote a policy of zero tolerance to any form of sexism (and other discrimination, harassment) in the department</b>	
A1.1	Ensure that all teaching materials are non-sexist and non-discriminatory <b>Specific actions for students:</b> <ul style="list-style-type: none"> <li>• announcements in introductory lectures and at cohort meetings by Chair BoS</li> <li>• information on website, student handbook, on screens in the department</li> <li>• Encourage students to alert Chair, Equality Committee in confidence of any issues (publicise this information through above channels)</li> </ul> <b>Specific actions for staff:</b> <ul style="list-style-type: none"> <li>• Announcements in Autumn BoS, Autumn staff meeting, stand up meetings</li> <li>• Information on Department staff wiki</li> </ul> <b>Specific actions in general:</b> <ul style="list-style-type: none"> <li>• Log instances of complaints about this issue</li> </ul>
A1.2	Ensure staff and students (including students on industrial placements) are clear that they can raise any issues of sexism/discrimination/harassment confidentially with the Chair, Equality Committee and that they will be acted on promptly <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• As for A1.1</li> <li>• Any issues on industrial placements to be raised with the placement organisation by the Industrial Placements Manager; if not resolved, organisation will be banned from having students on placement.</li> </ul>



Figure 3: Welcome party for women UG CS students, October 2018

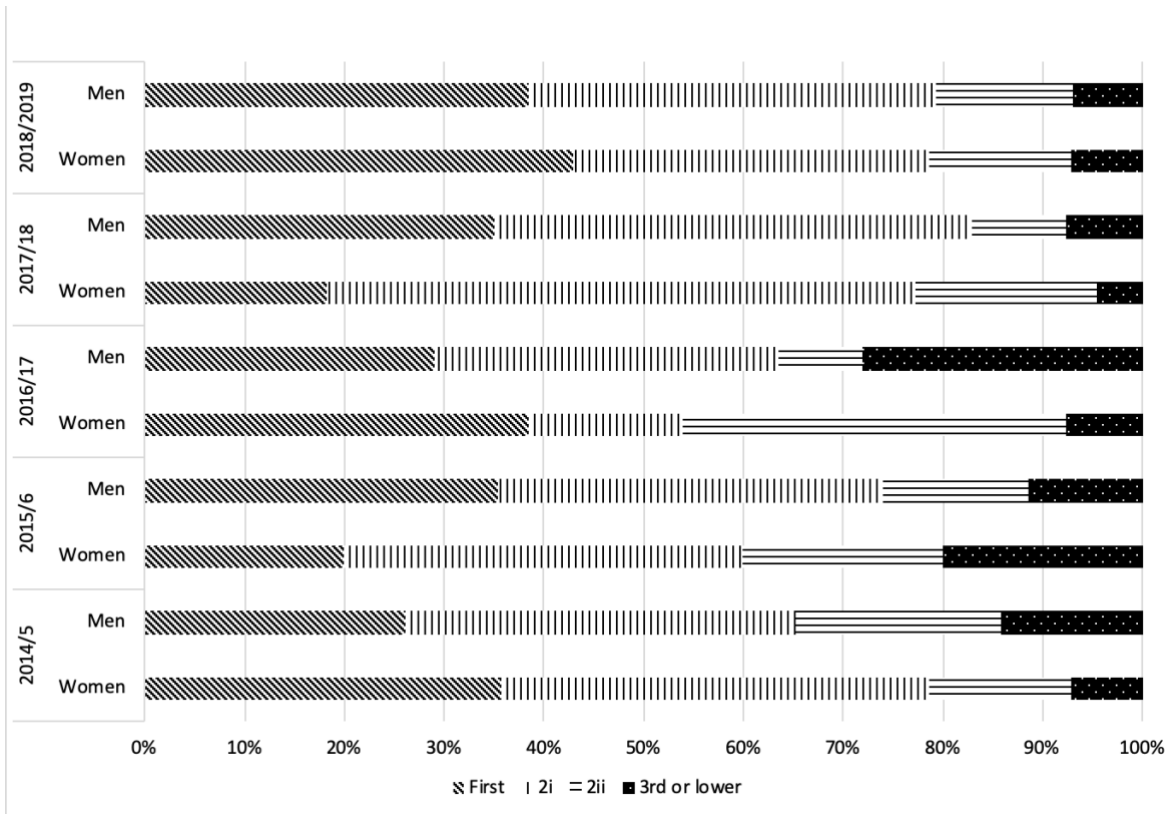


Figure 4: Percentages of women and men students achieving each degree class for UG degrees

There is variability between years in the percentage of women with each/good degree classes (Figure 4, Table 4), but no substantial bias against women. Thus, in spite of a male-dominated environment, women UGs do as well as men in their degree outcomes.

**Table 4: Percentage of women and men students receiving “good” UG degrees (First or 2i classification)**

	Women	Men
2014/15	78.6	65.2
2015/16	60.0	74.0
2016/17	53.8	63.6
2017/18	77.3	82.9
2018/19	78.6	79.2
Overall	70.1	72.1

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

The department offers six on-campus MSc degrees:

- Advanced Computer Science (ACS)
- Cyber Security (Cyber)
- Human-Centred Interactive Technologies (HCIT)
- Safety Critical Systems Engineering (SCSE)
- System Safety Engineering with Automotive Application (SSE)
- Social Media and Interactive Technologies (SMIT).

SMIT is shared with the Department of Sociology, students take half their modules from HCIT, half from Sociology. Therefore, HCIT and SMIT will be considered together. In addition, the Department started an online MSc in CS in 2019. The department currently has 218 on-campus MSc students (29.3% women) and 423 online MSc students (30.5% women). As the online MSc has only recently started, our analysis focused on the on-campus MSc’s. However, the online MSc already has a good percentage of women students and we will work to ensure that this course continues to be attractive and engaging to women (A4.9).

The percentage of women PGT applicants has fluctuated between 28 and 35% (Figure 4), with a general upward trend, but the percentage of women getting offers and taking Firm Accepts has always exceeded the applicant percentage. Thus, we are not discriminating against women applicants, and women are accepting our offers. The percentage of women entrants has sometimes been lower, but this difference is small and may be due to happenstance variations. This gives us 30.5% women on PGT courses

(Table 5), which is very similar to the RG CS average of 31%. There are some differences between courses, with HCIT/SMIT attracting a higher percentage of women (61.4% women), and the Cyber course attracting fewer (20.0% women), issues to be addressed (A3.2 – A3.5).

Our goal is to have 45% women PGT entrants by the 2022 intake, achievable with a 2.5% increase year on year (increase over past 3 years has been 3.5%) (A3.2). Our aspiration is to have 50:50 gender balance in the PGT population by the end of the decade (A3.1), which is also achievable with a steady 2.5% increase.

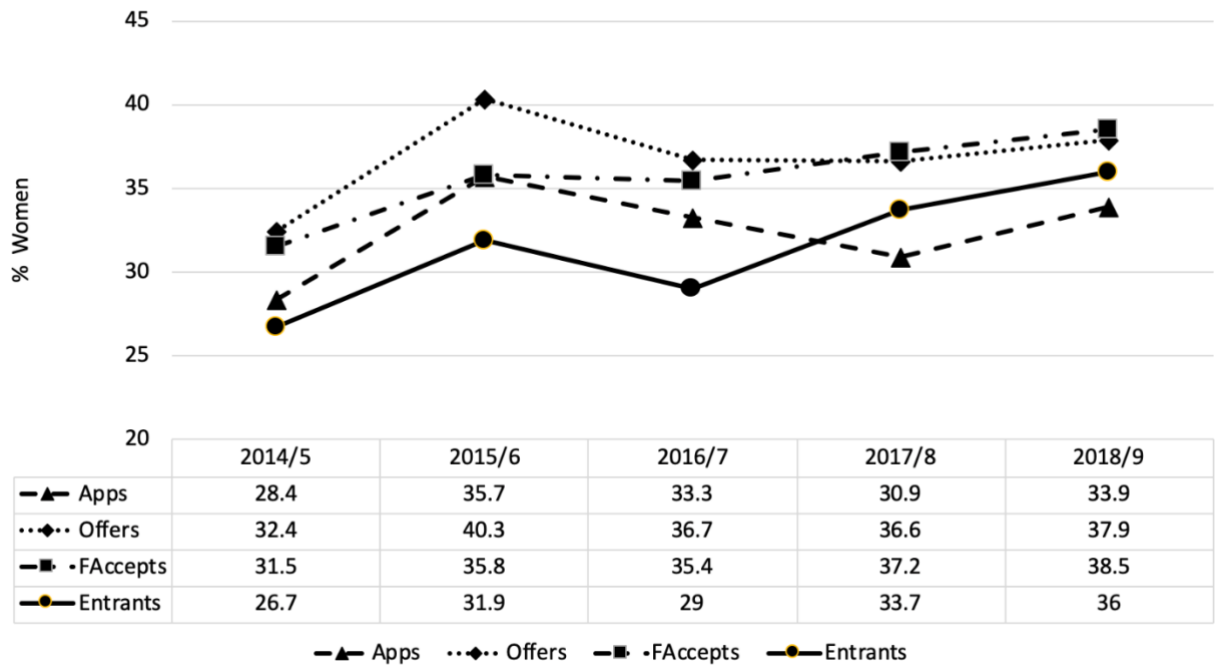


Figure 5: Pipeline for PGT students from applicants to entrants: % women

Table 5: Percentage of women at each point in the PGT application pipeline (average over last five years)

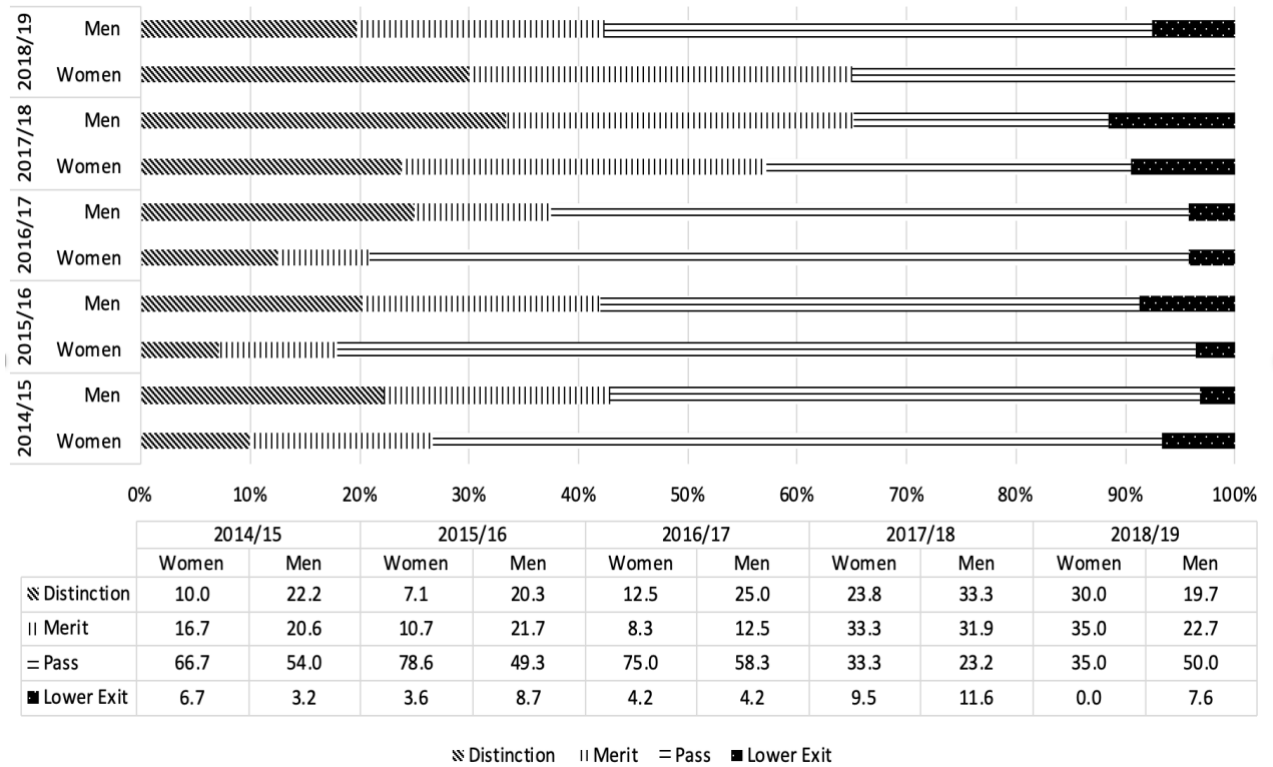
	Applicants	Offers	Firm Accepts	Entrants
% Women	32.4	36.8	35.7	31.5

Focus groups with women PGT students again highlighted the perception of a male-dominated environment. Points raised include:

- PGT students are encouraged to come to departmental and research group seminars, but these are generally given by male speakers and audiences are largely male, and do not feel welcoming;
- teaching style in some MSc modules is male-oriented (not clear, will be investigated in further discussions with PGTs);
- lack of social and extra-curricular activities.



All these issues will be addressed (A4.4 – A4.8, A5.1).



**Figure 6: Percentages of women and men students achieving each degree class for PGT courses**

The percentage of women PGTs achieving good degree classes (i.e. Distinction or Merit) is substantially lower than men (although they are less likely to exit with a lower qualification) (Figure 6, Table 6), particularly for the Cyber and SSE degrees (Table 7). This is very concerning and will be addressed (A4.8).

**Table 6: Percentage of women and men achieving each degree class for PGT courses (average over last five years)**

	Distinction	Merit	Pass	Lower Exit
Women	15.4	19.5	60.0	4.9
Men	24.1	22.5	46.0	7.3

**Table 7: Percentage of women and men achieving “good” degree (Distinction or Merit) for each PGT course (average over last five years)**

	ACS	Cyber	HCIT/SMIT	SCSE	SSE
Women	33.3	16.7	50.0	33.3	25.0
Men	45.5	56.7	52.8	44.0	50.0

<b>Action Plan items addressing issues of low women PGT recruitment</b>	
<b>O3 Increase the number/percentage of women applying to study at all levels (UG, PGT, PGR)</b>	
A3.2	Publicise our support for women students at recruitment events
A3.3	Ensure that women applicants/ those holding offers are aware of our support for women students
A3.4	Increase the number/% of women applicants for the MSc Cyber course <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Identify key places to publicise the Cyber course which might include women applicants</li> <li>Publicise the fact that we now have a very high profile woman professor of Cyber Security (in online, print materials)</li> </ul>
A3.6	Increase number/% of women applicants for the SCSE and SSE courses <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Many of the applicants are sponsored by their companies (e.g. Boeing, BAE Systems) – initiate discussions with those companies to encourage more women applicants</li> </ul>

Note 1: If an Action Plan item has already been mentioned, only the objective will be repeated, not the specific actions

<b>Action Plan items addressing issues of the male-dominated departmental culture for PGT women</b>	
<b>O4: Make the UG and PGT curricula and teaching environment more engaging for women students</b>	
A4.4	Ensure that women students do not feel isolated in learning contexts
A4.6	Encourage teaching using real world examples of relevance and interest to women students
A4.7	Encourage social and extra-curricular activities for PGT students <b>Specific actions:</b> <ul style="list-style-type: none"> <li>Ask each MSc Programme Lead to organize at least one social/extra-curricular event attractive to women students per term</li> <li>Encourage student online fora</li> </ul>

	<ul style="list-style-type: none"> <li>Organize a Christmas and end of Spring Term event (physical or virtual) for all PGT students</li> </ul>
A4.8	<p>Address the problem of fewer women achieving good degrees (on all MSc courses apart from HCIT/SMIT)</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>Hold discussions with MSc course leads (in conjunction with investigation of A4.6, which may be part of the problem)</li> <li>Analyse whether the problems come from coursework or project work</li> <li>Develop strategies to address the problem</li> </ul>

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

The Department offers full-time and part-time PGR degrees, and since 2016/17 a distance learning option. Numbers on the latter two options are very small (e.g. 10 – 20 applications per year), so all three options will be considered together. The department currently has 170 PGR students (29.4% women).

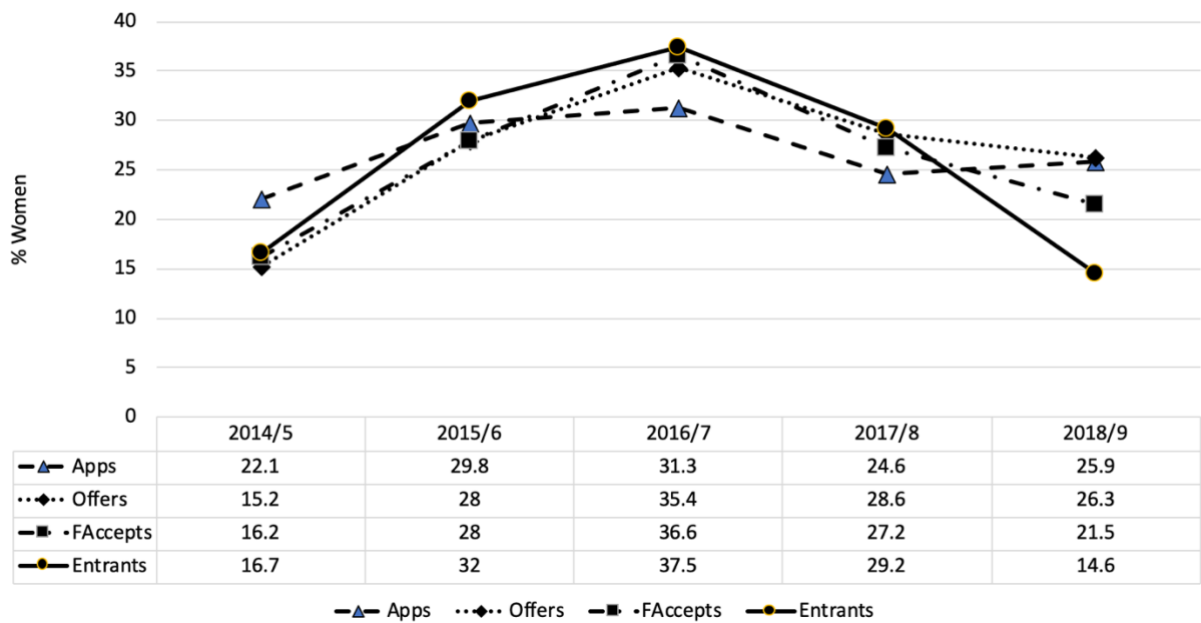


Figure 7: % women at each point in the acceptance pipeline for PGR students

**Table 8: % women at each point in the acceptance pipeline for PGR students over last 5 years**

	Applicants	Offers	Firm Accepts	Entrants	Russell Group Entrants
5 year average	26.7	26.7	25.9	26.0	25.2

There are large fluctuations in the percentage of women along the recruitment pipeline (15% to 37%). Two particular points of concern are in 2014/5 and again 2018/9, when the percentage of women entrants dropped well below applicants. The latter figure is particularly disappointing, as for the previous three years our percentage of women entrants was well above the RG average. This has been extensively discussed but remains a mystery; this will be monitored closely and we aim to increase the conversion of applicants to entrants (A3.7).

Over the period the percentage of women is approximately 25% throughout the pipeline (Table 8), in line with the RG average. Nonetheless, we aim to increase the percentage of women PGR entrants to 35% by the 2022 intake (A3.6), achievable with a 3% year on year increase. Our aspiration is to have a 50:50 gender balance in the PGR population by the end of the decade (A3.1), which is also achievable with a steady 3% increase.

Focus groups with women PGRs highlighted a number of important problems. Many of our women PGRs are international students with families. Issues around accommodation, childcare and maternity leave from their degree were raised. In addition, women students with all male supervision teams and largely male research groups and the lack of social events for PGRs often make women PGR students feel isolated. All these issues will be addressed (A5.1 – A5.5).

**Table 9: Number of women and men completing their degree for PGR students over last 5 years (2013/14 to 2017/18)**

	2013/4	2014/5	2015/6	2016/7	2017/8	5 Year total
<b>Women</b>						
Pass	3	5	1	5	x	14
Fail/Lower Exit	0	0	0	0	x	0
<b>Men</b>						
Pass	23	29	18	24	x	94
Fail/Lower Exit		1	1	3	x	5

All women PGRs have successfully completed their degrees, whereas a small percentage of men students (5.3%) have not. This will be investigated and addressed (A5.6).

<b>Action Plan items addressing issues of low women PGR recruitment</b>	
<b>O3: Increase the number/percentage of women applying to study at all levels (UG, PGT, PGR)</b>	
A3.2	Publicise our support for women students at recruitment events
A3.3	Ensure that women applicants/those holding offers are aware of our support for women students

<b>Action Plan items addressing issues of the male-dominated departmental culture for PGR women</b>	
<b>O5: Make the study environment more engaging for women PGR students</b>	
A5.1	<p>Increase the number/% of women speakers at departmental and group seminars</p> <ul style="list-style-type: none"> <li>• Ask seminar organizers to pay particular attention to recruiting women speakers</li> <li>• Encourage all staff to nominate interesting women speakers (via announcements at staff and BoS Meetings, stand ups)</li> </ul>
A5.2	<p>Provide better support to women PGR students on personal/family issues</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Improve online material (website, PGR handbook) on personal/family issues</li> <li>• Provide an informal get together of new and current women PGR students, so they can support each other more effectively</li> </ul>
A5.3	<p>Provide opportunities in the department where all PGR students can meet and get to know each other better</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Provide a dedicated PGR space, with desks for all first year PGR students</li> <li>• Evaluate student reactions to PGR space</li> <li>• Encourage supervisors to ensure their (women) PGR students are involved in activities (formal and informal) in the department</li> </ul>
A5.4	<p>Provide mixed gender supervision teams wherever possible</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Chair Graduate Studies to ensure that supervisors consider gender issues in allocating second supervisors, assessors</li> </ul>
A5.5	<p>Provide more information on general topics of interest for PGR students</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Organize a series of seminars on topics of interest to PGR students, particularly women, developed in consultation with the students</li> </ul>
A5.6	<p>Investigate non-completion of PGR degrees by men</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Interview supervisors of students who fail to complete their degree</li> <li>• Develop recommendations to improve the situation</li> </ul>

(v) Progression pipeline between undergraduate and postgraduate student levels

Only a small number of PGTs and PGRs come from York UG courses. Our UG students are largely British, whereas our PGT and PGR students are predominantly international. Thus, students are joining us through different pipelines with different characteristics. The percentage of women students jumps from a poor figure for UG (15%) to a somewhat better figure for a CS department for PGT/PGR (around 30%) (Table 10).

**Table 10: % women for each level of students**

UG	PGT on campus	PGT online	PGR	Total PG
14.9	29.3	30.5	29.4	29.8

## 4.2. Academic and research staff data

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

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

**Table 11: Number (FTEs) of women and men on Research Only (RO) contracts by grade, with percentage of women for each grade and in total**

	Grade	Women	Men	Total	% Women
2015	Associate Researcher	1.8	19.5	21.3	8.5
	Researcher	0.0	5.8	5.8	0
	Senior Researcher	0.0	2.8	2.8	0
	Total	1.8	28.1	29.9	6.0
2016	A Researcher	1.0	13.4	14.4	6.9
	Researcher	0.0	6.0	6.0	0
	Senior Researcher	1.0	2.6	3.6	27.8
	Total	2.0	22.0	24.0	8.3
2017	A Researcher	1.4	18.6	20.0	7.0
	Researcher	0.2	7.0	7.2	2.8
	Senior Researcher	2.0	0.8	2.8	71.4
	Total	3.8	26.4	30.0	12.0
2018	A Researcher	1.5	18.6	20.1	7.5
	Researcher	0.2	9.9	10.1	2.0
	Senior Researcher	2.0	1.8	3.8	52.0
	Total	3.7	30.3	34.0	10.9
2019	A Researcher	5.0	25.0	30.0	16.7
	Researcher	1.0	8.9	9.9	10.1
	Senior Researcher	4.0	5.0	9.0	44.4
	Total	10.0	38.9	48.9	20.4

The percentage of women on RO contracts has risen from a very low figure of 6% to 20.4% (improvements at all grades), which is close to the RG CS average (21.2%). Efforts will be made to increase recruitment of women to RO positions (see section 5(i)). Until 2018 the number of women on RO contracts was so small that considering the pipeline has not been relevant. We will now monitor the progression of women through RO contracts (A7.3).

<b>Action Plan items addressing issues of the male-dominated departmental culture for women on RO contracts</b>	
<b>O7: Improve the working environment for women academics (T&amp;R, TO and RO staff)</b>	
A7.1	Encourage networking and support amongst women academics <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Encourage a women’s researcher group for informal discussions, seminars about research topics of general interest</li> <li>• Encourage a women’s lunch group for all women engaged in research</li> </ul>
A7.2	Provide same gender mentoring for new women academic staff <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Assign a senior woman mentor to each new women T&amp;R/TO/RO staff member, whenever possible</li> </ul>
A7.3	Investigate career progression of women on RO and TO contracts <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Investigate whether women are promoted through the grades on RO/TO contracts less quickly than men</li> <li>• Interview line managers of women RO/TO staff</li> <li>• Develop better strategies to ensure appropriate progression of women RO/TO staff</li> </ul>
A7.4	Investigate whether reasons for leaving the department relate to gender or equality issues <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Add a question to the leavers’ questionnaire and the notes for exit interview about gender and equality issues</li> </ul>
A7.5	Improve the induction process for new staff (with particular aspects for women staff) <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Review current induction processes</li> <li>• Interview recent appointees for feedback on their induction</li> <li>• Create guides and checklists for induction</li> <li>• Include information of particular relevance to women (support within the department, maternity leave etc)</li> </ul>
A7.6	Ensure representation of women academics on the Departmental Research Committee (DRC) <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• DoHD(R) to propose a mechanism to ensure better representation of women academics on the DRC</li> </ul>
A7.7	Schedule all key departmental meetings within core working hours <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Disseminate this policy to all staff, particularly meeting secretaries</li> </ul>



**Table 12: Number (FTEs) of women and men on Teaching and Research (T&R) contracts by grade, with percentage of women for each grade and in total by grade**

	Grade	Women	Men	Total	% Women
2015	Lecturer	0.0	8.0	8.0	0.0
	Senior Lecturer	0.8	13.6	14.4	5.6
	Reader	0.0	4.5	4.5	0.0
	Professor	2.6	13.2	15.8	16.5
	Total	3.4	39.3	42.7	8.0
2016	Lecturer	0.0	7.0	7.0	0.0
	Senior Lecturer	0.8	11.6	12.4	6.5
	Reader	0.0	3.5	3.5	0.0
	Professor	2.6	13.5	16.1	16.2
	Total	3.4	35.6	39.0	8.7
2017	Lecturer	0.0	6.0	6.0	0.0
	Senior Lecturer	0.0	11.0	11.0	0.0
	Reader	0.0	3.5	3.5	0.0
	Professor	2.6	13.1	15.7	19.8
	Total	2.6	33.6	36.2	7.7
2018	Lecturer	1.0	12.0	13.0	7.7
	Senior Lecturer	0.0	10.8	10.8	0.0
	Reader	0.0	3.5	3.5	0.0
	Professor	2.8	13.3	16.1	17.4
	Total	3.8	39.6	43.4	8.8
2019	Lecturer	1.0	12.0	13.0	7.7
	Senior Lecturer	0.0	9.0	9.0	0.0
	Reader	0.0	4.5	4.5	0.0
	Professor	3.6	10.8	14.4	25.0
	Total	4.6	36.3	40.9	11.2

The percentage of women on T&R contracts is very low (11.2%), approximately half the RG Computer Science average (16.8%). In addition, representation is very skewed, with currently four women professors but only one woman at a lower grade.

After a long period of little recruitment to T&R positions, there have recently been numerous appointments, but this has resulted in only two women appointments: one Lecturer and one Professor. One woman Senior Lecturer left to take up a professorship at another institution. This has been in spite of efforts to attract women candidates (see section 5.1 (i)).

As there has only been one woman on a T&R contract below professorial level for most of previous five years, there is not enough data to discuss gender issues in the career pipeline. Before this period, one women professor was promoted within the department from Senior Lecturer to Professor, one was appointed at professor level from another institution, and the third was appointed as professor from a position in industry.

<b>Action Plan items addressing issues facing women T&amp;R staff</b>	
<b>O7: Improve the working environment for women academics (T&amp;R, TO and RO staff)</b>	
A7.1	Encourage networking and support amongst women academics
A7.2	Provide same gender mentoring for new women academic staff
A7.4	Investigate whether reasons for leaving the department relate to gender or equality issues
A7.5	Improve the induction process for new staff
A7.6	Ensure representation of women academics on DRC
A7.7	Schedule all key departmental meetings within core working hours

**Table 13: Number (FTE) of women and men on Teaching Only (TO) contracts by grade, with percentage of women for each grade and in total by grade**

	<b>Grade</b>	<b>Women</b>	<b>Men</b>	<b>Total</b>	<b>% Women</b>
2015	Associate Lecturer	1.0	1.5	2.5	40.0
	Lecturer	0.0	6.2	6.2	0.0
	Senior Lecturer	0.0	1.0	1.0	0.0
	Reader	0.0	0.0	0.0	0.0
	<b>Total</b>	<b>1.0</b>	<b>8.7</b>	<b>9.7</b>	<b>10.4</b>
2016	Associate Lecturer	0.0	1.5	1.5	0.0
	Lecturer	1.0	5.9	6.9	14.5
	Senior Lecturer	0.0	1.0	1.0	0.0
	Reader	0.0	1.0	1.0	0.0
	<b>Total</b>	<b>1.0</b>	<b>9.4</b>	<b>10.4</b>	<b>9.6</b>
2017	Associate Lecturer	0.0	1.5	1.5	0.0
	Lecturer	1.0	6.0	7.0	12.7
	Senior Lecturer	0.0	1.0	1.0	0.0
	Reader	0.0	0.5	0.5	0.0
	<b>Total</b>	<b>1.0</b>	<b>9.9</b>	<b>10.0</b>	<b>9.2</b>
2018	Associate Lecturer	0.0	0.0	0.0	0.0
	Lecturer	1.0	5.9	6.9	14.5
	Senior Lecturer	0.0	1.0	1.0	0.0
	Reader	0.0	1.0	1.0	0.0
	<b>Total</b>	<b>1.0</b>	<b>7.9</b>	<b>8.9</b>	<b>11.2</b>
2019	Associate Lecturer	1.0	3.0	4.0	33.3
	Lecturer	2.0	8.5	10.5	23.5
	Senior Lecturer	0.0	2.9	2.9	0.0
	Reader	0.0	1.0	1.0	0.0
	<b>Total</b>	<b>3.0</b>	<b>15.4</b>	<b>18.4</b>	<b>19.5</b>

The percentage of women on TO contracts is higher than either of the previous two categories (19.5%), near the RG average (22%). However, this does not necessarily give a good impression; women staff feel it suggests women are appointed to the “less important” category of academic staff. Some of the women on TO contracts expressed the need for greater support (addressed by A7.1 – 7.7, as for RO and T&R).

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

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

**Table 14: Number of women and men on Research Only (RO) contracts by contract type, with percentage of women for type**

Fixed Contract				Open Contract		
	Women	Men	% W	Women	Men	% W
<b>2015</b>						
Associate Researcher	1.8	16.5	9.8	0.0	3.0	0.0
Researcher	0.0	4.5	0.0	0.0	1.0	0.0
Senior Researcher	0.0	2.0	0.0	0.0	0.8	0.0
Total	1.8	23.0	7.3	0.0	4.8	0.0
<b>2016</b>						
Associate Researcher	1.0	12.4	7.5	0.0	1.0	0.0
Researcher	0.0	4.0	0.0	0.0	2.0	0.0
Senior Researcher	1.0	2.0	33.3	0.0	0.6	0.0
Total	2.0	18.4	9.8	0.0	3.6	0.0
<b>2017</b>						
Associate Researcher	1.0	15.5	6.1	0.0	1.6	0.0
Researcher	0.2	6.0	3.2	0.0	1.0	0.0
Senior Researcher	2.0	0.0	100.0	0.0	0.8	0.0
Total	3.2	21.5	12.9	0.0	3.4	0.0
<b>2018</b>						
Associate Researcher	1.5	15.0	9.1	0.0	2.6	0.0
Researcher	0.2	4.0	5.0	0.0	2.0	0.0
Senior Researcher	2.0	1.0	66.7	0.0	0.8	0.0
Total	3.7	20.0	15.6	0.0	5.4	0.0
<b>2019</b>						
Associate Researcher	5.0	21.0	19.2	0.0	2.0	0.0
Researcher	1.0	3.0	25.0	0.0	2.0	0.0
Senior Researcher	4.0	5.0	44.4	0.0	2.0	0.0
Total	10.0	29.0	25.6	0.0	6.0	0.0

All women on RO contracts are on fixed contracts, a small percentage of men (7.3%) are on open contracts. However, the prestigious Marie Curie Fellowships, are fixed contracts of two years. The department had 19 such fellowships in the period, 9 (47%) women.

Only one minor Fixed Term appointment for a T&R staff member occurred during the period, a man. Therefore, no analysis of contract type for T&R staff is presented.

**Table 15: Number of women and men on Teaching Only (TO) contracts by contract type, with percentage of women for type**

	Fixed Contract			Open Contract		
	Women	Men	% W	Women	Men	% W
<b>2015</b>						
Associate Lecturer	1.0	1.5	40.0	0.0	0.0	n/a
Lecturer	0.0	0.3	0.0	0.0	5.9	0.0
Senior Lecturer	0.0	0.0	n/a	0.0	1.0	0.0
Reader	0.0	0.0	n/a	0.0	0.0	n/a
<b>Total</b>	<b>1.0</b>	<b>1.8</b>	<b>35.7</b>	<b>0.0</b>	<b>6.9</b>	<b>0.0</b>
<b>2016</b>						
A Lecturer	0.0	1.5	0.0	0.0	0.0	n/a
Lecturer	0.0	0.5	0.0	1.0	5.4	15.6
S Lecturer	0.0	0.0	n/a	0.0	1.0	0.0
Reader	0.0	0.0	n/a	0.0	1.0	0.0
<b>Total</b>	<b>0.0</b>	<b>2.0</b>	<b>0.0</b>	<b>1.0</b>	<b>7.4</b>	<b>11.9</b>
<b>2017</b>						
A Lecturer	0.0	1.5	0.0	0.0	0.0	n/a
Lecturer	0.0	1.5	0.0	1.0	5.4	15.6
S Lecturer	0.0	0.0	n/a	0.0	1.0	0.0
Reader	0.0	0.0	n/a	0.0	0.5	0.0
<b>Total</b>	<b>0.0</b>	<b>3.0</b>	<b>0.0</b>	<b>1.0</b>	<b>6.9</b>	<b>12.7</b>
<b>2018</b>						
A Lecturer	0.0	0.0	n/a	0.0	0.0	n/a
Lecturer	0.0	1.5	0.0	1.0	4.0	20.0
S Lecturer	0.0	0.0	n/a	0.0	1.0	0.0
Reader	0.0	0.0	n/a	0.0	1.0	0.0
<b>Total</b>	<b>0.0</b>	<b>1.5</b>	<b>0.0</b>	<b>1.0</b>	<b>6.0</b>	<b>14.3</b>
<b>2019</b>						
A Lecturer	1.0	3.0	25.0	0.0	0.0	n/a
Lecturer	1.0	2.0	33.3	1.0	6.5	13.3
S Lecturer	0.0	0.0	n/a	0.0	2.9	0.0
Reader	0.0	0.0	n/a	0.0	1.0	0.0
<b>Total</b>	<b>2.0</b>	<b>5.0</b>	<b>40.0</b>	<b>1.0</b>	<b>10.4</b>	<b>8.8</b>

Although numbers are very small, a greater proportion of women are on fixed TO contracts (2/3 – 67%) compared to men (5/10.4 – 48.1%). Reasons for this are unclear and will be investigated further (A7.3).

**Table 16: Number of women and men on Research Only (RO) contracts by contract type (full-time and part-time), with percentage of women for type**

	Full-time			Part-time		
	Women	Men	% W	Women	Men	% W
<b>2015</b>						
Associate Researcher	1.0	19.0	20	0.8	0.5	61.5
Researcher	0.0	4.0	0.0	0.0	1.8	0.0
Senior Researcher	0.0	2.0	0.0	0.0	0.8	0.0
Total	1.0	25.0	3.8	0.8	3.1	20.5
<b>2016</b>						
AResearcher	1.0	13.0	7.1	0.0	0.4	0.0
Researcher	0.0	6.0	0.0	0.0	0.0	n/a
SResearcher	1.0	2.0	33.3	0.0	0.6	0.0
Total	2.0	21.0	8.7	0.0	1.0	0.0
<b>2017</b>						
AResearcher	1.0	15.0	6.3	0.0	2.1	0.0
Researcher	0.0	7.0	0.0	0.2	0.0	100
SResearcher	0.0	0.0	n/a	0.0	0.8	0.8
Total	1.0	22.0	8.7	0.2	2.9	6.5
<b>2018</b>						
AResearcher	1.0	17.0	5.5	0.5	0.6	45.5
Researcher	0.0	6.0	0.0	0.2	0.0	100
SResearcher	2.0	2.0	50.0	0.0	0.8	0.0
Total	3.0	25.0	10.7	0.7	1.4	33.3
<b>2019</b>						
AResearcher	5.0	23.0	17.9	0.0	0.0	n/a
Researcher	1.0	5.0	16.7	0.0	0.0	n/a
SResearcher	4.0	5.0	44.4	0.0	0.0	n/a
Total	10.0	33.0	23.3	0.0	0.0	n/a

All women on RO contracts are on full-time contracts whereas a small percentage of men (7.9%) are on part-time contracts. Interviews and focus groups did not reveal any feeling that that women wanted to be on part-time contracts. When specifically asked whether they would be confident about asking to go part-time, all answers were positive.

**Table 17: Number of women and men on Teaching and Research (T&R) contracts by contract type (full-time and part-time), with percentage of women for type**

	Full-time			Part-time		
	Women	Men	% W	Women	Men	% W
<b>2015</b>						
Lecturer	0.0	8.0	0.0	0.0	0.0	n/a
Senior Lecturer	0.0	13.0	0.0	0.8	0.6	57.1
Reader	0.0	4.0	0.0	0.0	0.5	0.0
Professor	2.0	12.0	14.3	0.6	1.2	33.3
<b>Total</b>	<b>2.0</b>	<b>37.0</b>	<b>5.1</b>	<b>1.4</b>	<b>2.3</b>	<b>37.8</b>
<b>2016</b>						
Lecturer	0.0	7.0	0.0	0.0	0.0	n/a
S Lecturer	0.0	11.0	0.0	0.8	0.6	57.1
Reader	0.0	3.0	0.0	0.0	0.5	0.0
Professor	2.0	11.0	15.4	0.6	2.5	19.4
<b>Total</b>	<b>2.0</b>	<b>32.0</b>	<b>5.9</b>	<b>1.4</b>	<b>3.6</b>	<b>28.0</b>
<b>2017</b>						
Lecturer	0.0	6.0	0.0	0.0	0.0	n/a
S Lecturer	0.0	11.0	0.0	0.0	0.0	n/a
Reader	0.0	3.0	0.0	0.0	0.5	0.0
Professor	2.0	11.0	15.0	0.6	2.1	22.2
<b>Total</b>	<b>2.0</b>	<b>31.0</b>	<b>6.1</b>	<b>0.6</b>	<b>2.6</b>	<b>18.8</b>
<b>2018</b>						
Lecturer	1.0	11.0	8.3	0.0	0.8	0.0
S Lecturer	0.0	10.0	0.0	0.0	0.8	0.0
Reader	0.0	3.0	0.0	0.0	0.5	0.0
Professor	2.0	11.0	15.4	0.8	2.3	25.8
<b>Total</b>	<b>3.0</b>	<b>35.0</b>	<b>7.9</b>	<b>0.8</b>	<b>4.4</b>	<b>15.4</b>
<b>2019</b>						
Lecturer	1.0	12.0	7.7	0.0	0.0	n/a
S Lecturer	0.0	9.0	0.0	0.0	0.0	n/a
Reader	0.0	4.0	0.0	0.0	0.5	0.0
Professor	3.0	9.0	25.0	0.6	1.8	25.0
<b>Total</b>	<b>4.0</b>	<b>34.0</b>	<b>10.5</b>	<b>0.6</b>	<b>2.3</b>	<b>20.7</b>

One woman and three men on T&R contracts are on part-time contracts. These are all senior T&R staff who have chosen this option. The woman expressed her satisfaction with her arrangements and support from the department.

**Table 18: Number of women and men on Teaching Only (TO) contracts by contract type (full-time and part-time), with percentage of women for type**

	Full-time			Part-time		
	Women	Men	% W	Women	Men	% W
<b>2015</b>						
Associate Lecturer	1.0	1.0	50.0	0.0	0.5	0.0
Lecturer	0.0	5.0	0.0	0.0	1.2	0.0
Senior Lecturer	0.0	1.0	0.0	0.0	0.0	n/a
Reader	0.0	0.0	n/a	0.0	0.0	n/a
<b>Total</b>	<b>1.0</b>	<b>7.0</b>	<b>12.5</b>	<b>0.0</b>	<b>1.7</b>	<b>0.0</b>
<b>2016</b>						
A Lecturer	0.0	0.0	n/a	0.0	1.5	0.0
Lecturer	1.0	4.0	20.0	0.0	1.9	0.0
S Lecturer	0.0	1.0	0.0	0.0	0.0	n/a
Reader	0.0	1.0	0.0	0.0	0.0	n/a
<b>Total</b>	<b>1.0</b>	<b>6.0</b>	<b>14.3</b>	<b>0.0</b>	<b>3.4</b>	<b>0.0</b>
<b>2017</b>						
A Lecturer	0.0	1.0	0.0	0.0	0.5	0.0
Lecturer	1.0	5.0	16.7	0.0	1.9	0.0
S Lecturer	0.0	1.0	0.0	0.0	0.0	n/a
Reader	0.0	0.0	n/a	0.0	0.5	0.0
<b>Total</b>	<b>1.0</b>	<b>7.0</b>	<b>12.5</b>	<b>0.0</b>	<b>2.9</b>	<b>0.0</b>
<b>2018</b>						
A Lecturer	0.0	0.0	n/a	0.0	0.0	n/a
Lecturer	1.0	4.0	20.0	0.0	1.9	0.0
S Lecturer	0.0	1.0	0.0	0.0	0.0	n/a
Reader	0.0	1.0	0.0	0.0	0.0	n/a
<b>Total</b>	<b>1.0</b>	<b>6.0</b>	<b>14.3</b>	<b>0.0</b>	<b>1.9</b>	<b>0.0</b>
<b>2019</b>						
A Lecturer	1.0	3.0	25.0	0.0	0.0	n/a
Lecturer	2.0	8.0	20.0	0.0	0.5	0.0
S Lecturer	0.0	2.0	0.0	0.0	0.9	0.0
Reader	0.0	1.0	0.0	0.0	0.0	n/a
<b>Total</b>	<b>3.0</b>	<b>14.0</b>	<b>17.6</b>	<b>0.0</b>	<b>1.4</b>	<b>0.0</b>

For staff on TO contracts all the women are on full-time contracts, whereas four men are on part-time contracts. Again, when asked, none of the women on TO contracts wished to be part-time and all felt they could ask for such an arrangement.



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

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

Only one woman on a T&R contract has left the department, to take up a professorship in another computer science department.

10 men on T&R contracts have left the department. There have been a variety of reasons for this: to take up other academic positions, in industry, retirement and sadly one death. We consider this level of turnover normal and healthy, allowing people to explore new opportunities and allowing new people to join the department.

All staff who leave are asked to complete a leavers' questionnaire and are offered an exit interview to highlight any issues for leaving which need addressing. In future these will be monitored for any gender or other equality issues (A7.4).

**Word count: 2253**

## 5. SUPPORTING AND ADVANCING WOMEN'S CAREERS

Recommended word count: Bronze: 6000 words | Silver: 6500 words

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

#### (i) Recruitment

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

**Table 19: Gender breakdown for recruitment pipeline for T&R positions**

		Applicants	Interviews	Offers	Accepts
2015 1 round	Women	2	1	0	0
	Men	8	2	0	0
	% women	20.0	33.3	n/a	n/a
2016 2 rounds	Women	3	1	0	0
	Men	20	7	3	3
	% women	13.0	12.5	0.0	0.0
2017 3 rounds	Women	29	5	1	1
	Men	154	14	2	2
	% women	15.8	26.3	33.3	33.3
2018 2 rounds	Women	19	4	1	1
	Men	88	11	4	4
	% women	17.8	26.7	20.0	20.0
2019 4 rounds	Women	26	4	1	1
	Men	158	16	4	4
	% women	14.1	19.0	20.0	20.0
Total	% women	15.6	23.1	18.8	18.8

Note 1: The University does not collect information about shortlisting numbers, so this information cannot be included.

Eight rounds of T&R recruitment have occurred during the period (Table 19), often for several positions. Since 2017 we have instituted a process to attract more women, based on best practice from Informatics Europe on the recruitment of women in STEM<sup>5</sup>. This has met with modest success. The percentage and numbers of women applying for positions remain low, but the percentage of women being interviewed has increased, and our efforts have resulted in the recruitment of two women lecturers, one women professor). Therefore, our processes for encouraging women applicants will be continued and intensified (A6.1).

Currently, the main points of the process are:

<sup>5</sup> Informatics Europe (2016). More women in informatics research and education.

- Recruitment materials vetted by the Equality Committee Chair for inappropriate images and language
- Staff asked to disseminate advertisements to outlets where women candidates might see them
- staff encouraged to actively approach women who might be interested in applying for the positions (e.g. by personal emails, discussions)
- Shortlisting panels asked to pay particular attention to gender issues
- All shortlisting/interview panels include at least one woman and have undertaken unconscious bias training
- On interview days, women applicants welcomed and shown around the department by an appropriate woman (i.e. similar grade)

Several useful issues have emerged from discussions of T&R recruitment. Firstly, we realise that both the computing industry and universities are eager to recruit women in CS. Thus, we are in a highly competitive market, and must make ourselves a very attractive workplace. It is evident from informal enquiries from prospective women candidates that they are sometimes deterred by the stringent “essential requirements” list in job particulars (several women candidates had to be persuaded to apply as they felt they would not meet the requirements, one was subsequently appointed). So extra care will be taken in dividing requirements between “essential” and “desirable” in job specifications (A6.1).

We were concerned that the department was perceived as too male-dominated to be attractive to women candidates (as raised by students, Sections 4.1 (ii) and (iii)). However, this does not appear to be a problem for potential staff, at least to candidates who did apply for positions (a number of candidates, both successful and unsuccessful have been asked about this, through personal contacts). However, it may well be that male candidates are better at selling themselves on interview day – are more confident, more attuned to the requirements of REF and the need to attract research funding. On these last two points several women candidates have just failed to be offered positions. We will provide more briefing for selection committees, backed up by research, on these issues (A6.1).

The recruitment situation is improving for TO and RO positions, with six women appointed in the 2018 rounds of recruitment and three women in 2019 (27.3% of appointment). In both cases, considerable efforts were made to attract women candidates for positions, following the process developed for T&R positions. However, there is considerable RO recruitment for which individual T&R staff are responsible. So, all staff recruiting RO staff will be briefed on the new recruitment processes (A6.2).

Given the large number of recent recruits, induction processes are being reviewed (A7.5), women staff are being interviewed about their perception of the department before and when applying, and of the recruitment process. This information will inform improvements of the recruitment pipeline (O6).

**Table 20: Gender breakdown for recruitment pipeline for Teaching Only (TO) positions**

		<b>Applicants</b>	<b>Interviews</b>	<b>Offers</b>	<b>Accepts</b>
2014 3 rounds	Women	4	1	0	0
	Men	15	5	4	3
	% women	21.1	16.7	0.0	0.0
2015 3 rounds	Women	8	2	1	1
	Men	23	6	1	1
	% women	25.8	25.0	50.0	50.0
2017 1 round	Women	0	0	0	0
	Men	4	2	1	1
	% women	0.0	0.0	0.0	0.0
2018 4 rounds	Women	4	2	1	1
	Men	23	2	1	1
	% women	14.8	50.0	50.0	50.0
2019 4 rounds	Women	15	7	3	3
	Men	97	23	8	8
	% women	13.4	23.3	27.3	27.3
<b>Total</b>	<b>% women</b>	<b>16.1</b>	<b>24.0</b>	<b>25.0</b>	<b>26.3</b>

Note 1: The University does not collect information about shortlisting numbers, so this information cannot be included.

**Table 21: Gender breakdown for recruitment pipeline for Research Only (RO) positions**

		Applicants	Interviews	Offers	Accepts
2014 7 positions	Women	9	2	1	0
	Men	51	12	4	4
	% women	15.0	14.3	20.0	0.0
2015 13positions	Women	14	2	1	1
	Men	74	22	9	9
	% women	15.9	8.3	10.0	10.0
2016 11positions	Women	10	2	0	0
	Men	71	20	7	7
	% Women	12.3	9.1	0.0	N/A
2017 9 positions	Women	5	1	0	0
	Men	45	17	7	7
	% women	10.0	5.5	0.0	N/A
2018 27positions	Women	55	22	5	5
	Men	125	50	20	20
	% women	30.6	30.6	20.0	20.0
Total	% women	20.3	19.3	12.9	11.3

Note 1: The University does not collect information about shortlisting numbers, so this information cannot be included.

(ii) **Induction**

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

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

All new staff have an induction meeting with the Departmental HR Coordinator (HRC). All academic staff have meetings with HoD, and the DHoD (T) (for T&R/TO staff) to discuss their teaching and a meeting with the DHoD (R) (for T&R/RO staff) to discuss research. Early career T&R and TO staff are encouraged to enrol on the Postgraduate Certificate in Academic Practice (PGCAP) programme.

The AS self-assessment process and increased recruitment have highlighted that the departmental induction processes were ad hoc and their effectiveness not assessed. The HRC will evaluate induction processes and the DM will meet with all recently appointed academics to review their induction. Processes will be updated in light of these reviews (A7.5).

(iii) Promotion

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

**Table 22: Gender breakdown for successful and unsuccessful applications for promotion**

	Successful		Unsuccessful		Total Applications
	Women	Men	Women	Men	
2014	0	0	0	1	1
2015	0	3	0	3	6
2016	0	1	1	0	2
2017	0	2	0	1	3
2018	0	0	0	4	4
Total	0	6	1	9	16

Annual promotions rounds are publicised through a range of channels (direct email, announcements at BoS, staff meetings, “stand up” meetings). A briefing session is held by the DHoD(R) to explain the process and requirements. In addition, as part of their performance and development review (PDR), staff are encouraged to apply for promotion when appropriate. Mentors also discuss promotion possibilities and support staff in the application process. Staff who apply and fail to achieve promotion (very common for T&R staff, Table 22) are debriefed and supported by a senior staff member.

Only one woman applied for promotion in the period (Table 22) and was unsuccessful (she subsequently left the university). However, all other women T&R staff were Professors and therefore not eligible for promotion during this period. Only 40% of men academic staff were successful in their promotion applications during the same period. Academic staff, both men and women, find the promotion process difficult – it is time consuming and the low success rate is disheartening.

With the recent recruitment of a number of women academics, they will be actively encouraged to apply for promotion when eligible and will receive particular support (A8.1).

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

Provide data on the staff, by gender, submitted to REF versus those that were eligible. Compare this to the data for the Research Assessment Exercise 2008. Comment on any gender imbalances identified.

**Table 23: Gender breakdown for REF 2014 submission**

	Eligible	Submitted	% Submitted
Women	4	2	50.0
Men	40	33	82.5
Total	44	35	

The gender breakdown for REF 2014 shows a substantially lower submission rate for women than men, although the number of women is very small. Figures for REF 2008 were not available.

Women academics in the department will be supported with careful mentoring in relation to future REF or similar future exercises and reasons for difficulties explored (for example, does it relate to high levels of academic community work, see Section 5.4(iv)). In preparation for next REF (or other research evaluation exercise, women academics in the department will be interviewed and guidelines prepared on how best to support them (A8.2). These guidelines will be used by mentors (A7.2), who will receive briefings from DHoD(R) (A8.2), but also in specific sessions arranged by the DHoD(R) and through the women academics network (A7.1).

<b>Action Plan items addressing issues of key transition points for women academic staff</b>	
<b>O6: Achieve 30% women in T&amp;R, TO and RO positions by the end of the decade</b>	
A6.1	Increase number/percentage of women T&R, TO and RO contract applicants and entrants
A6.2	<p>Continue to improve recruitment procedures for T&amp;R and TO staff</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Continue to apply the new recruitment procedures (see section 5.1 (i))</li> <li>Add further improvements: <ul style="list-style-type: none"> <li>• Find a better methodology for vetting the language of recruitment materials</li> <li>• Develop a larger pool of images featuring women to include in recruitment materials</li> <li>• Carefully consider “essential” and “desirable” requirements in job specifications, limit the former as much as possible</li> <li>• Brief selection committees on differences between men and women candidates in presentation styles (with research evidence)</li> </ul> </li> <li>• Create a checklist of key Athena SWAN actions for staff meeting women candidates</li> </ul>

A6.3	<p>Improve recruitment procedures for RO positions</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Apply the new recruitment procedures developed for T&amp;R recruitment (see section 5.1 (i)) and further improvements (see A6.1)</li> <li>• Brief any staff member recruiting for a RO contract on the new procedures and the importance of attracting more women to RO contracts</li> </ul>
<b>O7: Improve the working environment for women academics (T&amp;R, TO and RO staff)</b>	
A7.1	Encourage networking and support amongst women academics
A7.2	Provide same gender mentoring for new women academic staff
A7.5	Improve the induction process for new staff
<b>O8: Improve student and staff development support within the department, particularly for women</b>	
A8.1	<p>Encourage women academics to apply for promotion</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Interview all women staff as they become eligible for promotion, and a sample of men staff</li> <li>• Provide guidelines on the staff wiki for mentors and line managers who conduct PDRs with women on how best to support them through the promotion process</li> <li>• Brief mentors of women academics on the importance of encouraging them to apply for promotion and supporting them through the process</li> </ul>
A8.2	<p>Support academic staff, particularly women staff, in preparing for REF</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Interview women academics in preparation for next REF</li> <li>• Provide guidelines on supporting women academics for REF</li> <li>• Provide briefings for mentors on REF</li> <li>• Arrange “planning for REF” sessions</li> </ul>

## 5.2. Career development: academic staff

### (i) Training

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

All staff undertake a number of mandatory training courses (e.g. information security, fire safety), managed through the University’s central Learning Management System, with reminders automatically generated. In particular, all staff take the Mental Health First Aid course, to be able to better support students and staff with mental health issues.

Specific training needs are identified during PDRs. A wide range of training opportunities are available to all staff. These are advertised through numerous



channels. Uptake of training has grown very rapidly in the past five years (Table 24), however women’s participation is substantially less than the percentage of women in the department (e.g. 14.3% in 2018, percentage of women staff: 27.8%). It is not clear why, although feedback from both academic and PSS women has been very mixed. Some women have found the university leadership training very helpful (e.g. “transformative”, “very good but time-consuming”), others found similar training “very condescending”. Issues raised have been boring online courses, insufficient notice of training opportunities, difficulty of allocating large blocks of time to training.

Women are over-represented in E&D training and Management training, but under-represented in Leadership and Other training (Table 25). Further analysis will be undertaken to understand the situation, and women staff will be encouraged through mentors and PDR to take training and other career development opportunities (A8.3).

**Table 24: Gender breakdown of training uptake (all staff, academic and PSS)**

	Women	Men	Total	% Women
<b>2014</b>	2	13	15	13.3
<b>2015</b>	10	61	71	14.1
<b>2016</b>	14	87	101	13.9
<b>2017</b>	17	159	176	9.7
<b>2018</b>	23	138	161	14.3
<b>Total</b>	66	458	524	12.6

**Table 25: Gender breakdown of training uptake, by training type (all staff, academic and PSS)**

		Equality and Diversity	Management	Leadership	Other
<b>2014</b>	<b>Men</b>	1	0	6	3
	<b>Women</b>	2	5	1	11
<b>2015</b>	<b>Men</b>	1	1	1	34
	<b>Women</b>	1	6	1	14
<b>2016</b>	<b>Men</b>	1	2	1	28
	<b>Women</b>	1	2	2	16
<b>2017</b>	<b>Men</b>	2	3	2	94
	<b>Women</b>	1	1	0	45
<b>2018</b>	<b>Men</b>	0	2	1	76
	<b>Women</b>	3	2	2	51
<b>% Women</b>		61.5	66.7	35.3	36.8

We have identified a number of specific training needs within the department related to E&D (e.g. our legal obligations in relation to equality legislation). We will identify a regular termly Training Day for both academic and PSS staff (A8.4). We will also evaluate the effectiveness of training (A8.4).

(ii) Appraisal/development review

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

All staff have a compulsory annual PDR, so no data are presented on uptake of this scheme. For RO and PSS staff, reviews are conducted by the line manager. For T&R staff, these are conducted by the HoD or DHoD(R) and for TO staff by the HoD or DHoD(T). All those conducting PDRs undertake compulsory training, so no data are presented on uptake.

Feedback from women staff about PDR is very mixed, with some finding the process helpful (“they’ve become more helpful with recent improvements as something to guide my development over the year” and “useful process to reflect on goals and achievements”) but others that it is not (“not very helpful, too formulaic, one size fits all, more people should be reviewers” and “I have said the same things over and over for x years ... with nothing coming of it due to external limitations”). Guidelines will be developed on how PDRs can be made most useful for women, with the possibility of having senior academic women conduct PDRs for women staff (A8.8).

(iii) Support given to academic staff for career progression

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

Support is provided to all academic staff in their career progression through mentoring, PDRs and through regular meetings for postdoctoral and early career researchers (ECRs) arranged by the HoD and DHoD(R).

All academic staff are assigned a mentor (a senior member of staff outside their line of management). Mentors receive training at University level. They meet regularly with their mentee and are available to provide practical and emotional guidance and support. One aspect of this guidance and support is career progression and promotion.

Advice on career progression is also provided through PDRs, with objectives for the coming year being identified, and advice on whether to apply for promotion. As for most of the period, only one woman academic was below professorial level, it is impossible to provide information about the effectiveness of the PDR and career progression support for women academics. However, as several younger women have joined the department, this will require attention. Initially, this will be addressed through the mentoring and PDR processes, but also reviewed (A8.9). Initial feedback from new appointments is that they feel well supported, but would like more support targeted to their specific situation. This will be considered in developing further support.

A regular series of meetings for PGR students and ECRs is organised by the HoD and DHoD(R). These are on different themes including publications, REF, research grants,

and promotion. Feedback from both PGRs and ECRs is that these meetings have been extremely helpful. Given the situation on REF for our few women academics, special attention will be paid to having sessions about REF with an emphasis on support for women academics in future (A8.2) and the effectiveness of these will be evaluated (A8.10).

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

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

UG students are offered a wide range of career development support, including 4-5 events per term throughout their UG programme (Figure 8). Events are widely publicised via personal tutors, departmental screens and the student intranet. There are also events aimed at women students on career development in the tech industries (Figure 9). Feedback from women students about the sessions has been very positive, particularly opportunities to meet women alumni and women in the computing industry. More support has been requested (sessions on CVs, panel discussions, opportunities to meet alumni students or women in technical roles). These ideas will be incorporated into future sessions (A8.6).

<b>Figure 8: Career Development events for UG students, a typical term</b>
Finding jobs and completing application forms (1 hour)
Internships, placement years and work experience (1 hour)
CV basics (1 hour)
Interview skills (1 hour)
Help, I don't know what to do in my career (1 hour)
Tech fair (5 hours) (stands from a range of national tech firms)

<b>Figure 9: Career Development events for UG women students, a typical term</b>
Women in Tech: what's it like (2 hours)
Women in Tech: Node-RED, basics to "bots" practical session (run by IBM) (4.5 hours)
Women in Tech: Advice from women role models and professionals working in tech (1.5 hours)

Students at all levels have the option of taking an extra, non-assessed course in Spring Term entitled "Business Innovation and Entrepreneurship" delivered by a York-based internationally renowned tech entrepreneur. This course includes lectures about

innovation and entrepreneurship in the tech industries and aims to enhance students' employability through greater business awareness and confidence. Students undertake a group project developing a business plan for an innovation which they pitch to a team of "dragons" (Figure 10). In the 2019 course, 17 students (both UG and PGR) completed the course, including three women. Although this may seem a small take up, this is a specialist course appealing to a minority of students interested in starting their own tech businesses.



**Figure 10: Two mixed gender student groups receiving their certificates for successful business plan pitches to the "dragons" on the CS Business Innovation and Entrepreneurship course**

A technology careers fair is organized by the students each year, and in 2018 women students organized a set of activities of particular interest to women, including a woman keynote speaker from the technology industry.

Support given to PGT and PGR students has been rather ad hoc. The MSc HCIT students have several sessions with speakers from industry (e.g. NHS Digital, British Airways, usability consultancies) and government departments, about work possibilities after the MSc, and a session on how to build a portfolio of their MSc work to use when applying for positions.

The AS work has highlighted the need for a more structured approach to career support for PGT and PGR students, and is part of our AP (A8.6).

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

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

The DHoD(R) sends out a regular research bulletin with information about upcoming calls for research proposals and other relevant information. With other senior members of the department, he runs regular seminars about research proposal writing. The department has its own Research Support Office (RSO) to support research grant applications. All grant applications are reviewed by a senior experienced grant holder before submission and suggestions are made to applicants. The DHoD(R) and reviewer

also provide support when applicants are not successful. The effectiveness of this system needs evaluation and will be included in the staff survey in the future (A8.10).

<b>Action Plan items addressing issues of career development for students and staff</b>	
<b>O8: Improve student and staff development support within the department</b>	
A8.2	Support academic staff, particularly women staff, in preparing for REF
A8.3	<p>Improve uptake of staff training and development activities by women</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Interview a range of staff (both men and women) about uptake of training and type of training taken</li> <li>• Identify what training and development women staff need/want</li> <li>• Develop strategies to encourage women to take up training and other career development activities</li> </ul>
A8.4	<p>Provide training within the department on topics of general interest/importance</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Identify an appropriate regular training day (say once a term)</li> <li>• Set up a series of topics of interest/importance and arrange suitable speakers/training</li> <li>• Develop a short training evaluation questionnaire for use after each training day</li> </ul>
A8.5	<p>Provide more career development support for students at all levels</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Provide specific sessions about CVs, career development for women at UG level</li> <li>• Provide specific sessions for all PGT and PGR students about career development</li> </ul>
A8.8	<p>Provide more effective PDR processes for women staff</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Develop guidelines on effective PDR processes for women</li> <li>• Explore possibility of having senior women academics as PDR reviewers for women staff</li> </ul>
A8.9	<p>Ensure that mentoring and PDR processes provide adequate career progression support for young women academics</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Interview young women academics one and two years into their appointment</li> <li>• If appropriate, include young T&amp;R, TO women in ECR and PGR activities</li> <li>• Develop strategies for supporting young women academics</li> </ul>
A8.10	<p>Evaluate effectiveness of research support (REF, grant writing)</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Add question on REF sessions to staff survey</li> <li>• Add questions on grant writing sessions to staff survey</li> </ul>

### 5.3. Flexible working and managing career breaks

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

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

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

If adjustments to standard university policy are needed, the department is very flexible and these are discussed with the staff member's line manager beforehand on a case by case basis. This applies to both academic and PSS staff and PhD students. No academic staff have taken maternity leave in the period, so no comments can be made about effectiveness of procedures for this group. However, four PSS staff have taken maternity leave and feedback gathered (see 5.3(iv)).

There have been a number of problems when overseas funding bodies for pregnant PhD students have not been supportive of arrangements proposed by the department. We will discuss with the University how to deal with such situations more robustly in the future (A8.7).

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

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

In addition to the University policy of "keeping in touch" days, the department arranges meetings and communications with staff members who are on maternity/adoption leave to ensure any important information is passed on and that they are well prepared for their return to work. A return-to-work date is agreed well in advance. No academic staff have taken maternity/adoption leave during the period.

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

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

The department is flexible in supporting a staged return to work. There is currently no policy on research support for returning academic staff, and we will develop a policy as part of creating a more supportive and inclusive departmental culture (A8.7).

(iv) Maternity return rate

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

All PSS staff who took maternity leave returned, initially on a part-time basis (40% or 60%). No member of staff has had their contract not renewed.

One of the women who has taken maternity leave commented:

“I have had x<sup>6</sup> maternity leaves whilst employed in the department and ... have been fully supported ... kept in contact ... and felt more than happy to return to work ... I had keeping in touch days and was eased by in gently”

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

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

Uptake of these forms of leave is low for such a large department (Table 26). Feedback identifies a reluctance amongst men in the department, particularly academics, to take advantage of these types of leave and failure to plan for them sufficiently in advance. Therefore, staff will be encouraged to take this leave, with information on the staff wiki (A2.2), encouragement from mentors, and regular reminders.

Several staff who had taken paternity leave were interviewed and said the department had been very supportive on this issue. Two case studies, one of paternity leave and one of maternity leave with be added to the E&D webpages (A2.2) to highlight the importance of this type of leave and the department’s support for it.

**Table 26: Uptake of paternity, shared parental, adoption and parental leave by staff (number of days leave indicated)**

Grade:	T&R		Research		T&S	PSS		
	7	8	6	7	7	4	5	6
2014	1 (14)		1 (14)				1 (14)	
2015		1 (14)				1 (14)		
2016			1 (7)		1 (14)			1 (14)
2017								
2018				1 (7)				

<sup>6</sup> Removed to protect the identity of the staff member

#### (vi) Flexible working

Provide information on the flexible working arrangements available.

Departmental policy allows all staff, with agreement of the HoD, to work flexible hours in line with the University's Flexitime policy. Full-time staff are required to work two core time periods:

Morning core: 10:00 – 12:00

Afternoon core: 14:00 – 16:00.

They may then choose to work flexible time bands:

07:30 – 10:00

12:00 – 14:00

16:00 – 20:00

A number of women PSS staff take advantage of the Flexitime policy and are very happy with the arrangements:

“the department are very agreeable in allowing me to be flexible around childcare”

However, there has been an issue of staff perceiving that they need to work “too flexibly”:

“there is a perceived pressure in that in order to progress, you too should work ‘at odd times’”

This issue has been addressed by disseminating a policy that different staff may work different hours, and should not be expected to work outside those hours. Staff are encouraged to have an email footer indicating that they do not expect answers outside other people's working hours (A7.8).

Academic staff have more flexibility in their work hours in their contracts. Timetabling of teaching is set by the central administration, but staff may request that they are not scheduled to teach outside core time periods if they have caring responsibilities. A form is sent to staff with teaching responsibilities each year when teaching timetabling is organized. Three women academics expressed satisfaction with the department's flexible working arrangements.

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

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

Currently, transition back to work after career breaks is taken on a case-by-case basis. The department has been very flexible in the cases that have occurred. However, two cases of women returning to work after breaks were not totally smooth<sup>7</sup>. Therefore, a

<sup>7</sup> No details can be given of these cases as they would identify the individuals.



more formal policy needs to be developed, so that staff are confident they will be supported on this issue (A8.7) and this policy will be disseminated in the department.

<b>Action Plan items addressing issues of flexible working and managing career/study breaks</b>	
A7.8	<p>Create and disseminate a policy of not expecting staff to work outside their agreed hours</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Disseminate this policy at BoS, staff and stand up meetings</li> <li>• Encourage staff to have appropriate footers to their emails</li> </ul>
A7.9	<p>Ensure that staff returning to work from exceptional leave are appropriately supported</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Develop policy for return to work from exceptional leave</li> </ul>
A7.10	<p>Create and disseminate a policy of not expecting staff to work outside their agreed hours</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Disseminate this policy at BoS, staff and stand up meetings</li> <li>• Encourage staff to have appropriate footers to their emails</li> </ul>
A8.6	<p>Provide more support for international women students on maternity leave</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Discuss university policy with University Dean of Graduate Research School, so we are better prepared for this in the future</li> <li>• Provide clear procedures in staff wiki</li> </ul>
A8.7	<p>Ensure smooth transition back to work for staff returning from leave (maternity, paternity etc)</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Develop an appropriate policy and disseminate this to staff</li> <li>• Develop a questionnaire/interview schedule for returning staff</li> </ul>

## 5.4. Organisation and culture

### (i) Culture

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



**Figure 11: Word cloud from staff and PGR students' perceptions of the department culture**

Preparation of this AS submission has led to lively and interesting discussions of gender and equality issues within numerous contexts within the department – from formal discussions in BoS to informal discussions of a plan to create a display in the department about our men and women heroes in computer science. Some male staff (both young and old) have expressed surprise at the range and complexity of issues facing women students and staff, both in the department and in the wider CS community.

It is clear that women students see the department as male-dominated and not particularly welcoming or friendly (see Sections 4.1 (ii) and (iii)). However, the organizational culture is clearly changing. This is probably partly due to the work on AS issues, partly due to the recruitment of a number of young staff and partly the commitment to E&D issues of the current senior management team. A recent exercise to describe the department in three words resulted in a surprisingly positive set of words (Figure 11). In addition, when the AS lead suggested in a recent meeting that a target of 50:50 gender balance for students would be too difficult to achieve, the consensus was we should strive to achieve it.

Overall there is enthusiastic support for us to be a more inclusive department and an eagerness to start addressing issues of inclusion beyond those of gender. Currently there is a great deal of interest in new requirements to make our teaching materials accessible to students with disabilities, with many staff asking for support and guidance on this topic. There is similar interest in the new University “Inclusive Teaching, Learning and Assessment Strategy”. The department has volunteered to be a “pathfinder” department, piloting initiatives in this area.

There are many small signs that the whole department is actively considering gender and inclusion issues very seriously at every step. Recently there was a small incident of UG men students acting inappropriately, it was immediately brought to the attention of the Chair of the Equality Committee and the Chair of BoS as potentially sexist or racist (which it turned out not to be) and investigated immediately. Students are clearly aware of our new zero tolerance policy (AP Objective 1) and confident to report issues.

At a much more structural level, in planning a revision of our UG syllabus, there have been in-depth discussions of how to make the syllabus more engaging for women students and how to ensure that each year has some teaching by women, and these no longer need to be prompted by the AS lead. Indeed, it is often now the men Programme Leads who are pushing the boundaries, for example suggesting that we should have women teaching the most technical subjects, to show that women are capable of all aspects of CS.

Overall, the department has embraced the AS principles and the very challenging Action Plan developed for this submission with enthusiasm and commitment.

## (ii) HR policies

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

Preparation of the AS submission has highlighted the fact that the department in the past has not rigorously monitored HR policies and general good practice around equality, dignity at work, and bullying. As part of our AP we have already begun more rigorous information dissemination and monitoring in these areas. There have been a very small number of incidents of inappropriate behaviour by men students towards women students and by men staff. We are now very actively promoting a “zero tolerance” policy (A1.1, A1.2) in relation to sexism and other forms of discrimination, with numerous announcements to students and staff, and very prompt and appropriate action when needed. We also have plans to monitor a number of other aspects of our work (e.g. whether there are gender or inclusion issues for why staff leave the department – A7.4; monitor the promotion process for women academics – A8.1), to improve our application of principles of equality and inclusion.

(iii) Representation of men and women on committees

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

The key departmental committees are BoS, the Departmental Teaching Committee (which organizes teaching within the department) and the Departmental Research Committee (DRC, which sets research strategy, allocates departmental research funding etc). Given the small number of women academics currently in the department, the gender breakdown is appropriate, with the notable exception of the DRC which does not have any women members (Table 27). This will be addressed (A7.6). However, there is a need to not over-burden academic women with excessive committee work. Two of the senior women academics commented on the number of requests they receive from both our own and other departments to be on appointment committees, given the need for some women on such committees.

**Table 27: Staff and gender breakdown of representation on departmental committees (as at 1/10/2019) (Academic staff = A; Professional and Support staff = PSS, S = student representative)**

<b>Committee</b>	<b>Ex-officio members Any additional members</b>	<b>Gender breakdown</b>
Board of Studies (BoS)	Chair: appointed from academic staff for three year term (A) All members of academic staff (i.e. all T&R, TO, any other staff with teaching responsibilities Student representatives (S, one per cohort, one for each MSc, one for each PGR year) Academic Liaison Librarian (PSS, external) Student and Academic Support Services Manager (PSS)	82 members 18 women (12%) 64 men (78%)
Departmental Teaching (DTC)	Chair: DHoD (T) (A) Chair, BoS (A) Chair, P/T Masters Committee (A) UG Programme leads (A) PGT Programme Leads (A) Academic Administrator (PSS) Chair, Student Staff Forum (S) One PGT student representative (A)	14 members 4 women (29%) 10 men (71%)
Part-time Masters	Chair: appointed from MSc Programme Leads (A)	7 members 5 women (71%) 2 men (29%)
Departmental Research	Chair: DHoD(R) (A)	8 members 8 men (100%)
Board of Examiners	Chair: appointed from academic staff for three year term	69 members 11 women (16%) 58 men (84%)
Exceptional Circumstances	Chair: appointed from academic staff for three year term	6 members 1 women (17%) 5 men (83%)
Equality	Chair: appointed from academic staff for three year term	10 members 6 women (60%) 4 men (40%)
Safety, Health, Environment & Fire	Chair: Department Safety Advisor	11 members 3 women (27%) 8 men (73%)
Athena SWAN	Chair: appointed by HoD	21 members 11 women (52%) 10 men (48%)
CS Computing Strategy	Chair: Department Project Manager	9 members 3 women (33%) 6 men (67%)

(iv) Participation on influential external committees

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

All academic staff are encouraged to participate in “academic citizenship” activities (including external committees) via mentors and the PDR process. The PDR form asks for people to report and plan their citizenship activities. Feedback suggests that women and men staff are equally encouraged to undertake these activities. Information was collected about four categories of influential external committees: conferences and journals (this included participating in conference committees, journal editorial committees); government and research councils (including UK and overseas government advisory committees and UK and overseas research councils); learned societies (including the Royal Society, Royal Society of Engineering, British Computer Society); and standards bodies (British Standards Institution, International Standards Organization).

Table 28 shows that the women professors are undertaking a very high level of these citizenship activities (on average over 23 activities per person for women professors, compared to just over 4 for men professors) although there are fairly equal levels of participation at lower grades. This difference was startling and figures were carefully checked and we believe them to be accurate and representative. There is no evidence that the department is putting more pressure on senior women to undertake these activities, but senior women in the department either believe they need to or that they should undertake many activities. This may come from a greater sense than men that they needed to do so when climbing the academic ladder (and now they cannot stop), that they need to do so to justify their senior position, or that they are simply more nurturing of the academic community. This will be investigated in more detail, both in our own department and in other computer science departments (A8.11).

**Table 28: Participation in influential external committees for women by gender and grade (averages across available data for the past five years – not all staff reported, due to coronavirus situation)**

Women (Number included)	Conferences/ journals	Gov/research councils	Learned Societies	Standards bodies	Total Average per person
Professors (4)	16.75	3.75	2.00	1.25	23.75
Readers (0)	-	-	-	-	-
Senior Lecturers (0)	-	-	-	-	-
Lecturers (2)	4.50	0.00	0.50	1.0	6.00
Teaching- only staff (1)	0.00	0.00	1.00	1.00	2.00
Research- only staff (1)	0.00	0.00	1.00	0.00	1.00
<b>Total (8)</b>	<b>9.5</b>	<b>1.88</b>	<b>1.38</b>	<b>1.0</b>	<b>13.75</b>

Men (Number included)	Conferences/ journals	Gov/research councils	Learned Societies	Standards bodies	Total Average per person
Professors (6)	1.17	0.67	1.83	0.5	4.17
Readers (4)	4.75	0.75	0.25	0.25	6.00
Senior Lecturers (4)	2.50	0.25	0.25	0.75	3.75
Lecturers (5)	5.80	0.20	0.40	0.0	6.40
Teaching- only staff (2)	1.00	0.00	0.00	1.00	2.00
<b>Totals (21)</b>	<b>3.19</b>	<b>0.43</b>	<b>0.71</b>	<b>0.43</b>	<b>4.76</b>

(v) Workload model

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

A workload model is used in the department with details available to all staff. The model includes citizenship activities, teaching, and research student supervision.

New T&R staff have a lower workload for their first three years.

The model is monitored by the HoD, DHoD(T) and the Chair, Equality Committee for gender bias. Allocations are discussed with the whole department in Summer Term for the following academic, there are individual discussions between DHoD(T) and members of staff, and workloads are published for all staff to see.

The current version of the workload model is more transparent and precise than the previous iterations. It has only been in place for one year, it will be assessed (A7.10) including for gender equality (A7.10).

(vi) Timing of departmental meetings and social gatherings

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

As a consequence of the AS work, all major departmental meetings are now scheduled between 10am and 4pm (A7.7). Social gatherings are held at lunchtime or in the evenings, depending on the event, to allow staff and students with outside responsibilities and part-time staff to participate as much as possible. This has been very well received by staff.

For some years we had an informal afternoon tea once a fortnight, with staff and students baking cakes and money raised was donated to a different charity each term. We now have “stand up” lunchtime meeting for all staff and PGR students, every week. People are encouraged to make short announcements, socialize and eat cake. These have been a great success with 50 - 70 people attending each time.

(vii) Visibility of role models

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

It became apparent from the focus groups with PGT and PGR students that they were very aware of the gender imbalance in departmental and research group seminars. An analysis showed that over the past three years only approximately 15% of speakers at the main departmental seminar have been women. Data were not available from the numerous research theme seminars, but it is suspected that it would be similar. We



will work to increase the proportion of women speakers at both the main departmental seminars and research theme seminars (A5.1).

The department has a small dedicated team of PSS staff who support the organization of seminars, workshops and conferences in the department or by department members. They explicitly encourage organizers to consider gender balance in organizing events, including overall numbers of speakers, keynote speakers and chairpersons. A sector-specific guide on developing inclusive conferences has been very useful in developing our own principles and is made available to everyone organizing an event and a summary of our own experience will be included in the Equality and Diversity pages of the website (A2.2) and the staff wiki.

A review of the externally facing website is underway (A2.2) and more gender and diversity positive materials are being developed (A2.5). In particular a set of webpages about equality and diversity are planned. It has already been established that all the videos of staff and students talking about the department on the website were by men, so further videos by women students and staff will be created and uploaded. The same problem applies to the photographs used on the website.

A review has already taken place of the publicity materials used for recruitment (A2.5) and ongoing monitoring of these materials is part of the recruitment process (A6.1). When this was first undertaken, it was also noted that all the images were of men. A set of images of people in the department was commissioned and these are now available for publicity purposes, these include numerous images of women and an ethnically diverse set of people (all of whom actually work or study in the department).

At the entrance to the department, there is a display of computing equipment (some historic, some contemporary) with videos of staff and students talking about their experiences and the displays, all men. Further videos will be created of women, as this may be the first thing that people see when they come into the department.

At the tech fair in 2018, women students and staff created a series of posters about women role models in CS. This inspired us to hold a “competition” between staff and PGR students, who were asked to nominate two heroes (which had to be a man and a woman). A wide range of nominations were received, including an historically and ethnically diverse range of heroes. This exercise also prompted interesting discussions in the department. A set of posters of a selection of women and men heroes will be created and displayed around the department. In addition, a set of posters about successful (in many ways) alumni of the department, which will have a 50:50 gender balance and a diversity of under-represented groups (we have a very successful totally blind alumnus, a profoundly deaf alumnus, a number of British Indian alumni) will be produced in the same way (A2.6). Web pages for both these projects will also be developed.

(viii) Outreach activities

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

The department is involved in a wide range of outreach and engagement activities, including a number specifically aimed at encouraging young women into CS. The main activities in this area are:

**Headstart:** each summer the department has run a course which provides a taster of CS for students aged 16 – 17. The involvement of women staff in Headstart courses has been poor (Table 28), although the number of women students coming to the courses has been good (28% to 48%), therefore an action point will be to increase the number of women staff, CS students and alumni in future similar courses (Headstart funding has finished, but the department is planning a similar self-funded programme) (A9.2 - 9.3).

**Table 28: Gender breakdown of staff and students involved in Headstart courses**

Year	Academic staff	York students	York CS Alumni	Headstart students
2015	Women: 1	Women: 1	Women: 1	Women: 7
	Men: 5	Men: 1	Men: 1	Men: 18
2016	Women: 0	Women: 0	Women: 0	Women: 12
	Men: 4	Men: 2	Men: 2	Men: 13
2017	Women: 0	Women: 1	Women: 0	Women: 11
	Men: 4	Men: 1	Men: 2	Men: 15
2018	Women: 0	Women: 0	Women: 0	Women: 11
	Men: 4	Men: 2	Men: 2	Men: 14
2019	Women: 0	Women: 0	Women: 1	Women: 11
	Men: 5	Men: 2	Men: 1	Men: 15

**Computing at School (CAS):** the department led the Yorkshire and Humber Regional Centre for CAS (2016 - 2018) and is now the Regional Delivery Partner for the National Centre for Computing Education (NCCE). For CAS, we supported and provided training and resources for 20 Master Teachers (at both primary and secondary education level). It was clear that there was a gender imbalance amongst the Master Teachers in our region (pre-2016 there were 8 primary level Master Teachers, all men, and 8 secondary level Master Teachers, only one woman). So, we successfully applied for additional funding through the University's Widening Participation Fund to specifically train women Master Teachers. This was a very successful exercise, with five women Master Teachers participating in training and being provided with a senior computing teacher as a mentor (three of the mentors were women, one was a man).

We also ran two annual regional conferences for CAS. The 2018 Conference was attended by approximately 70 teachers. The keynote presentation by Gillian Arnold (past chair BCS Women and Board member of WISE – Women in Science, Technology and Engineering) was on “Diversity in the technology industry and how to balance it out”, was very well-received.

Activities for the new Regional Delivery Partnership are now being planned and will continue to include activities focussing on gender imbalance in computing.

**Summer internships:** the department has hosted local high school students for short periods over the summer on internships. Statistics on numbers and gender of students and staff involved have not been recorded. That programme is now being reviewed, as it was felt to not be an efficient use of staff time. Gender issues will be taken into account as part of the review and plans for a future internship programme (A9.1).

**TechUp:** the department is one of four CS departments which has run the TechUp programme providing computer science retraining for 100 women in the Midlands and North of England. We hosted a residential weekend (including three women speakers for the weekend), and provided mentors for students on the programme. It is hoped that this programme can be repeated, both in the North and in other regions, and the department is actively supporting efforts to secure further funding to do so.

<b>Action Plan items addressing issues of departmental culture and organization</b>	
<b>A1.1</b>	Ensure all teaching materials are non-sexist and non-discriminatory
<b>A1.2</b>	Ensure staff and students are clear that they can raise any issues of sexism/discrimination confidentially with the Chair, Equality Committee and that they will be acted on promptly
<b>A2.2</b>	Make our public website more attractive and interesting to women visitors (including prospective staff and students), show our commitment to women and other under-represented groups
<b>A2.5</b>	Improve gender and under-represented groups balance in images in all publicity materials
<b>A2.6</b>	Promote women role models in computer science, interesting women alumni
<b>A6.1</b>	Continue to improve recruitment procedures for T&R and TO staff
<b>A7.6</b>	Ensure representation of women on the Departmental Research Committee (DRC)
<b>A7.7</b>	Schedule all key departmental meetings within core working hours
<b>A7.10</b>	Monitor workload allocations for gender balance in quantity and type of work assigned
<b>O8</b>	<b>Improve student and staff development support within the department, particularly for women</b>
<b>A8.11</b>	Investigate reasons for high levels of academic citizenship by senior women academics <b>Specific actions:</b> <ul style="list-style-type: none"> <li>• Interview all senior women academics, a sample of senior men academics</li> </ul>

	<ul style="list-style-type: none"> <li>• Develop recommendations of appropriate levels of academic citizenship</li> </ul>
<b>A9.1</b>	<p>Revamp the internship programme</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Create a proposal for a summer internship programme that makes better use of staff time, particularly considering gender and inclusion issues</li> <li>• Create and conduct an evaluation questionnaire for interns</li> </ul>
<b>A9.2</b>	<p>Increase participation of women academics in outreach activities (without putting too great a burden on the women academics)</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Ask women academics to participate in individual outreach activities</li> <li>• Develop an evaluation questionnaire for those who have received outreach activities (teachers as well as students), include a question about gender balance</li> </ul>
<b>A9.3</b>	<p>Continue attention to gender in activities of the NCCE</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Continue to monitor participation of women teachers in NCCE activities</li> <li>• Create programmes specifically for women teachers as needed</li> </ul>
<b>O10</b>	<b>Monitor progress towards Athena SWAN goals</b>
<b>A10.1</b>	<p>Set up a system to track Athena SWAN goals and support regular monitoring</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Choose appropriate software</li> </ul>
<b>A10.2</b>	<p>Monitor student awareness and satisfaction with Athena SWAN issues</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Conduct an annual survey of students at all levels of Athena SWAN issues</li> <li>• Include Athena SWAN question in module evaluation forms</li> <li>• Include Athena SWAN questions in annual focus groups with students at every level</li> </ul>
<b>A10.3</b>	<p>Monitor staff awareness and satisfaction with Athena SWAN issues</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Conduct an annual survey of Athena SWAN issues</li> <li>• Include an Athena SWAN question in PDR form</li> </ul>
<b>A10.4</b>	<p>Involve students and staff in evolving the Athena SWAN plan</p> <p><b>Specific actions:</b></p> <ul style="list-style-type: none"> <li>• Regularly discuss the Athena SWAN plan at all meetings</li> <li>• Once a year use the suggestions board in the CS foyer for Athena SWAN suggestions</li> </ul>

Word count: 5440

## 6. FURTHER INFORMATION

Recommended word count: Bronze: 500 words | Silver: 500 words

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

In response to the coronavirus outbreak, the university has now decided that all teaching for at least Autumn Term 2020 will take place online and that all staff will work from home if possible until further notice. These developments will clearly have some impact on our Action Plan. We have not attempted to address that in the Action Plan submitted, as it is currently unclear exactly what the impact will be and how long it will last. We will follow as closely as possible to our Action Plan as outlined below, but in all developments that occur as a result of the new and evolving situation, we will pay particular attention to the impact on women students and staff.

## 7. ACTION PLAN

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

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

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

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




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## LANDSCAPE PAGE



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## ACTION PLAN

N.B. Actions marked X/20XX – mean they start in that month and continue throughout the 4 year period, but will be reviewed on a yearly basis. A GANTT chart is provided at the end of the Action Plan to provide an overview of the Action Plan during the 4 year period.

Reference	Objective/Rationale	Specific Actions	Timescale	Responsible Personnel	Success Measures
<b>Objective O1</b>	<b>Promote a policy of zero tolerance to any form of sexism (or other discrimination, harassment) in the department</b>				
<b>Action A1.1</b>	Ensure all teaching materials are non-sexist and non-discriminatory	<p>For students: Announcements in introductory lectures and cohort meetings by Chair BoS</p> <p>Encourage students to alert Chair, Equality Committee in confidence of any issue (publicise through above outlets)</p> <p>For staff: announcements in BoS (every Autumn Term), termly staff meetings</p>	<p>Introductory lectures: 10/2019- Cohort meetings: 10/2020 -</p> <p>Department Information Screens: 10/2020–</p> <p>BoS: 10/2019 –</p>	<p>Chair BoS</p> <p>Student and Academic Support Services Manager Department Manager</p>	<p>By 2021/22 academic year, 90% of students are aware of how to report any inappropriate teaching materials and are confident about doing so (as measured by annual survey, see A10.2)</p> <p>From 2020/21 academic year, 100% of staff are aware of need to ensure all teaching materials are non-sexist and non-</p>

		<p>(every Autumn term) and “stand up” meetings</p> <p>Information on Department staff wiki</p> <p>Log instances of complaints about this issue</p>	<p>Staff meeting: 10/2019 –</p> <p>Staff wiki: 10/2020 –</p> <p>10/2020 -</p>	<p>Chair, BoS</p> <p>Chair, Equality Committee</p> <p>Department Manager</p> <p>Chair, Equality Committee</p>	<p>discriminatory and have conducted an audit of their materials, including textbooks (as measured by annual survey, see A10.3)</p> <p>Issues discussed at Equality Committee, further actions taken as needed</p>
<b>A1.2</b>	<p>Ensure staff and students (including students on industrial placements) are clear that they can raise any issues of sexism/discrimination confidentially with the Chair, Equality Committee and that they will be acted on promptly</p>	<p>Publicise this information to staff and students</p> <p>For students: Channels as for A1.1</p> <p>Plus</p> <p>Sharing information with placement students</p> <p>Information on website and student handbook (also covering A1.1)</p>	<p>Time scale as above</p>	<p>As above, plus</p> <p>Industrial Placements Manager</p> <p>Chair, Student Staff Forum</p>	<p>By end of 2022/23 academic year, no instances raised by students within the department (see comment on industrial placements in actions)</p> <p>By 2020/21 academic year, 90% of students are aware of how to report any inappropriate issues and are confident about doing so (as measured by</p>

		<p>Announcements on the screens in the department (also covering A1.1)</p> <p>Encourage students to alert Chair, Equality Committee or Industrial Placements Manager in confidence of any issues</p> <p>Log instances as for A1.1</p> <p>For staff: As in A1.1</p> <p>Any issues with industrial placements to be discussed with placement organization by Industrial Placements Manager (organizations to be banned from having students if this is not appropriately dealt with)</p>			<p>annual survey, see A10.2)</p> <p>Issues discussed at Equality Committee, further actions taken as needed</p>
<b>O2</b>	<b>Communicate our commitment to women and other under-represented groups more effectively through our public website and other channels</b>				
<b>A2.1</b>	Create a position of Communications Director to oversee our digital communications	Recruit a member of staff to take up the position	Start: 1/4/2020 Position filled: by 9/2020	HoD, DM	Communications Director appointed



<b>A2.2</b>	Make our public website more attractive and interesting to women visitors (including prospective staff and students), show our commitment to women and other under-represented groups	Review and improve public website, particularly by including pages on Equality and Diversity (E&D), highlighting our activities to support women staff and students	Start: 1/6/2020 Revamped website: 10/2020  Appropriate new content every six months  Continue work throughout the period	Communications Director  Chair, Equality Committee	10/2020: All content and images on website reviewed and refreshed (and updated at least every six months)  At least six new pages on Equality and Disability uploaded (and updated at least every six months)  50:50 balance of women and men in images on the website (and to be maintained)
		Monitor visits to website, particularly E&D pages	Monitoring current website: 6/2020-12/2020 Monitoring of revamped website: 1/2021 -	Department Project Manager	By 1/21 Increase in website visits by 20% compared to 6/20
<b>A2.3</b>	Use our Twitter account more effectively to communicate our commitment to women and other under-represented groups	Post at least two messages a month on Twitter about commitment to women by the department	Regular use of Twitter: 1/2021 -	Communications Director	Number of tweets posted reaches target of 2 per month
		Monitor number of followers and retweets	3/2021 -	Department Project Manager	By 3/2022 double our followers on Twitter (compared to 3/2021)

					Increase retweets of messages by 30% from 1/21 to 12/21
<b>A2.4</b>	Use Instagram (as this is currently popular with young women) to communicate with our audiences	Set up an Instagram account for the department  Post at least two images a month on Instagram relevant to our commitment to women	Regular use of Instagram account: 1/2021 -	Communications Director	Instagram account set up  Target of two images a month reached
		Monitor number of followers and “likes” of posts	Start monitoring Instagram account: 3/2021	Department Project Manager	Double number of followers between 6/2021 and 12/2021 Increase likes of posts by 30% between 6/2021 and 12/2021
<b>A2.5</b>	Improve gender and under-represented group balance in images in all publicity materials	Refresh the pool of images used in publicity, paying attention to gender/under-represented group balance	New pool of images available: 10/2020	Communications Director	By 12/20, all publicity materials to have 50:50 gender balance in images, and a range of people from different ethnic groups
<b>A2.6</b>	Promote women role models in computer science, interesting women alumni	Run a competition for heroes and heroines in computer science  Create webpages and posters about popular heroes (with 50:50 gender balance, range of under-represented groups)	Competition complete  5/2020 – 3/2021	Department Project Manager  Chair, Equality Committee	Webpages made public and at least 12 posters displayed around the department

			1/2021 – 6/2021		Include questions about awareness, inspiration of the poster displays in 2020/21 staff and student surveys
<b>O3</b>	<b>Achieve 50:50 gender balance in student population at all levels by the end of the decade</b>				
<b>A3.1</b>	Increase the pool of women UG applicants/entrants	Review the possibility of lowering/removing our stringent A Level Mathematics requirement	1/2021 – 10/2021 Make a decision by 10/2021, which could be implemented for 22/23 intake	HoD, DHoD(T), Admissions Team,  Chair, Equality Committee	Admissions requirement changed, if deemed appropriate
<b>A3.2</b>	Publicise our support for women students at recruitment events	Ensure that department and central University Admissions team are aware of our activities to support women students and publicise them at external events (e.g. UCAS fairs)	1/2021 -	Chair, Equality Committee Director of Admissions Admissions Team	Targets are for entrants, rather than for each step in the recruitment pipeline (this will be achieved by appropriate increases at each step, which will be monitored)  Increase women UG entrants to 30% by 2022 intake (up from 12.3%, achievable with a 3% increase in women entrants year on year)

					<p>Increase % women PGT entrants to 45% by 2022 intake (up from 31.5%, achievable with a 2.5% increase in women entrants year on year)</p> <p>Increase % women PGR entrants to 35% by 2022 intake (up from 26.0%, achievable with a 3% increase in women applicants year on year)</p>
<b>A3.3</b>	Ensure that women applicants/those holding offers are aware of our support for women students	<ul style="list-style-type: none"> <li>• Publicise the department's activities for women students at Open Days</li> <li>• Mentions in talks</li> <li>• Posters in the department about "heroes of computer science" and successful alumni</li> <li>• Videos of staff and students in foyer to highlight women and under-represented groups</li> <li>• Publicise the department's activities for women in post-offer</li> </ul>	4/2020 -	Department Project Manager Chair, Equality Committee Director of Admissions Admissions team	As above

		newsletters, communications to women offer holders			
<b>A3.4</b>	Increase the number/% of women applicants for the MSc Cyber Security	Identify key places to publicise the Cyber Security course which might include women applicants  Publicise the fact that we now have a very high profile woman professor of Cyber Security (in online, print materials)	3/2020 (for next round of recruitment) -	Programme Lead, Cyber Security  Head, Admissions Team	Increase Cyber applicants and entrants to 30% women by 2022 intake
<b>A3.5</b>	Increase number/% of women applicants for the SCSE and SSE courses	Many of the applicants are sponsored by their companies (e.g. Boeing, BAE Systems) – initiate discussions with those companies to encourage more women applicants	3/2020 (for next round of recruitment) -	Programme Lead, SCSE/SSE  Head, Admissions Team	Increase SCSE/SSE applicants and Entrants to 35% women
<b>A3.6</b>	Ensure women PGR applicants are provided with useful information at interview	Add information to the interview forms to alert interviewers to provide information to interviewees  Where possible, give women interviewees contacts (“buddies”) for current women PGR	1/2020 -	Head, Admissions Team  Chair, Graduate Studies	Targets as in A3.3

		students so they can ask questions			
<b>A3.7</b>	Monitor applicant-to-entrant percentages for women potential PGR students	Investigate why women do not take up PGR places, can we improve the uptake  Discuss with people who interview women potential PGR students	1/2020 -	Chair, Graduate Studies  PGR Admissions Team  Chair, Equality Committee	Equalise the percentage of women taking up PGR places to those applying
<b>O4</b>	<b>Make the UG and PGT curricula and teaching environment more engaging for women students</b>				
<b>A4.1</b>	Make women UG students feel welcome when they join the department	Continue to hold a welcome party for all UG women students at the beginning of each academic year	10/2019 -	Chair, Equality Committee  All women academics	Have question on the student survey (see A10.2) about the effectiveness of the welcome party, Target: at least 80% satisfaction
<b>A4.2</b>	Encourage women students to participate in “women in CS” societies and activities in the department and at the university	Liaise with EDIT (Equality, Diversity and Inclusion in Technology Society) to continue expanding to CS students  Provide departmental funding to EDIT, HackSoc (the general UG CS society) for women’s events	10/2019 -	Departmental ACM-W Liaison Person	At least one event a year organized by a York CS Women’s UG student group  Have questions on student survey (see A10.2) on awareness of opportunities, engagement with opportunities Target: 90% awareness; 50% engagement

<b>A4.3</b>	Encourage women students to take part in events both at the university and beyond for women in CS	Publicise any events e.g. via Twitter, Instagram Provide funding for women students to attend events	10/2019 -	Departmental ACM-W Liaison Person	At least two women students attend an event each academic year  Have questions on student survey (see A10.2) on awareness of opportunities, engagement with opportunities Target: 90% awareness; 50% engagement
<b>A4.4</b>	Ensure that women students do not feel isolated in learning contexts	Ensure that there are no sole women in assessment groups or tutorials whenever possible  Provide women students with women personal tutors whenever possible	10/2020 -	Chair BoS Chair Equality Committee  DHoD(T)	All women students in mixed groups for assessments, tutorials, wherever possible  All women students have woman personal tutor  Measure level of awareness/ satisfaction by women students in survey and focus groups (A10.2)  Questions on staff survey (see A10.3) to measure whether staff are aware of this principle, whether there are problems with implementation Target: 100% awareness

<p><b>A4.5</b></p>	<p>Have at least one woman leading a module in each of the UG years</p>	<p>Review teaching teams for each year of the programme</p>	<p>10/2019: reached target for 1st year</p> <p>By 10/2021: reach target for 2<sup>nd</sup> year</p> <p>By 10/2022: reach target for 3<sup>rd</sup> year</p>	<p>UG Programme Lead</p>	<p>2019 target was reached</p> <p>Targets reached for future years</p> <p>Measure level of awareness/ engagement by women and men students in module evaluation forms, survey and focus groups (A10.2)</p>
<p><b>A4.6</b></p>	<p>Encourage teaching using real world examples of relevance and interest to women students</p>	<p>Review and revise core modules for each year and core PGT modules, consider materials</p> <p>Add question to module evaluation form about relevance</p>	<p>4/2020 - 8/2020: review and revise at least one 1<sup>st</sup> year module</p> <p>4/2021 - 8/2021: review and revise at least one 2<sup>nd</sup> year module</p> <p>4/2022 - 8/2022: review and revise at least one 3<sup>rd</sup> year module</p> <p>4/2020 - 8/2020: review and revise modules on MScs</p> <p>By 10/2020: Add questions to</p>	<p>UG Programme Lead</p> <p>MSc Programme Leads</p> <p>Student and Academic Support Services Manager</p>	<p>Measure level of awareness/satisfaction/ engagement by women and men students in module evaluation forms, survey and focus groups (A10.2)</p>



			module evaluation forms		
<b>A4.7</b>	Encourage social and extra-curricular activities for PGT students	<p>Ask each MSc Programme Lead to organize at least one social/extra-curricular event attractive to women students per term</p> <p>Encourage student online fora</p> <p>Organize a Christmas and end of Spring Term event for all PGT students (physical or virtual)</p>	10/2020 -	MSc Programme Leads	<p>2 social/extra-curricular events for each MSc each year</p> <p>2 general PGT events each year</p> <p>Measure level of awareness/ engagement by women and men students in survey and focus groups (A10.2)</p>
<b>A4.8</b>	Investigate the problem of fewer women achieving good degrees (on all MSc courses apart from HCIT/SMIT)	<p>Hold discussions with MSc Programme Leads (in conjunction with investigation of A4.6, which may be part of the problem)</p> <p>Analyse whether the problem comes from coursework or project work</p> <p>Develop strategies to address the problem</p>	4/2020 – 10/2020	<p>MSc Programme Leads</p> <p>Chair, Equality Committee</p>	Approximately equal percentages of women and men achieving good degrees by 2022 intake for all MSc degrees

<b>A4.9</b>	Ensure online Masters continues to be attractive and engaging to women students	<p>Analyse module feedback from women students</p> <p>Encourage teaching using real world examples of relevance and interest to women students (see A4.6)</p> <p>Make recommendations for module improvements as needed</p>	<p>6/2021 - 11/2021</p> <p>12/2021 –</p> <p>12/2021 – 3/2022</p>	<p>Programme Lead, Online MSc Programmes</p> <p>Chair, Equality Committee</p>	<p>80% satisfaction with modules by women students</p> <p>Guidelines with recommendations for course content available</p>
<b>O5</b>	<b>Make the study environment more engaging for women PGR students</b>				
<b>A5.1</b>	Increase the number/% of women speakers at departmental and theme seminars	<p>Ask seminar organizers to pay particular attention to recruiting women speakers</p> <p>Encourage all staff to nominate interesting women speakers (via announcements at staff, BoS and stand up meetings)</p>	10/2019 -	<p>Departmental Seminar Organizer</p> <p>Theme Seminar Organizers</p> <p>Chair, Equality Committee</p>	<p>30% of speakers should be women by 2021/22 Academic year (currently approximately 15% at the departmental seminars)</p> <p>Monitor % at both departmental seminar and theme seminars, take action as needed</p>
<b>A5.2</b>	Provide better support to women PGR students on personal/family issues	Improve online material (website, PGR handbook) on personal/family issues	1/2020 - 10/2020 (to be ready for next main intake of PGR students)	<p>Chair, Graduate Studies</p> <p>PGR Admin Team</p>	<p>Handbook appropriately updated for 2020 intake</p> <p>Informal get together organized</p>

		Provide an informal get together of new and current women PGR students, so they can support each other more effectively			
<b>A5.3</b>	Provide opportunities in the department where all PGR students can meet and get to know each other better	<p>Provide a dedicated PGR space, with desks for all first year PGR students</p> <p>Evaluate student reaction to the dedicated PGR space</p> <p>Encourage supervisors to ensure their (women) PGR students are involved in activities (formal and informal) in the department</p>	Achieved 10/2019	<p>Department Manager Department Project Manager</p> <p>Chair, Equality Committee</p> <p>Chair, Graduate Studies PGR Team</p>	Achieved, space is ready
<b>A5.4</b>	Provide mixed supervision teams whenever possible	Chair Graduate Studies to ensure that supervisors consider gender issues in allocating second supervisors, assessors	10/2019 -	Chair, Graduate Studies	<p>Measure level of supervision team satisfaction by women PGR students in survey and focus groups (A10.2)</p> <p>Target: At least 75% of women PGR students to have a mixed gender supervision team</p>

<b>A5.5</b>	Provide more information on general topics of interest for PGR students	Organize a series of seminars on topics of interest to PGR students, particularly women, developed in consultation with the students (e.g. How to get a post-doc position, how to get published ...)	1/2020 -	DHoD (R)	Measure level of satisfaction by all PGR students in survey and focus groups (A10.2)  At least three seminars per year, on topics proposed by PGR students, one of particular interest to women students
<b>A5.6</b>	Monitor non-completion of PGR degrees	Investigate why more men students fail to complete compared with women  Interview supervisors of students who fail to complete their degree  Develop recommendations to improve the situation	5/2020 – 4/2021  1/2021 – 12/2021  1/2022 – 4/2022	Chair, Graduate Studies  Chair, Equality Committee	Create strategies to support students at risk of failing PGR, based on findings
<b>O6</b>	<b>Achieve 30% women in T&amp;R, TO and RO positions by the end of the decade</b>				
<b>A6.1</b>	Continue to improve recruitment procedures for T&R and TO staff	Continue to apply the new recruitment procedures (see section 5.1 (i)) Add further improvements:	1/2020 –  1/5/2020 –	Department HR Coordinator  Chair, Equality Committee	Measure staff awareness/acceptance of the procedures through staff survey (A10.3) Target: 100% awareness; if acceptance is not 100%, conduct training in

		<ul style="list-style-type: none"> <li>• Find a better methodology for vetting the language of recruitment materials</li> <li>• Develop a larger pool of images featuring women to include in recruitment materials</li> <li>• Carefully consider “essential” and “desirable” requirements in job specifications, limit the former as much as possible</li> <li>• Brief selection committees on differences between men and women candidates in presentation styles (with research evidence)</li> </ul> <p>Create a checklist of key Athena SWAN actions for staff meeting women candidates</p>	<p>10/2020 –</p> <p>10/2020</p>		<p>the department on gender issues</p> <p>Target: Increase % women at each point in the pipeline to 25% by 10/2023, 30% by 2029</p>
<b>A6.2</b>	Improve recruitment procedures for RO positions	Apply the new recruitment procedures	10/2020 -	Departmental HR Coordinator	Measures as for A6.2

		<p>developed for T&amp;R recruitment (see section 5.1 (i)) and further improvements (see A6.1)</p> <p>Brief any staff member recruiting for a RO contract on the new procedures and the importance of attracting more women to RO contracts</p>		Chair, Equality Committee	<p>Plus</p> <p>Measure understanding with a short questionnaire to staff after they have made a RO appointment</p> <p>Follow up with actions if procedures have been not understood, accepted or followed</p>
<b>O7</b>	<b>Improve the working environment for women academics (T&amp;R, TO and RO staff)</b>				
<b>A7.1</b>	Encourage networking and support amongst women academics	<p>Encourage a women's research group for informal discussions, seminars about research topics of general interest, planning for REF</p> <p>Encourage a women's lunch group for all women engaged in research</p>	10/2020 -	DoH (R) Departmental ACM-W Person Women's Network Lead	<p>Level of attendance at first meeting/lunch, suggestions from women on activities, support needed</p> <p>Question on staff survey about awareness/effectiveness (A10.3)</p> <p>Target: Regular meetings/lunches of women researchers</p>
<b>A7.2</b>	Provide same gender mentoring for new women academic staff	Assign a senior woman mentor to each new woman T&R/TO/RO	On new appointments from 10/2020	HoD Department Manager	Appropriate mentors assigned

		staff member, whenever possible			Question on staff survey about effectiveness of mentoring process (A10.3)
<b>A7.3</b>	Investigate career progression for women on RO and TO contracts	Investigate whether women are promoted through the grades on RO/TO contracts less quickly than men and why more women are on fixed term contracts than men  Interview line managers of women RO/TO staff  Develop better strategies to ensure appropriate progression of women RO/TO staff	10/2020 – 12/2020  10/2020 – 12/2020  1/2021 – 12/2021	DHoD(R)  Chair, Equality Committee	Questions on staff survey about career progression, bottlenecks, problems (A10.3)  Better data on career progression for RO and TO women, understanding of the bottlenecks  Implementation of strategies developed to ensure appropriate progression of women RO/TO staff
<b>A7.4</b>	Investigate whether reasons for leaving the department relate to gender or equality issues	Add a question to the leavers' questionnaire and the notes for exit interviewers about gender and equality issues	By 10/2020	Departmental HR Coordinator  Chair, Equality Committee	Reflect on any new information about any gender/equality issues for leaving
<b>A7.5</b>	Improve the induction processes for new staff	Review current induction processes	10/2019 – 6/2020	Department Management  Departmental HR Coordinator	Induction guides available on the staff wiki  Questions on staff survey (for staff appointed in

		Interview recent appointees for feedback on their induction	5/2020 – 9/2020		last two years) about induction (A10.3)
		Create guides and checklists for induction	10/19 – 6/2020		
		Include information of particular relevance to women (e.g. support within the department, maternity leave etc)	10/19 – 6/2020		
<b>A7.6</b>	Ensure representation of women on the Departmental Research Committee (DRC)	DHoD(R) to propose a mechanism to ensure better representation of women on the DRC	4/2020 – 4/2021	DHoD(R)	At least one member of DRC to be a woman academic
<b>A7.7</b>	Schedule all key departmental meetings within core working hours	Disseminate this policy to all staff, particularly all meeting secretaries	10/2012 achieved Reminders to be issued if needed	Chair, Equality Committee	This has been enthusiastically adopted
<b>A7.8</b>	Create and disseminate a policy of not expecting staff to work outside their agreed hours	Disseminate this policy at BoS, staff and stand up meetings as needed  Encourage staff to have appropriate footers to their emails	10/2019 -	Department Manager	Questions on staff survey about awareness of the policy: 90% awareness by 10/2020  75% of staff with such a footer by 10/2020
<b>A7.9</b>	Ensure that staff returning to work from exceptional leave are appropriately supported	Develop policy for return to work from exceptional leave	1/2021 – 3/2021	Department Manager  Departmental HR Coordinator	Policy published on staff wiki



					Questions on staff survey about awareness of the policy: 90% awareness
<b>A7.10</b>	Ensure workload allocations balance for gender in quantity and type of work assigned	DHoD(T) to report annually on gender breakdown for each category of staff on quantity and type of work	10/2020 -	DHoD(T)	Annual Report to Equality and Diversity Committee, DMT  Equal loading between the genders on quantity and type of work assigned
<b>O8</b>	<b>Improve student and staff development support within the department, particularly for women</b>				
<b>A8.1</b>	Monitor the promotion process for academic staff, women staff in particular	Interview all women staff as they become eligible for promotion, a sample of men staff  Provide guidelines on the staff wiki for mentors and line managers who conduct PDRs with women on how best to support them through the promotion process  Brief mentors of women academics on the importance of encouraging them to apply for promotion and	1/2022 -  By 1/2021  1/2021 -	Chair, Equality Committee  Departmental HR Coordinator	Target: gender balance in promotion of women and men academic staff (in ratio of appointments)

		supporting them through the process			
<b>A8.2</b>	Support academic staff, particularly women, in preparing for REF	Provide briefings for mentors on REF  Arrange "planning for REF" sessions	1/2023 -	DHoD(R)	Target: 50:50 gender balance in submission to future REF style exercises for women and men academics
<b>A8.3</b>	Improve uptake of staff training by women	Interview a range of staff (both men and women) about uptake of training and type of training taken  Identify what training women staff need/want  Develop strategies to encourage women to take up training	By 1/2021	Department Manager  Chair, Equality Committee	New opportunities for training appropriate to women staff identified and strategies to promote take up  Questions on staff survey about training opportunities (A10.3)  Target: 50:50 gender balance in uptake of training by women and men academics
<b>A8.4</b>	Provide training within the department on topics of general interest/importance	Identify an appropriate regular training day (once a term)  Set up a series of topics of interest/importance and arrange suitable speakers/training  Develop a short training evaluation questionnaire	By 10/2021	Department Manager	Measure participation in each training day  Measure effectiveness/satisfaction of each training day with the new questionnaire  Target: 80% effectiveness and satisfaction

		for use after each training day			
<b>A8.5</b>	Provide more career development support for students at all levels	Provide specific sessions about CVs, career development for women at UG level  Provide specific sessions for all PGT and PGR students about career development	10/2020 -	Faculty Employment Manager (Sciences)  MSc Programme Leads  Chair, Graduate Studies	Add more specific CV, career advice to current UG programme for women students  Provide at least one session a year for all PGT and PGR students  Add questions to student surveys of career development support  Target: 80% satisfaction
<b>A8.6</b>	Provide more support for international women students about maternity leave	Discuss university policy with University Dean of Graduate Research School, so we are better prepared for this in the future  Provide clear procedures in staff wiki	10/2020 – 3/2021  By 4/2021	Chair, Graduate Studies  Chair, Equality Committee	Procedures available on wiki on international students requirements from funders which are in conflict with York requirements/wishes
<b>A8.7</b>	Ensure smooth transition back to work for staff returning from leave (maternity, paternity etc)	Develop an appropriate policy  Disseminate this policy to staff	10/2020 – 3/2021	Department Manager	Policy available on staff wiki  Question on staff survey to measure awareness of the policy

		Develop a questionnaire/interview schedule for returning staff			Target: Responses to questionnaire/interview schedule from returning staff 80% satisfaction
<b>A8.8</b>	Provide more effective PDR processes for women staff	Develop guidelines on effective PDR processes for women  Explore possibility of having senior women academics as PDR reviewers for women academic staff	10/2020 - 9/2021	HoD  Chair, Equality Committee	Question on staff survey to measure satisfaction with PDR process
<b>A8.9</b>	Ensure that mentoring and PDR processes provide adequate career progression support for young women academics	Interview young women academics one and two years into their appointment  If appropriate, include young T&R and TO women in ECR and PGR activities  Develop strategies for supporting young women academics	10/2020 -	Chair, Equality Committee  HoD  DHoD(R)	Question on staff survey to measure satisfaction career progression support, 75% satisfaction by 2025
<b>A8.10</b>	Evaluate effectiveness of research support (e.g. REF, grant writing session)	Add questions on REF, grant writing sessions etc to staff survey	10/2020 - 1/2021	Department Manager	Questions on staff survey to measure satisfaction with engagement and satisfaction with REF support/grant writing support, 80% satisfaction by 2025

<b>A8.11</b>	Investigate reasons for high levels of academic citizenship by senior women academics	Interview all senior women academics, a sample of senior men academics  Develop recommendations of appropriate levels of academic citizenship	1/2021 – 12/2021	Chair, Equality Committee  HoD  DHoD (R)	Understanding of the issues involved  Recommendations available through staff wiki
<b>O9</b>	<b>Improve our emphasis on gender and inclusion issues in our outreach activities</b>				
<b>A9.1</b>	Revamp the internship programme	Create a proposal for a summer internship (including work placements) programme that makes better use of staff time, particularly considering gender and inclusion issues  Create an evaluation questionnaire for interns	10/2020 – 4/2021	Department Project Manager  Prof Susan Stepney (lead on internships)	Target: a proposal ready for summer 2021  Target: 80% satisfaction with the internship, measured by the questionnaire
<b>A9.2</b>	Increase participation of women academics in outreach activities (without putting too great a burden on the women academics)	Ask women academics to particularly participate in outreach activities  Develop a short evaluation questionnaire for those who have received outreach activities (might include	10/2020 –  By 10/2021	Outreach Academic Coordinator	At least one woman academic involved in one specific outreach activity per year  Target: 80% satisfaction with the activity, measured by the questionnaire

		teachers as well as students), include a question about gender balance			
<b>A9.3</b>	Continue attention to gender in activities of the NCCE	Continue to monitor participation of women teachers in NCCE activities  Create programmes specifically for women teachers as needed	10/2020 -	Director, NCCE	Target: 50:50 gender balance in participation  If this is not achieved “naturally”, take further actions
<b>O10</b>	<b>Monitor progress towards Athena SWAN goals</b>				
<b>A10.1</b>	Set up a system to track Athena SWAN goals and support regular monitoring	Choose appropriate software, probably based on what is already being used for other projects in the department  Implement a project on the software	3/2020 – 4/2020	Department Project Manager	System ready for use by 10/2020
<b>A10.2</b>	Measure student awareness and satisfaction with Athena SWAN issues	Conduct an annual survey of students at all levels of AS issues	10/2020 -  10/2020 -	Chair, Equality Committee  Student and Academic Support Services Manager	Survey designed (or agreed with other departments) Responded to by 75% of women students  Question added to module evaluation form

		<p>Include AS question in individual module evaluation forms</p> <p>Include AS questions in annual focus groups with students at each level</p>	10/2020 -	<p>Student and Academic Support Services Manager</p> <p>Student and Academic Support Services Manager</p> <p>Chair, Equality Committee</p>	<p>Answered by 80% of students completing the forms</p> <p>Questions included in the focus group question schedule</p> <p>Answers to all the above collated and discussed at Equality Committee meetings and acted on as appropriate</p>
<b>A10.3</b>	Measure staff awareness and satisfaction with AS issues	<p>Conduct an annual survey of AS related issues</p> <p>Include an AS question in PDR form</p>	<p>10/2020 -</p> <p>10/2020 -</p>	<p>Chair, Equality Committee</p> <p>Student and Academic Support Services Manager</p> <p>HoD</p> <p>Department Manager</p> <p>Chair, Equality Committee</p>	<p>Survey designed (or agreed with other departments)</p> <p>Responded to by 75% of women staff/50% of men staff</p> <p>All staff to provide some answer</p> <p>Answers to both the above collated and discussed at Equality</p>

					Committee meetings and acted on as appropriate
<b>A10.4</b>	Involve students and staff in evolving the AS plan	Regularly discuss the AS plan at all meetings (e.g. BoS, termly staff meetings, stand up meetings) and SSF for students and ask for suggestions  Once a year use the suggestions board in the CS Building foyer for AS suggestions for a period (e.g. around International Women's Day)	10/2020 –  10/2020 -	Chair, Equality Committee  Chair, Equality Committee	AS issues discussed at least once a term with staff  AS issues discussed at least once a term with students  Suggestion board available and publicised



**Table 30: Distribution of AS AP tasks**

Role	Number of Tasks	Academic/PSS
Chair, Equality and Diversity Committee	31	A
Department Manager	15	PSS
Department Project Manager	9	PSS
Chair, Graduate Studies	8	A
Student and Academic Support Services Manager	7	PSS
Department HR Coordinator	6	PSS
DHoD (R)	6	A
HoD	6	A
PGR Team	5	PSS
Programme Lead MSc Cyber Security	5	A
Admissions Team	4	PSS
Business and Partnerships Manager	4	PSS
Communications Director	4	A
Director of Admissions	4	A
Programme Lead MSc ACS	4	A
Programme Lead for SCSE/SSE	4	A
DHoD (T)	4	A
Department ACM-W Liaison person	3	PSS
Chair, BoS	3	A
Programme Lead MSc HCIT	3	A
Industrial Placements Manager	2	PSS
Programme Lead UG	2	A

Care has been taken to distribute tasks for the AS AP throughout the department, to both academic and PSS staff. In total, tasks have been allocated to personnel with 32 different roles. Roles with more than one task are summarized in Table 30.

**Table 31: GANTT chart of the Action Plan, part of system to be used to monitor progress on the Plan during the next period**

Ref	Objective / action	2018				2019				2020				2021				2022				2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
O1	<b>Promote a policy of zero tolerance to any form of sexism (or other discrimination, harassment) in the department</b>	[Gantt bar: 2019 Q1 - 2024 Q4]																											
A1.1	<b>Ensure all teaching materials are non-sexist and non-discriminatory</b>	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	For students	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Announcements in introductory lectures and at cohort meetings by Chair BoS	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Encourage students to alert Chair of the Equality Committee in confidence of any issue	[Gantt bar: 2020 Q1 - 2024 Q4]																											
	For staff	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Announcements in BoS (every Autumn term)	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Announcements in termly staff meeting (every Autumn term) and informal "stand ups"	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Information on Departmental staff wiki	[Gantt bar: 2020 Q1 - 2024 Q4]																											
	Log instances of complaints about this issue	[Gantt bar: 2020 Q1 - 2024 Q4]																											
A1.2	<b>Ensure staff and students (including students on industrial placements) are clear that they can raise any issues of sexism/discrimination confidentially with the Chair, Equality Committee and that they will be acted on promptly</b>	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	For students	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Announcements in introductory lectures by Chair BoS	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Sharing of information with Placement students	[Gantt bar: 2020 Q1 - 2024 Q4]																											
	Information on website and student handbook (also covering A1.1)	[Gantt bar: 2020 Q1 - 2024 Q4]																											
	Announcements on the screens in the department (also covering A1.1)	[Gantt bar: 2020 Q1 - 2024 Q4]																											
	Encourage students to alert Chair of the Equality Committee or Industrial Placements Manager in confidence of any issue	[Gantt bar: 2020 Q1 - 2024 Q4]																											
	For staff	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Announcements in BoS (every Autumn term)	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Announcements in termly staff meeting (every Autumn term) and informal "stand ups"	[Gantt bar: 2019 Q1 - 2024 Q4]																											
	Information on Departmental staff wiki	[Gantt bar: 2020 Q1 - 2024 Q4]																											
	Log instances of complaints about this issue	[Gantt bar: 2020 Q1 - 2024 Q4]																											
O2	<b>Communicate our commitment to women and other under-represented groups more effectively through our public website and other channels</b>	[Gantt bar: 2019 Q1 - 2024 Q4]																											
A2.1	<b>Create a position of Communications Director to oversee our digital communications</b>	[Gantt bar: 2020 Q1 - 2020 Q2]																											
	Recruit a member of staff to take up the position	[Gantt bar: 2020 Q1 - 2020 Q2]																											
A2.2	<b>Make our public website more attractive and interesting to women visitors (including prospective staff and students), show our commitment to women and other under-represented groups</b>	[Gantt bar: 2020 Q1 - 2024 Q4]																											

Ref	Objective / action	2018				2019				2020				2021				2022				2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Review and improve public website, particularly by including pages on Equality and Diversity (E&D), highlighting our activities to support women staff and students																												
	<input type="checkbox"/> Monitor visits to website, particularly E&D pages																												
	Current website																												
	Revamped website																												
A2.3	<input type="checkbox"/> Use our Twitter account more effectively to communicate our commitment to women and other under-represented groups																												
	Post at least two messages a month on Twitter about commitment to women by the department																												
	Monitor number of followers and retweets																												
A2.4	<input type="checkbox"/> Use Instagram to communicate with our audiences																												
	Set up Instagram account for the department																												
	Post at least two images a month on Instagram relevant to our commitment to women																												
	Monitor number of followers and "likes" of posts																												
A2.5	<input type="checkbox"/> Improve gender and under-represented group balance in images in all publicity materials																												
	Refresh the pool of images used in publicity, paying attention to gender/under-represented group balance																												
A2.6	<input type="checkbox"/> Promote women role models in Computer Science, interesting women alumni																												
	Run a competition for Heroes in Computer Science																												
	Create webpages and posters about popular heroes (with 50:50 gender balance, range of under-represented groups)																												
O3	<input type="checkbox"/> Achieve 50:50 gender balance in student population at all levels by the end of the decade																												
A3.1	<input type="checkbox"/> Increase the pool of women UG applicants/entrants																												
	Review the possibility of lowering/removing our stringent A Level Mathematics requirement																												
A3.2	<input type="checkbox"/> Publicise our support for women students at recruitment events																												
	Ensure that department and central University Admissions team are aware of our activities to support women students and publicise them at external events (e.g. UCAS fairs)																												
A3.3	<input type="checkbox"/> Ensure that women applicants/those holding offers are aware of our support for women students																												
	<input type="checkbox"/> Publicise the department's activities for women students at Open Days																												
	Mention in talks																												
	Posters in the department about "heroes of computer science"																												
	Posters in the department about successful alumni																												
	Videos of staff and students in foyer																												

Ref	Objective / action	2018		2019				2020				2021				2022				2023				2024				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Publicise the department's activities for women in post-offer newsletters, communications to women offer holders																											
A3.4	<b>[-] Increase the number/% of women applicants for the MSc Cyber Security</b>																											
	Identify key places to publicise the Cyber Security course which might include women applicants																											
	Publicise the fact that we now have a very high profile woman professor of Cyber Security (in online, print materials)																											
A3.5	<b>[-] Increase the number/% of women applicants for the SCSE and SSE courses</b>																											
	Many of the applicants are sponsored by their companies (e.g. Boeing, BAE Systems) - initiate discussions with those companies to encourage more women applicants																											
A3.6	<b>[-] Ensure women PGR applicants are provided with useful information at interview</b>																											
	Add information to the interview forms to alert interviewers to provide information to interviewees																											
	Where possible, give women interviewees contacts ("buddies") for current women PGR students so they can ask questions																											
A3.7	<b>[-] Monitor applicant-to-entrant percentages for women potential PGR students</b>																											
	Investigate why women do not take up PGR places, can we improve the uptake?																											
	Discuss with people who interview women potential PGR students																											
O4	<b>[-] Make the UG and PGT curricula and teaching environment more engaging for women students</b>																											
A4.1	<b>[-] Make women UG students feel welcome when they join the department</b>																											
	Continue to hold a welcome party for all UG women students at the beginning of each academic year																											
A4.2	<b>[-] Encourage women students to participate in "women in CS" societies and activities in the department and at the university</b>																											
	Liaise with EDIT (Equality, Diversity and Inclusion in Technology Society) to continue expanding to CS students																											
	Provide departmental funding to EDIT, HackSoc (the general UG CS society) for women's events																											
A4.3	<b>[-] Encourage women students to take part in events both at the university and beyond for women in CS</b>																											
	Publicise any events e.g. via Twitter, Instagram																											
	Provide funding for women students to attend events																											
A4.4	<b>[-] Ensure that women students do not feel isolated in learning contexts</b>																											
	Ensure there are no sole women in assessment groups or tutorials whenever possible																											
	Provide women students with women personal tutors whenever possible																											

Ref	Objective / action	2018				2019				2020				2021				2022				2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Review teaching teams for 1st year																												
	Review teaching teams for 2nd year																												
	Review teaching teams for 3rd year																												
A4.6	<b>Encourage teaching using real world examples of relevance and interest to women students</b>																												
	Review and revise core modules for 1st year, consider materials																												
	Review and revise core modules for 2nd year, consider materials																												
	Review and revise core modules for 3rd year, consider materials																												
	Review and revise core PGT modules, consider materials																												
	Add question to module evaluation form about relevance																												
A4.7	<b>Encourage social and extra-curricular activities for PGT students</b>																												
	Ask each MSc programme lead to organise at least one social/extra-curricular event attractive to women students per term																												
	Encourage student online fora																												
	Organise a Christmas and end of Spring term event for all PGT students (physical or virtual)																												
A4.8	<b>Investigate the problem of fewer women achieving good degrees (on all MSc courses apart from HCIT/SMIT)</b>																												
	Hold discussions with MSc programme leads (in conjunction with A4.6, which may be part of the problem)																												
	Analyse whether the problem comes from coursework or project work																												
	Develop strategies to address the problem																												
A4.9	<b>Ensure online Masters continues to be attractive and engaging to women students</b>																												
	Analyse module feedback from women students																												
	Encourage teaching using real-world examples of relevance and interest to women students (see A4.6)																												
	Make recommendations for module improvements as needed																												
O5	<b>Make the study environment more engaging for women PGR students</b>																												
A5.1	<b>Increase the number/% of women speakers at departmental and theme seminars</b>																												
	Ask seminar organisers to pay particular attention to recruiting women speakers																												
	Encourage all staff to nominate interesting women speakers (via announcements at staff, BoS meetings and "stand ups")																												
A5.2	<b>Provide better support to women PGR students on personal/family issues</b>																												
	Improve online material (website, PGR handbook) on personal/family issues																												
	Provide an informal get together of new and current women PGR students, so they can support each other more effectively																												

Ref	Objective / action	2018				2019				2020				2021				2022				2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
A5.3	<b>Provide opportunities in the department where all PGR students can meet and get to know each other better</b>	[Green bar]																											
	Provided a dedicated PGR space, with desks for all first year PGR students	[Yellow bar]																											
	Evaluate student reaction to PGR space	[Yellow bar]																											
	Encourage supervisors to ensure their (women) PGR students are involved in activities (formal and informal) in the department	[Yellow bar]																											
A5.4	<b>Provide mixed supervision teams whenever possible</b>	[Green bar]																											
	Chair Graduate Studies to ensure that supervisors consider gender issues in allocating second supervisors, assessors	[Yellow bar]																											
A5.5	<b>Provide more information on general topics of interest for PGR students</b>	[Green bar]																											
	Organise a series of seminars on topics of interest to PGR students, particularly women, developed in consultation with students (e.g. How to get a post-doc position, how to get published)	[Yellow bar]																											
A5.6	<b>Monitor non-completion of PGR degrees</b>	[Green bar]																											
	Investigate why more men students fail to complete their PGR degree compared to women students	[Yellow bar]																											
	Interview supervisors of students who fail to complete their degree	[Yellow bar]																											
	Develop recommendations to improve the situation	[Yellow bar]																											
O6	<b>Achieve 30% women in T&amp;R, TO and RO positions by the end of the decade</b>	[Purple bar]																											
A6.1	<b>Continue to improve recruitment procedures for T&amp;R and TO staff</b>	[Green bar]																											
	Continue to apply the new recruitment procedures (see section 5.1 (i))	[Yellow bar]																											
	<b>Add further improvements:</b>	[Yellow bar]																											
	Find a better methodology for vetting the language of recruitment materials	[Yellow bar]																											
	Develop a larger pool of images featuring women to include in recruitment materials	[Yellow bar]																											
	Carefully consider "essential" and "desirable" requirements in job specifications, limit the former as much as possible	[Yellow bar]																											
	Brief selection committees on differences between men and women candidates in presentation styles (with research evidence)	[Yellow bar]																											
	Create a checklist of key Athena SWAN actions for staff meeting women candidates	[Yellow bar]																											
A6.2	<b>Improve recruitment procedures for RO positions</b>	[Green bar]																											
	Apply the new recruitment procedures developed for T&R recruitment (see section 5.1 (i)) and further improvements (see A6.1)	[Yellow bar]																											
	Brief any staff member recruiting for a RO contract on the new procedures and the importance of attracting more women to RO contracts	[Yellow bar]																											

Ref	Objective / action	2018				2019				2020				2021				2022				2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
O7	Improve the working environment for women academics (T&R, TO and RO staff)	[Green bar across all quarters]																											
A7.1	Encourage networking and support amongst women academics	[Green bar across all quarters]																											
	Encourage a women's research group for informal discussions, seminars about research topics of general interest, planning for REF	[Yellow bar across all quarters]																											
	Encourage a women's lunch group for all women engaged in research	[Yellow bar across all quarters]																											
A7.2	Provide same gender mentoring for new women academic staff	[Green bar across all quarters]																											
	Assign a senior woman mentor to each new woman T&R/TO/RO staff member, whenever possible	[Yellow bar across all quarters]																											
A7.3	Investigate career progression for women on RO and TO contracts	[Green bar across all quarters]																											
	Investigate whether women are promoted through the grades on RO/TO contracts less quickly than men and why more women are on fixed term contracts than men	[Yellow bar across all quarters]																											
	Interview line managers of women RO/TO staff	[Yellow bar across all quarters]																											
	Develop better strategies to ensure appropriate progression of women RO/TO staff	[Yellow bar across all quarters]																											
A7.4	Investigate whether reasons for leaving the department relate to gender or equality issues	[Green bar across all quarters]																											
	Add a question to the leavers' questionnaire and the notes for exit interviewers about gender and equality issues	[Yellow bar across all quarters]																											
A7.5	Improve the induction process for new staff	[Green bar across all quarters]																											
	Improve current induction processes	[Yellow bar across all quarters]																											
	Interview recent appointees for feedback on their induction	[Yellow bar across all quarters]																											
	Create guides and checklists for induction	[Yellow bar across all quarters]																											
	Include information of particular relevance to women (e.g. support within the department, maternity leave, etc)	[Yellow bar across all quarters]																											
A7.6	Ensure representation of women on the Departmental Research Committee (DRC)	[Green bar across all quarters]																											
	DHoD(R) to propose a mechanism to ensure better representation of women academics on the DRC	[Yellow bar across all quarters]																											
A7.7	Schedule all key departmental meetings within core working hours	[Green bar across all quarters]																											
	Disseminate this policy to all staff, particularly all meeting secretaries	[Yellow bar across all quarters]																											
A7.8	Create and disseminate a policy of not expecting staff to work outside their agreed hours	[Green bar across all quarters]																											
	Disseminate this policy at BoS, staff and "stand up" meetings	[Yellow bar across all quarters]																											
	Encourage staff to have appropriate footers to their emails	[Yellow bar across all quarters]																											
A7.9	Ensure that staff returning from exceptional leave are appropriately supported	[Green bar across all quarters]																											
	Develop policy for return-to-work from exceptional leave	[Yellow bar across all quarters]																											
A7.10	Ensure workload allocations balance for gender in quantity and type of work assigned	[Green bar across all quarters]																											

Ref	Objective / action	2018				2019				2020				2021				2022				2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	DHoD(Teaching) to report annually on gender breakdown for each category of staff on quantity and type of work																												
O8	<b>Improve student and staff development support within the department, particularly for women</b>																												
A8.1	<b>Monitor the promotion process for academic staff, women staff in particular</b>																												
	Interview all women staff as they become eligible for promotion, a sample of men staff																												
	Provide guidelines on the staff wiki for line managers on how best to support women through promotion																												
	Brief mentors of women academics on supporting them through promotion																												
A8.2	<b>Support academic staff, particularly women, in preparing for REF</b>																												
	Provide briefings for mentors on REF																												
	Arrange "planning for REF" sessions																												
A8.3	<b>Improve uptake of staff training by women</b>																												
	Interview a range of staff (both men and women) about uptake of training and type of training taken																												
	Identify what training women staff need/want																												
	Develop strategies to encourage women to take up training																												
A8.4	<b>Provide training within the department on topics of general interest/importance</b>																												
	Identify an appropriate regular training day (once a term)																												
	Set up a series of topics of interest/importance and arrange suitable speakers/training																												
	Develop a short training evaluation questionnaire for use after each training day																												
A8.5	<b>Provide more career development support for students at all levels</b>																												
	Provide specific sessions about CVs, career development for women at UG level																												
	Provide specific sessions for all PGT and PGR students about career development																												
A8.6	<b>Provide more support for international women students about maternity leave</b>																												
	Discuss university policy with University Dean of Graduate Research School, so we are better prepared for this in future																												
	Provide clear procedures in staff wiki																												
A8.7	<b>Ensure smooth transition back to work for staff returning from leave (maternity, paternity, etc)</b>																												
	Develop an appropriate policy and disseminate this to staff																												
	Develop a questionnaire/interview schedule for returning staff																												
A8.8	<b>Provide more effective PDR processes for women staff</b>																												
	Develop guidelines on effective PDR processes for women																												



Ref	Objective / action	2018				2019				2020				2021				2022				2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Explore possibility of having senior women academics as PDR reviewers for women academic staff																												
A8.9	<b>Ensure that mentoring and PDR processes provide adequate career progression support for young women academics</b>																												
	Interview young women academics one and two years into their appointment																												
	If appropriate include young T&R and TO women in ECR and PGR activities																												
	Develop strategies for supporting young women academics																												
A8.10	<b>Evaluate effectiveness of research support (e.g. REF grant writing)</b>																												
	Add questions on REF grant writing to staff survey																												
O9	<b>Improve our emphasis on gender and inclusion issues in our outreach activities</b>																												
A9.1	<b>Revamp the Internship programme</b>																												
	Create a proposal for a summer internship (including work placements) programme that makes better use of staff time, particularly considering gender and inclusion issues																												
	Create and conduct an evaluation questionnaire for interns																												
A9.2	<b>Increase participation of women academics in outreach activities (without putting too great a burden on the women academics)</b>																												
	Ask women academics to particularly participate in outreach activities																												
	Develop a short evaluation questionnaire for those who have received outreach activities (might include teachers as well as students), include a question about gender balance																												
A9.3	<b>Continue attention to gender in activities of the NCCE</b>																												
	Continue to monitor participation of women teachers in NCCE activities																												
	Create programmes specifically for women teachers as needed																												
O10	<b>Monitor progress towards Athena SWAN goals</b>																												
A10.1	<b>Set up a system to track AS goals and support regular monitoring</b>																												
	Choose appropriate software, probably based on what is already being used for other projects in the department																												
	Implement a project on the software																												
A10.2	<b>Measure student awareness and satisfaction with AS issues</b>																												
	Conduct an annual survey of students at all levels of AS issues																												
	Include AS question in individual module evaluation forms																												
	Include AS questions in annual focus groups with students at each level																												
A10.3	<b>Measure staff awareness and satisfaction with AS issues</b>																												
	Conduct an annual survey of AS related issues																												
	Include an AS question in PDR form																												

Ref	Objective / action	2018				2019				2020				2021				2022				2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
A10.4	<b>▣ Involve students and staff in evolving the AS plan</b>	[Green bar spanning from Q2 2020 to Q4 2024]																											
	Regularly discuss the AS plan at all meetings (e.g. BoS, termly staff meetings, stand-ups, and SSF for students) and ask for suggestions	[Yellow bar spanning from Q2 2020 to Q4 2024]																											
	Once a year use the suggestions board in the CS building foyer for AS suggestions for a period (e.g. around International Women's Day)	[Yellow bar spanning from Q2 2020 to Q4 2024]																											