

## School of Informatics

### 2021-22 Strategic Plan

March 2021

The School of Informatics at Edinburgh has the leading research position in the UK and is recognised internationally for excellence of its research outputs, knowledge exchange and industry engagement.

We produce extraordinary science, scientists and knowledge that is the source of transformative change. Through our research, education, knowledge exchange and public engagement activities, the knowledge that we create impacts upon the international academic community, upon policy and society, industry and businesses, our local community and individuals.

**Our Vision** is to build a strong research and teaching environment that addresses key challenges of the 21<sup>st</sup> century and benefit society as a whole.

**Our Mission** is:

- To provide quality undergraduate and graduate education that equips graduates to solve real world problems and provides them with a competitive advantage in the ever changing and challenging global work environment of the 21st century.
- To enhance our position as one of the world's leading research and teaching computer science and research informatics schools through research of the highest quality, motivated by both intellectual curiosity and societal needs.
- To make a significant, sustainable and socially responsible contribution to Scotland, the UK and the world through education, research, innovation and impact.

**Our Values** are:

- **Respect:** We value high standards of fairness, always being principled, considerate, and respectful to each other.
- **Inclusive:** We are diverse, inclusive and accessible to all and celebrate our deep-rooted and distinctive internationalism.
- **Collaborative:** We have a strong sense of community and work together to achieve our goals.
- **Excellence:** We aim to achieve excellence in all that we do: teaching, research, societal relevance.

## Our Key Focus Areas and Actions

With our Values underpinning everything we do; we will achieve our Vision by focussing our activity around six core focus areas during the life of this plan – People, Research, Learning & Teaching, Civic and Social Responsibility, Environmental Sustainability and Financial Sustainability.

1. People

People are key to the success of the School and achievement of our strategic plan. We aim to recruit, develop and retain the best academic, research and professional services staff and so that we can maintain and build on our UK leading position and international reputation.

2019-20 has been a challenging year for individuals as we have adapted to remote working and teaching and adapted to new ways of working associated with the pandemic, the consequential financial constraints being experienced by the University, and new systems and structures implemented by the University.

Our Staff Engagement Action Plan (developed following 2019 University Staff Survey) and our 2020 Athena Swan Action Plan contain actions designed to support individuals in their personal wellbeing and career development. While progress on many of these actions has been delayed given many actions were designed as in person and workloads have been heavy, we will move ahead on adjusting and implementing these. We will also look at ways to adjust to hybrid working; retaining elements of remote working that have proved valuable while trying to rebuild our School community. These actions plans will become an extension of this strategic plan.

Long Term Targets		Specific 2021-22 Actions
Measure	Target	
% of PDRA/Early Career Research Support Action Plan implemented	Action Plan developed 2021/22  Measures incorporated into 2022/23 Plan  40% by 2021/22; 60% by 2022/23; 100% by 2023/24	<div>1. <b>Progress completion of the actions within our 2020 Athena Swan action plan</b> which support gender equality and career development opportunities (<i>to be attached as Appendix 2</i>)<ul style="list-style-type: none"><li>Mar-20: Actions converted to SMART confirming measures of success</li><li>40% of actions implemented end 2020-21</li></ul></div> <div>2. <b>Submission of Athena Swan Silver application</b><ul style="list-style-type: none"><li>Submission April 2022</li><li>Silver award November 2022</li></ul></div> <div>3. <b>Implementation of actions within our Staff Engagement action plan</b> which support a thriving school community, transparency of decision making and zero tolerance for inappropriate behaviour and</div>
% of PDRAs securing positions at end of their contract (UoE or elsewhere)	No baseline data; we need to collate this as part of PDRA role exit surveys, including type of position secured – Faculty position, position in industry, position in a different sector, another PDRA position.	
% of Staff Engagement Action Plan implemented	80% by 2021/22; 100% by 2022/23	
% Employee Engagement measured through University Staff Satisfaction Survey	+5% by 2022/23 ( <i>baseline 53% 2020 Pulse Survey; 70% 2019 Staff Survey</i> )	
% staff who feel that the School deals with poor performance, discrimination, and	>50% by 2022/23 ( <i>baseline 32% for dealing with bullvina/harassment; 36% for dealing with</i>	

inappropriate behaviour (measured through University Staff Satisfaction Survey)	<i>discrimination; 39% for dealing in inappropriate behaviour 2019 Staff Survey)</i>	discrimination (refer Appendix 1 for the detailed action plan)
% of Athena Swan Action Plan implemented	40% by 2021/22; 60% by 2022/23; 100% by 2023/24  Measures incorporated into 2021/22 and 2022/23 School Plans	<ul style="list-style-type: none"> <li>Jul-22: 80% actions implemented</li> </ul>
Athena Swan Award	Silver Renewal in 2021/22  Gold submission Self-Assessment Team formed and meeting by 2023/24	4. Continue <b>expansion and awareness of School's Mental Health First Aiders Network</b>
Key School academic leadership roles	Successors identified and in training or recruitment underway by end of 2021/22	5. Continue <b>delivery of Don't Cross the Line training</b>
Staff turnover	<i>[Identify how this can be measured]</i>	6. Continue <b>delivery of School's leadership development programme</b>
Promotions	<i>Targets to be inserted when Athena Swan actions and measures finalised</i>	7. <b>Development of a PDRA/Early Career action plan</b> which aligns school initiatives with the University's Researcher Development Concordat, to support researcher career development <ul style="list-style-type: none"> <li>Oct-21: Action plan, timeframes and measures of success confirmed.</li> <li>Jul-22: 40% of actions implemented</li> </ul>
		8. <b>Develop and implement hybrid working principles:</b> <ul style="list-style-type: none"> <li>May-21: Return to campus indicative roadmap developed</li> <li>Jun-21: Hybrid working principles developed</li> <li>Sep-21: Action plan and timeframes for implementation of new ways of working developed</li> </ul>

<b>2. Research</b>	<p>The School has the leading research position in the UK and is recognised internationally for excellence of its research outputs. Over the life of this plan, we aim to increase the breadth and depth of our research while increasing research income, enhancing the quality, inter-disciplinarity and impact of our research.</p> <p>We have strong demand from postgraduate research students, although are having to cap places due to space restrictions and current financial constraints. Our CDTs remain strong with Biomedical Artificial Intelligence, Natural Language Processing and Robotics and Autonomous Systems (RAS) continuing to admit students through to September 2023; and Data Science and Pervasive Parallelism CDTs continuing to support students admitted up to 2018/19. We will implement a PGR student desk sharing framework and our financial sustainability objectives will support reinstatement of the former level of school funded studentships.</p> <p>Research grant awards and income remain high, as does the quality of our research and its impact. We believe we have a strong REF2021 submission and confident of a positive outcome.</p>
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<p>Staff continue to be successful in securing fellowships and we will continue to support these, backfilling where we can to ensure teaching is not interrupted. While there are fewer fellowship opportunities for our postdoctoral researchers, we will continue to support these where available and appropriate and will develop an Earlier Career Researcher action plan to ensure we support our postdoctoral researchers both in their role and their career development.</p> <p>Addressing the current issues in relation to our server room capacity and increasing the use of shared GPU clusters are high priorities, as the capacity issues are posing a significant and immediate threat to our current and future research.</p>		
Long Term Targets		Specific 2021-22 Actions
Measure	Target <sup>1</sup>	
Times Higher Education World University Computer Science Subject Ranking	In the top 20 by 2023/24 (c/f 22 <sup>nd</sup> 2020 and 24 <sup>th</sup> 2019)	1. Increase number of large grants (eg programme grants, ERC fellowships etc)
% Faculty and PDRAs holding Fellowships	+x% (baseline xx Faculty; xx PDRAs in 2020/21)	2. Increase server room capacity
% of Faculty on sabbatical	x% per annum (or x% over x year rolling period)	3. Increase use of shared GPU clusters (rather than project-focussed clusters)
% time spent on research, measured through TAS returns	>x%	4. Implement PGR student desk sharing framework.
Number of industry, third sector and public sector collaborators	Determine how we will measure – possibly count the ones who are partners on funded projects, or industry funding	5. Increase costs that are charged to grants and ensuring adequate overheads are charged on grant applications: <ul style="list-style-type: none"> <li>Matrix of chargeable costs and mechanisms to apply to bids developed.</li> <li>Increase in fellowships and other grants that support salary recovery for senior academic and research staff.</li> <li>Set up of small research facilities and their recharge income.</li> </ul>
Number of international partnerships	Determine how we measure – possibly count the ones where there is funding and/or MoA	
Number of 4* papers	Measured through REF2028. Target to be set when REF2021 outcomes are known (early 2022).	
Number of 4* Impact case studies	Measured through REF2028. Target to be set when REF2021 outcomes are known (early 2022).	
Value of research grant awards	£x per academic staff FTE (baseline £x 2019/20)	
Value of research grant income	£x per academic staff FTE (baseline £x 2019/20)	
Diversity in research grant funders	No one funder accounts for more than one-third of research grant income over 3-year rolling average  +x% increase in ISCF and UKRI application success rates (baseline £x 2019/20)	

<sup>1</sup> Baseline data to be determined, which will inform targets

		+x% increase in funded collaboration with CDT delivery partners ( <i>baseline £x 2019/20</i> )	
	Number of PhD students	% growth in PhD students aligns with % growth in academic staff	

<b>3. Learning &amp; Teaching</b>	<p>The School has a diverse portfolio of programmes and courses and strong demand from across the world to study with us. Over the life of this plan, we aim to deliver high quality teaching programmes both on campus and online, securing high levels of student satisfaction.</p> <p>2019-20 saw the transition to hybrid teaching which was highly successful given the speed at which the transition occurred. The learnings from 2019-20 will form the basis of our course and programme development and delivery in the coming years. We plan to continue to deliver large lectures online given there are no lecture theatres large enough to accommodate our large courses and will develop an online PGT degree curriculum. To ensure student engagement while studying remotely, a number of courses increased assessments which has had a detrimental effect on student and staff workloads; we will reduce assessments.</p> <p>2020-21 has been a challenging year for students; despite attempts to build and maintain communities this has not been as successful as we would have hoped given the difficulty in holding on-campus events. The student pulse surveys conducted in semester 1 showed that many of our students did not feel part of a community, and that this was particularly acute amongst the PGT students. We will develop and implement taught and PGR student community building and support action plans.</p> <p>Demand for our taught programmes remains high. Difficulty in predicting conversion rates given the pandemic and Brexit resulted in higher intakes than we had anticipated. We anticipate minimal student growth in the next few years while the School stabilised following previous unplanned growth and given the current financial constraints will limit growth in academic and professional services staff and given space constraints. Brexit will have an impact on demand from EU nationals and there is a risk that replacing these students with overseas students will create a mono-culture in which English-speaking students are in the minority – a particular concern for our UGT students where it is a larger adjustment to studying and adult life. We will aim to maintain an overall UG student population as close as possible to 1,000 and limit our UG overseas intake to 50% or less.</p>		
	<b>Long Term Targets</b>		<b>Specific 2021-22 Actions</b>
	<b>Measure</b>	<b>Target<sup>2</sup></b>	
	UG overall student satisfaction (measured by National Student Survey)	+x% each year ( <i>baseline xx 2019</i> )	1. Participate in University's curriculum review, initially through engagement with the relevant College Working Group

<sup>2</sup> Baseline data to be determined, which will inform targets

	PGT overall student satisfaction (measured by Postgraduate Taught Experience Survey)	+x% each year (baseline xx 2019)	<ol style="list-style-type: none"> <li>2. Reduce assessments within our courses to reduce workload for students, academic and teaching support staff.</li> <li>3. Develop a new outside course.</li> <li>4. Continue to deliver large lectures online; continuing to develop online materials to enhance the quality.</li> <li>5. Develop an online PGT degree; first intake 2022-23.</li> <li>6. Continue to work with our student societies and work with them to create opportunities for students to engage in extra-curricula activities and form their own interest groups, whilst also enhancing the role of the programme directors to foster a greater sense of cohort within each programme.</li> <li>7. Continue to improve UG, PGT and PGR student satisfaction scores through community building activities: <ul style="list-style-type: none"> <li>○ Review community building and student support initiatives undertaken at UoE Schools with high(er) satisfaction scores, and other University computer science schools</li> <li>○ Develop and implement Taught and PGR Student Community Building and Student Support Action Plans.</li> <li>○ Deliver lecture series to taught students; at least one lecture in each MSC programme topic area.</li> <li>○ Mechanisms to increase sense of community and opportunities for spontaneous conversations We will review community building and student support initiatives undertaken at other UoE Schools with high(er) satisfaction scores, and other University computer science schools, to increase the number and quality of community building activities.</li> </ul> </li> <li>8. Maintain an overall UG student population as close as possible to 1,000</li> <li>9. Limit our overseas intake to 50% or less; to reduce the risk associated with over exposure to one market and creating a mono-culture in which English-speaking students are in the minority.</li> <li>10. Increase demand from Scottish and RUK students for our UG programmes and Home students for our PGT programmes by undertaking conversion activity focussed on these offer holders for 21-22 intake; and marketing to influence 22-23 intake</li> <li>11. Diversify our international market by identifying priority countries to focus our attention on. <ul style="list-style-type: none"> <li>▪ Analysis of applicant data to identify potential markets and feeder universities on which to focus (by May 2021). Potential markets: India (quality applications and</li> </ul> </li> </ol>
	PGR student satisfaction (measured through PGR survey undertaken 2021 and then every two years)	+x% each survey (baseline xx 2019)	
	UG student progression rates from year 1 to 2, and year 2 to 3	+x% each year (baseline xx)	
	UG student withdrawals within first year of study (including WP students)	-x% each year (baseline xx)	
	New student enrolments in fully online distance education programme	Xx enrolments 2022/23	
	UG Home student enrolments	+x% Scottish students (baseline xx) +x% RUK students (baseline xx)	
	PGT Home student enrolments	+x% Scottish students (baseline xx) +x% RUK students (baseline xx)	
	Under-represented geographical group enrolments	+x% Widening Participation students (baseline xx) +x% priority international students (baseline xx)	

			<p>affordable); North America (our degrees are shorter therefore cheaper); South America, Africa.</p> <ul style="list-style-type: none"> <li>▪ Draft plan to Recruitment Committee and Strategy Committee (by July 2021)</li> <li>▪ Pursue opportunities for collaboration with universities in under-represented countries; if necessary, 2+2s to enter markets but with the aim of increasing student demand (e.g. MAHE 2+2).</li> </ul>
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<b>4. Social and Civic Responsibility</b>	<p>Through our research, education, knowledge exchange and public engagement activities, the knowledge that we create impacts upon the international academic community, upon policy and society, industry and businesses, our local community and individuals. Over the life of this plan, we aim to build and strengthen relationships between the School, other parts of the University, the city and our communities.</p> <p>We have a robust pipeline of industry partnerships and funding, and strong relationships with industry partners and collaborators, however there is increasing nervousness from industry given the current economic uncertainty which we need to monitor.</p> <p>As Data Science and Artificial Intelligence become ever more pervasive in daily life, we recognise our responsibility to ensure that these techniques are used appropriately. We have started an initiative of AI for Social Good and will be seeking to increase our research activity around AI and data ethics.</p> <p>The pandemic has limited the amount of engagement with the city and our communities, although we participated in virtual Doors Open and have continued promotion of our work via social media. Likewise, Outreach activity has been somewhat restricted, particularly with schools given their own challenges, however we will continue to implement initiatives as opportunities present themselves.</p> <p>2022/23 will be the 25th anniversary of the School and the 60th anniversary of Computer Science at Edinburgh which provide an opportunity to focus on greater engagement with our alumni and we will begin planning for this during the forthcoming year.</p>		
	<b>Long Term Targets</b>		<b>Specific 2021-22 Actions</b>
	<b>Measure</b>	<b>Target<sup>3</sup></b>	
	Number of UoE schools collaborating with	Maintain current 22/24 Schools	<ol style="list-style-type: none"> <li>1. Strengthen industry partnerships with a particular focus on fostering talent and adoption City Deal goals</li> <li>2. Increase Outreach activity including development and delivery of Data Science Education with school children</li> </ol>
	Number of MSc projects with industry partners	+x% per annum ( <i>baseline xx</i> )	
	Number of external project supervisors	+x% per annum ( <i>baseline xx</i> )	

<sup>3</sup> Baseline data to be determined, which will inform targets

	Number of school aged children participating in Outreach activity; and % SIMD20 school aged children	+x% per annum % of total from SIMD20	3. Renew emphasis on staff and student entrepreneurship - revised programme of activities, creation of an early-stage accelerator to establish new “deep tech” businesses which will create jobs and attract private equity funding to the City <ul style="list-style-type: none"> <li>Consider options for increasing engagement with our alumni, identifying key purpose (eg. philanthropy, industry connections, etc).</li> </ul>
	Number of new deep-tech businesses that have created jobs and attracted private equity funding to Edinburgh	+x% each year ( <i>baseline xx</i> )	
	Number of staff and student entrepreneurship activities	-x% each year ( <i>baseline xx</i> )	
	Student enrolments in new distance education programme	TBC	

<b>5. Environmental Sustainability</b>	Many of our research projects contribute to environmental sustainability and over the life of this plan we will aim to increase the School's level of activity to contribute to University's 2040 Carbon-Zero University target, and UN Sustainable Development Goals.  We are developing a Sustainability Action Plan which will outline activities that map onto the UN Sustainable Development Goals and reduce our carbon emissions.		
	<b>Long Term Targets</b>		<b>Specific 2021-22 Actions</b>
	<b>Measure</b>	<b>Target</b>	
	% Sustainability Action Plan implemented	Action Plan developed 2019/20  Measures incorporated into 2021-22 Plan	

<b>6. Financial Sustainability</b>	The School makes one of the highest levels of contribution within the College of Science & Engineering (in both percentage and monetary value) however recognises the University's current financial constraints. Over the life of this plan we will aim to maintain our level of contribution to the University from income generating activities, identifying opportunities to increase our contribution where this does not have a detriment effect on delivering of our strategic objectives and core business.		
	<b>Long Term Targets</b>		<b>Specific 2021-22 Actions</b>



	Measure	Target	
	% contribution to University	As agreed with College each planning round	<ol style="list-style-type: none"> <li>1. Continue to improve our financial forecasting and identify opportunities to reduce costs without impacting delivery of our strategic objectives and core business.</li> <li>2. Continue to embed system and process changes as opportunities arise and with movement of paper-based processes online where it is cost effective to do so.</li> <li>3. Review teaching support policy, to prioritise teaching support resource allocation, recruitment, appointment, payment and training processes.</li> <li>4. Develop method for costing courses and programmes and pilot course costings on first year UG courses or a PGT programme</li> </ol>

## Appendices

1. Staff Engagement Action Plan
2. Athena Swan Action Plan
3. SWOT Analysis
4. Planned Student Populations

## Appendix 1: Staff Engagement Action Plan

The Staff Engagement Action Plan was developed in 2020 through consultation with staff within the School, and shortly before the impacts of the 2020/21 global pandemic resulted in all staff working remotely. Many of the actions were designed around in person activities, and therefore progress on actions has been stalled.

Action	Status – March 2021
1. Further Staff Engagement sessions will be held	Session held March 2020.
2. Engagement session feedback and action plan will be published on Intranet, and status fed back at either General Meetings or Engagement Sessions	In progress. ➤ By September/October 2021: Review actions and status when staff have transitioned back to campus and hybrid working principles have been established to review engagement opportunities ( <b>DoPS</b> )
3. Reinstate bi-annual professional services (including computing and technical) staff meetings	Some virtual meetings held 2020/21. ➤ By May 2021: Dates to be scheduled for 2021/22 AY, including an Away Day ( <b>DoPS</b> )
4. Investigate including training opportunities in bi-annual professional services meetings.	
5. Ensure communication about decisions include rationale for decision.	Ongoing.
6. Issue Zero Tolerance reminder to staff and students.	Complete as well as Don't Cross the Line training provided in person and virtually. ➤ Ongoing - periodic reminders included in communication ( <b>HoS/DoPS</b> ) ➤ By Aug 2021 - continuation of Don't Cross the Line training ( <b>Staffing Support Manager</b> )
7. Hold an annual Xmas event for staff.	Did not occur given global pandemic and remote working. ➤ By Oct 2021 – review and confirm options for Xmas celebration event within pandemic restrictions ( <b>PA to Head of School</b> )
8. Introduce 'My Typical Day' section of the staff newsletter to foster a greater understanding of the different roles in the School	Lockdown Bulletin was delivered for first six months of 2020 lockdown and restrictions. ➤ By Jul 2021 – incorporate My Typical Day/Week in staff newsletter ( <b>Communications Team</b> )
9. Ensure all staff have name plates at or near their desk or office.	Delayed due to remote working. ➤ By May 2021 – Design name plate ( <b>Communications Team</b> ) ➤ By June 2021 – Produce and attach name plates to desks in shared offices ( <b>Facilities Team for staff; IGS Team for PGR students</b> ) ➤ Ongoing – Produce and attach for new starters ( <b>Facilities Team for staff; IGS Team for PGR students</b> )

Action	Status – March 2021
10. Teaching Office and Computing Support to trial drop in sessions. This may be extended to other professional services areas if feedback indicates there is need.	Delayed due to remote working. ➤ By Sep 2021 – Drop in sessions scheduled ( <b>Teaching Organisation Manager and Computing Support Manager</b> )
11. Establish Sol Mental Health First Aider Network and publicise within School.	Established and promoted. ➤ Ongoing – Publicising of Network; expansion of Network to ensure proportionate representation of staff ( <b>Staffing Support Manager</b> )
12. Ensure career/professional development discussions, and support the School can provide, as a major part of professional services annual review discussions.	Linked with Athena Swan action for PSS promotion and career development.
13. Arrange an Equality and Diversity Week in the spring where we refresh everyone's awareness of the E&D policy and procedures -- webpages and posters, social activity(s).	➤ By June 2021 – Outline of programme developed ( <b>Director of EDI</b> ) ➤ By Sept 2021 – Programme implemented with recommendations for future E&D weeks ( <b>Director of EDI</b> )
14. Experiment with setting up short life working groups to deal with issues that emerge to consider and recommend options.	This has been occurring and will continue to occur as issues arise.
15. Review responsibility for clarifying committee meeting discussions that need communication back to School community.	➤ By Sept 2021 - Guidelines to be developed and communicated to all (new and continuing) Committee Chairs and Clerks (DoPS)
16. Ensure policy changes are well publicised with links to the new policy.	
17. Review devolved teaching allocation process and timelines in advance of 2021/22 process.	Complete. Ongoing review of process and transparency linked with Athena Swan action.
18. We will seek to develop a better resource model used to understand our teaching load and cost effectiveness of our programmes.	Not yet started. Clarification needed on rationale for this to ensure actions taken address the concerns. ➤ By May 2021: Clarify rationale and confirm actions required.
19. Review induction programme for all staff with a view to incorporating periodic induction coffee sessions on themes timed to the academic year.	Not yet started. ➤ By June 2021: Review of current induction programme for new staff ( <b>HoSS, HoRS, HoF&amp;A</b> ) and recommendations for enhancements to DHoS and DoPS.
20. Review teaching support recruitment and appointment lifecycle to identify opportunities to proactively identify candidates.	Not yet started. People & Money implementation will impact processes from recruitment to payment for work. ➤ By July 2021: Review of current end to end processes for recruitment, appointment and payment of teaching support staff, and redesign of processes to align with

Action	Status – March 2021
	People & Money and/or best practice ( <b>Special Projects Manager, with HoSS and S&amp;TSM</b> ).
21. Undertake a review of School webpages.	Not yet started. Clarification needed on rationale for this to ensure actions taken address the concerns. ➤ By May 2021: Clarify rationale and confirm actions required.
22. Review processes to reduce bureaucracy where we can.	Ongoing. People & Money implementation provides an opportunity for this to occur. ➤ By July 2021: Prioritisation of processes to be reviewed because of P&M ( <b>Special Projects Manager, with Professional Services Managers</b> ). ➤ By July 2021: Investigation of potential for delivery of Lean Six Sigma training to PSS ( <b>Special Projects Manager</b> ). ➤ Ongoing review of processes.
23. Develop mechanisms for publicising College and University lectures (possibly information available to members of the School through links in the newsletter, on website)	➤ By June 2021: Action complete ( <b>Communications Team</b> )
24. Installation of a projector in MF2 is planned.	➤ By April 2021: Review of Forum and Appleton Tower meeting rooms to assess readiness for holding hybrid meetings ( <b>Computing Support Team</b> ) ➤ By June 2021: Installation of equipment and guidance for use of equipment in meeting rooms ( <b>Computing Support Team</b> ) and guidance on holding hybrid meetings (with social distancing assuming required) ( <b>Facilities Team</b> )
25. Develop regular Computer Housekeeping Tips and Reminders communication	Implemented as transition to remote working occurred ➤ By September 2021: Programme of reminders developed and being communicated periodically (potentially through staff newsletters) ( <b>Computing Support Team</b> )
26. Reminder of Return to Work procedures to be sent to line managers.	Implemented as transition to remote working occurred ➤ By July 2021: Action implemented, and inclusion in induction for new line managers ( <b>Staffing Support Manager</b> )
27. Guidance on shared office etiquette will be developed, published on the web and given to new starters if they will be in a shared office.	Shared office guidelines for managing Covid developed, however this action not implemented. ➤ By July 2021: Draft prepared and agreed at Buildings Committee ( <b>Facilities Supervisor</b> ) then communicated in staff newsletter and to new staff ( <b>Facilities</b> )
28. Investigate feasibility of decaf coffee beans on one floor	➤ By July 2021: Recommendations to Buildings Committee ( <b>Facilities Supervisor</b> )

## **Appendix 2: Athena Swan Action Plan**

The Athena Swan Action Plan is currently under review to verify the rationale for actions and convert them to SMART actions. This will be made available shortly.

### Appendix 3: SWOT

	Strengths	Weaknesses	Opportunities	Threats
<b>People</b>	<ul style="list-style-type: none"> <li>Recent hires have deepened our pool of staff with strong teaching and research interests</li> <li>Some lecturers/courses regularly innovating and providing excellent student experience.</li> <li>Strong involvement of UG and PGR students in the delivery of teaching support, e.g. for tutorials and InfPALS</li> <li>Excellent Faculty; Cohesive Institute groupings which are friendly, welcoming and supportive of its members.</li> </ul>	<ul style="list-style-type: none"> <li>Staff growth, systems and processes have not kept pace with student growth</li> <li>Poor gender balance among staff and PhD students</li> <li>Difficulties in attracting and retaining academic staff</li> <li>Difficulty in recruiting sufficient teaching support</li> <li>Frequent loss of staff to buyouts or industry poses challenges for course staffing/stability - some courses have suffered from lack of continuity</li> <li>Lack of knowledge retention and dissemination due to staff turnover and amongst academic staff admin roles, and knowledge and responsibility concentrated in too few roles</li> <li>Insufficient training provided to new teaching staff</li> <li>Sometimes strained relationship between professional services and academic staff.</li> <li>Large class sizes lead to staff overload and potential burnout</li> </ul>	<ul style="list-style-type: none"> <li>Hybrid working – improve work/life balance; free up some space if can provide alternate space for remote workers</li> <li>Opportunity to learn from global companies how they deal with remote and hybrid working</li> </ul>	<ul style="list-style-type: none"> <li>UK seen as less welcoming to outsiders impacting ability to attract overseas staff and students</li> <li>School less integrated due to remote working; particularly difficulty for new staff and students to integrate but also longer term implications for whole community.</li> <li>Inability to recruit and retain academic and research staff due to strong competition from industry and other universities; impact of Brexit</li> <li>General stress on academics, researchers, professional services and research students due to lockdown/restrictions, Brexit, restructuring and other threats.</li> <li>Impact of centralisation, increasing regulation and administrative expectations of academic staff.</li> <li>Insufficient space for staff and students; Estate is deteriorating.</li> <li>Complexity employing staff who are not in the UK; impact on teaching support and flexible working.</li> </ul>

<b>Research</b>	<ul style="list-style-type: none"> <li>• Strong research environment. Research excellence and breadth of the School – internationally renowned, high inter-disciplinary, collaborative and impactful.</li> <li>• Many discipline areas (but not all) attractive to new PhD students, RAs, Faculty. Strong research environment helps those not as attractive.</li> <li>• Strongest academic centre for AI in the UK, with a large breadth of expertise</li> <li>• Strong grant income from a number of sources (UKRI, EU, industry)</li> <li>• Strong research engagement with the rest of the University (collaborating with 22/24 Schools), and beyond</li> <li>• Good engagement with industry</li> <li>• Collaborative research across School disciplines.</li> <li>• CDTs</li> <li>• Strong demand from PhD students and visiting research students.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of space and support for running GPU servers impacts competitiveness, cutting edge research and teaching</li> <li>• Industrial engagement heavily focussed on a few key relationships, therefore lacking resilience</li> <li>• Difficulty in taking part in strategic activities or to exploit new opportunities due to high workloads</li> <li>• Lack of central support for research administration impacts School resource</li> <li>• Lack of PhD funding.; overreliance on CDT funding</li> <li>• UK funded research not adequately funded</li> <li>• Attracting Philanthropic funding; limited flow through from College lead.</li> </ul>	<ul style="list-style-type: none"> <li>• General growth of interest in AI</li> <li>• Initiative on AI for Social Good</li> <li>• Possible expansion of "AI for Science</li> <li>• Collaboration opportunities with Bayes Centre, EFI and City Region Deal activities, as well as across School Institutes</li> <li>• Multi-disciplinary collaboration opportunities with academia and industry</li> <li>• Engagement with alumni for marketing, philanthropic funding.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Disruption to European funding</li> <li>• EU PhD student intake may be severely affected by change in fee structure; impact on non-university funded studentships</li> <li>• Lack of space for PhD students -&gt; shared desks</li> <li>• Financial position -&gt; School studentships</li> <li>• Abundance of "theme based" funding (e.g. Global uncertainties, Living with Environmental Change), where the School (being more focussed on foundations than applications) does not have so much to contribute. We are not a service provider to other Schools</li> <li>• Some exposed sources of industrial funding, e.g. export control, politics, human rights</li> <li>• Over-emphasis on AI; peak AI has passed.</li> <li>• University focus on AI and Data Science diluting our area of expertise.</li> </ul>
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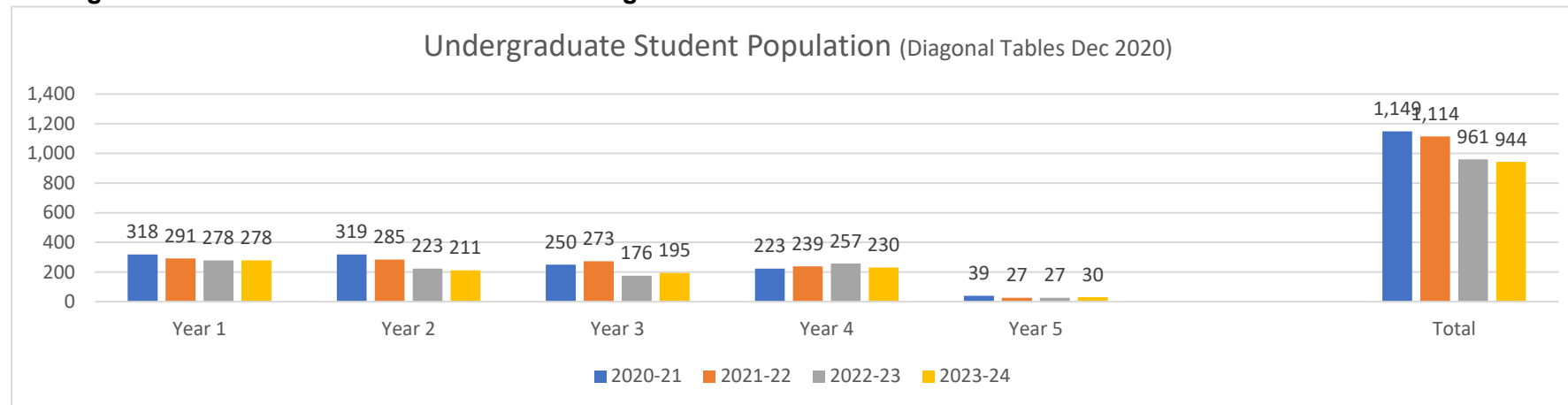
<p><b>Learning &amp; Teaching</b></p>	<ul style="list-style-type: none"> <li>• Up-to-date and broad UG and PGT portfolio driven by world-leading research. Breadth and opportunity for specialisation is our USP for many students</li> <li>• Programmes rank highly both nationally and internationally.</li> <li>• Strong demand for our programmes; particularly PGT programmes from students in China</li> <li>• Strong expertise and support for professional development and learning technology (Teaching hours, ILTS, etc)</li> <li>• Large pool of satisfied alumni</li> <li>• Expertise in, and materials for, online delivery</li> </ul>	<ul style="list-style-type: none"> <li>• Students do not feel part of a community (2020 Pulse Survey)</li> <li>• Breadth and flexibility of programmes creates difficulty predicting resource needs; changes in one place have unexpected consequences elsewhere; insufficient ownership: few feel empowered to take decisions as often requires too much knowledge</li> <li>• Large cohort and class sizes, uneven demand for programmes/courses impacts student experience and staff workload.</li> <li>• Course design/approval done without resourcing considerations</li> <li>• No strategic prioritisation of teaching support resourcing across year groups</li> <li>• Uneven quality of intake at MSc level - difficult to satisfy large heterogeneous population; poor English is increasingly problematic as more group work expected and less individual support</li> <li>• Standard admin tasks are not sufficiently automated (student course enrolment; teaching support request / review / approval / appointment)</li> <li>• Loss of EU students - loss of diversity within cohorts</li> <li>• Online open-book exam assessment and in-course assessment has resulted in increased workload for students.</li> <li>• Difficulty predicting conversion rates can result in not reaching targets (financial implications); exceeding targets (workload)</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunities for continued growth and income generation due to strong demand for our UG and PGT programmes</li> <li>• Potential demand from mature students (part-time / online) for PGT programmes</li> <li>• Strong industry demand for our graduates - opportunities for monetisation of access to our students</li> <li>• Strong demand for collaborative student projects (with industry or other Schools) - opportunities for developing research collaborations</li> <li>• Possible increased demand for online PGT programmes</li> <li>• Funding available (e.g., through CityDeal) for data science programmes and upskilling</li> <li>• Opportunity to make use of large pool of satisfied alumni</li> <li>• Opportunity for fee paying visiting EU students through partnerships with EU universities.</li> </ul>	<ul style="list-style-type: none"> <li>• Continuing pressure to increase number of students and difficulty predicting conversion rates</li> <li>• High demand for some of our courses from outside students, exacerbating problems of large courses</li> <li>• Insufficient space for teaching of all types (large lectures, labs, workshops and tutorials), once in-person teaching resumes</li> <li>• Increasing expectations of students - whatever we provide, they want more, and online teaching can be easily "compared". Risk of comparison against professionally produced, but free lectures</li> <li>• Ongoing global pandemic - difficulty planning for 21-22 (hybrid, in person or online?)</li> <li>• EU students will now need visas – Tier 4 monitoring and admissions' workload</li> <li>• Loss of Erasmus scheme; details of new Turing Scheme not known</li> <li>• High and unplanned teaching workloads can impact research grant applications</li> <li>• Assumption that online is cheaper to deliver ; resource intensive to maintain materials</li> <li>• In aftermath of Covid, preparation received during secondary school highly variable in incoming UG, particularly WP. Additional support and courses required.</li> </ul>
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<b>Social and Civic Responsibility</b>	<ul style="list-style-type: none"> <li>• Robust pipeline of industry partnerships and funding</li> <li>• Strong relationships with industry partners and collaborators</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of clear strategy from Scottish Enterprise and Scottish Government</li> <li>• Difficulty reaching into schools for Outreach activity (Covid)</li> </ul>	<ul style="list-style-type: none"> <li>• AI for Social Good initiative</li> <li>• Greater alumni engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of investment from industry and Government due to economic climate</li> </ul>
<b>Environmental Sustainability</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of data available to measure impact of actions we may implement</li> <li>• Forum ventilation - air quality in these internal rooms is poor and as the overall number of people in the Forum increases the situation becomes worse</li> <li>• Power usage in server rooms</li> </ul>	<ul style="list-style-type: none"> <li>• Recycling heat from server rooms</li> </ul>	<ul style="list-style-type: none"> <li>• Weakness of University finances impact availability of capital funds</li> </ul>
<b>Financial Sustainability</b>	<ul style="list-style-type: none"> <li>• Strong overseas student demand</li> </ul>	<ul style="list-style-type: none"> <li>• High cost of teaching support</li> <li>• Over reliance on international student income to cover cost of other core business</li> <li>• Over reliance on Chinese market for overseas student income</li> <li>• No knowledge of cost of delivering our programmes and courses (University believes UG costs more to teach than PGT)</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Weakness of University finances</li> <li>• Expenditure-based funding model - no additional funding even if additional students or income.</li> <li>• Changes in the geopolitical situation may impact our ability to recruit Chinese PGT students in large numbers, which in turn jeopardises the School's financial situation.</li> <li>• Delay in Estates capital projects likely to impact maintenance and other small work costs</li> <li>• Cost and workload for visas for EEA appointments</li> <li>• Potential increased costs of goods from EU</li> </ul>

## Appendix 4: Student Intake Numbers

### Undergraduate Student Intakes – 2021-22 Planning



#### Overarching aims:

- Maintain overall UG student population as close as possible to 1,000
- Overseas (English speaking) proportion of intake on average 50% to ensure diversity within student population

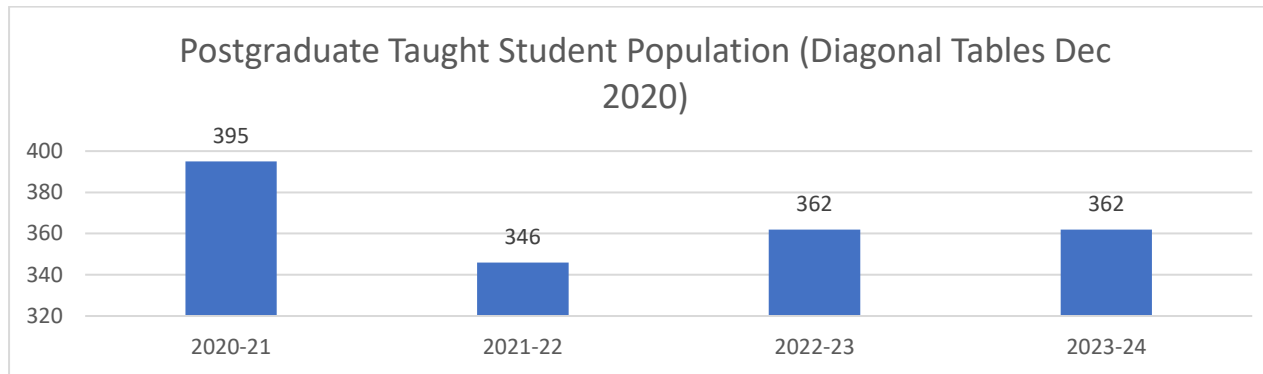
#### EU impact:

- Average EU portion of SEU intake for 2018 and 2019 = 42% (60 of our 2020-21 SEU student intake)

#### Student population notes:

- 2020-21:
  - Includes Graduate Apprenticeships and some continuing Yr1 and visiting students.
  - Planning round intake target (Jan 2020): 253 (141 SEU; 26 RUK; 86 OSeas), with overall UG population of 1,128 (including visiting students)
  - Actual intake (College data): 297 (149 SEU; 65 RUK; 83 OSeas), with overall UG population of 1,149.
- 2021-22:
  - Intake target submitted to College (Dec 2020): 236 (85 Scottish; 40 RUK; 111 OSeas).
  - Student population (291 Yr1) includes some visiting student and continuing Yr1 assumptions; assumes intake of 236
  - No further intake of Graduate Apprenticeships
- 2022-23 and 2023-24:
  - Student intakes not reviewed as part of 2020-21 planning. Figures shown are those from Jan 2020 planning submission less EU students.

## PGT Student Intakes – 2021-22 Planning



### Overarching aims:

- Increase demand from Home students.

### EU impact:

- Average EU portion of Home intake for 2018, 2019 and 2020 = 71% (45 of our 2020-21 student intake)

### Student population notes:

- 2020-21:
  - Planning round intake target (Jan 2020): (71 Home; 267 OSeas)
  - Actual intake (College data): 397 (65 Home; 321 OSeas).
- 2021-22:
  - Intake target submitted to College (Dec 2020): 346 (40 Home; 306 OSeas).
- 2022-23 and 2023-24:
  - Student intakes not reviewed as part of 2020-21 planning. Figures shown as those from Jan 2020 planning submission.