Strategic Plan 2024 – 2029

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

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.

Vision

Our vision is to have a strong research and teaching environment that addresses key challenges of the 21st century and benefits society as a whole.

Mission

- To provide quality education that equips all our graduates with problem solving, analytical and critical thinking skills, which they can rely on as future leaders in an ever-changing global environment of the 21st century.

- To conduct research of the highest quality, motivated by both intellectual curiosity and societal needs, informing our research-led teaching and retaining our position as one of the world's leading informatics schools.

- To make a significant, sustainable and socially responsible contribution to Scotland, the UK and the world through education, research, innovation and impact.

Values

- **Civility:** We treat everyone considerately, care for each other, and seek to influence society responsibly.

- **Collaboration:** We share responsibilities across our community, work together to achieve our goals, and help each other effect positive change.

- **Curiosity:** We seek diverse evidence and opinions, and welcome things that challenge our views as an opportunity to learn.

- **Integrity:** We make decisions as rationally and transparently as we can.

- **Humility:** We acknowledge that our understanding of the world and each other is always incomplete and revise continually.

Strategic Priorities for the School of Informatics

To ensure we achieve our Vision, our strategic priorities are centred around the University's 2030 Strategy Plan with the focus areas of People, Research, Learning & Teaching and Civic and Social Responsibility.

People

Supporting our people to thrive is key to the success of the School and achievement of our strategic plan. We aim to:

1. **Recruit, retain and develop the best academic, research and professional services staff**
2. **Create a culture where staff and students feel they belong and that they feel valued, respected and encouraged to realise their potential**

Research

We have the leading research position in the UK and are recognised internationally for excellence of our research outputs. We aim to produce research of the highest quality and significance, encompassing both applied and foundational work, ensuring our impact on the world both now and in the future, with our strategic priorities being:

3. **Increase our research activities through more funded projects, fostering in our academic staff the skills and ambition to lead projects of increasing scale and globalisation**
4. **Increase the visibility of our excellent research on the world stage through optimised communications and enhancing our interactions and connectedness with policymakers and government**

Learning & Teaching

We have a diverse portfolio of programmes and courses and strong demand to study with us. We aim to provide high quality education that equips graduates to solve real world problems and deliver research-led teaching that provides students with a competitive advantage in the ever-changing and challenging global work environment of the 21st century. Our key strategic priorities are:

5. **Be the best school in our discipline for student and teacher experience**
6. **Strengthen our international standing as a world-leading educator**

Social and Civic Responsibility

We create knowledge that, through our research, education, knowledge exchange and public engagement activities, impacts the international academic community, policy and society, industry and businesses, our local community and individuals. We aim to make a significant, sustainable and socially responsible contribution to Scotland, the UK and the world through education, research, innovation and impact. Our strategic priorities are:

7. **Strengthen and diversify relationships between the School and our industry partners, other parts of the University, the city, our communities and our alumni**
8. **Grow entrepreneurship opportunities and education**

School Plan

This document sets out the School's priorities for the academic years 2023-24 and 2024-25 to ensure we can achieve the Strategic Priorities outlined in the School's Strategic Plan and to contribute to the College of Science & Engineering's strategic plan, together with Key Performance indicators that will help us measure our progress towards achieving our strategic priorities.

The College of Science & Engineering's strategic plan sets out a commitment to three core thematic areas in which consolidation and growth is expected over the coming years – **Data science and AI**; **Healthcare and data-intensive medicine; Sustainability**. The School has long-standing strengths in data science and AI and several different research initiatives and expertise in healthcare and data-intensive medicine. We are, therefore, well positioned to lead in these areas. A number of our staff have an interest in Sustainability, both in terms of their research practices but also in terms of pushing the forefront of their research to assist global sustainability; this is an area in which we can expand in collaboration with other parts of the University.

The College has also indicated a commitment to the following strategic priorities for the forthcoming year or two – Curriculum Transformation; International diversification; Estate development; Staff engagement and succession planning.

Over the next few years, the School intends to continue to consolidate and strengthen, rather than grow in size, except where we have already made strategic investment decisions such as expansion of our PGR students following our successful CDT bids and investment in establishing the university-wide Generative AI Laboratory. This limited expansion is primarily due to constraints on space to accommodate staff and students and to ensure we can focus on creating a compelling experience for our students, being a great place to work and maintaining our cutting-edge research with the resource that we have. From 2026/27, as committed to within our GAIL investment proposal, we plan for small annual growth in our UG and PGT student population.

People

People are key to the success of the School and we are fortunate to have people who are incredibly committed to their work, their colleagues and the School.

We continue to recruit excellent academic, professional services and research staff, who make a significant contribution to the success of the School. We aim to create a values-driven culture where we trust and respect each other; where we take mutual accountability for actions whilst always giving safety and wellbeing due consideration; where everyone feels they belong, that they are valued and that their voice is heard; and where everyone is empowered to recognise their potential.

Unfortunately, the results of the 2023 Staff Survey have indicated that overall staff engagement is lower than it was in 2018 (52% compared with 70% in 2018). While we know that the past four years have been challenging for our people due to external influences, such as the pandemic and poorly managed University change programmes, the survey results indicate that our staff feel a greater sense of belonging to the School than they do to the University. We are concerned about these results as we want to ensure that both the School and the University are a great place to work. We have assigned a working group to further drill down into the points raised by the survey through focus groups and other mechanisms. This working group's remit is to provide a **set of recommendations and an action plan to** improve the overall sense of engagement and satisfaction with both the School and the University. We are proud of our strong community of staff and students – in the staff survey essentially 100% of respondents (considering those who neither agree/disagree) said they valued their relationships with their colleagues. In the past year, we have benefited from the opportunity to interact more as a community, as more staff have returned to campus. We have implemented various staff engagement

activities, which have brought together staff and students. These include lunchtime concert series, yoga, community-building breakfasts, monthly morning teas, and InfConnect activities including events where staff and students get to know each other's research interests. Furthermore, we will continue to implement staff wellbeing and community-building initiatives to maintain our strong community.

The School's Mental Health (MH) First Aiders Network has continued to provide support to staff and PGR students; we now have MH First Aiders from the various staff and student categories (professional services, academic research, PGR students) and have a continued demand for training. We will continue to expand and foster this network of support, ensuring an appropriate representation from different staff and student categories. This network, together with the University's Employee Assistance Programme, provides a good first point of contact for those needing someone to talk to.

During AY22-23, we implemented an induction programme for new academic staff, which is being refined for delivery for new staff joining again in 2023-24. In the forthcoming year, we will seek feedback on this induction programme, as well as exit policies and procedures to ensure that staff are adequately supported when they join the school and to understand more fully why staff are leaving. Our new SharePoint site, a project started 2023-24, focuses on the migration of content from our CMS-based intranet to SharePoint. This will help staff find up-to-date information more efficiently. SharePoint has an improved search functionality and we have implemented the allocation of SharePoint Champions to take responsibility to ensuring content is up to date. We believe that this will help new staff find their way more easily than our current intranet.

During AY22-23 our People & Culture Committee consulted with staff to develop a set of Values that aim to ensure that we collectively take responsibility for raising awareness of EDI matters to support our ambition to be a caring and inclusive community. In the forthcoming year, they will identify mechanisms to embed those Values.

We recognise that many University and School processes are complex, which creates inefficiencies that take time away from what matters. During the past year our computing team have continued to migrate services to central EASE authentication where practical to do so. This reduces the volume of school-specific services needing support, creating a consistent experience for staff and students. This has enabled the streamlining of various business processes, as functions are gradually moved out of the Theon to PIP systems.

We will work to build a culture of continuous improvement, encouraging greater cross-functional collaboration and open communication to identify opportunities to increase efficiency and effectiveness. We know we can also improve the way we plan and implement new initiatives. We will work to grow the School's project management maturity, define skills and training frameworks, and invest in the necessary learning and development to equip individuals and teams to better support such work.

We continue to have a poor gender balance amongst our staff (under-representation of females in academic, research, computing and business development; and under-representation of males in other professional services roles). **Addressing gender imbalance** remains a key priority, as does **addressing gender pay gaps and ethnicity achievement gaps for our students.** We have submitted an application to regain **our Athena Swan Silver Award; implementing our Athena Swan action plan will be a priority** (whether or not we receive the Award) alongside initiatives to improve equality, diversity and inclusion within the workplace.

We were pleased to see that responses within the 2023 staff survey indicated a higher level of confidence in the way the School deals with poor performance, discrimination and inappropriate behaviour than was the case in 2018, however we would still like to see this level of confidence increase and we need to see the (albeit low) percentage of staff experiencing bullying, harassment and discrimination at zero. We will deliver **training and initiatives to support our goal for Zero Tolerance for harassment and bullying** to provide people with the confidence to respond to behaviours they find inappropriate.

We have continued to deliver our leadership development programme based around *Insights Discovery®* to help our current and potential leaders understand their work and communication styles.

During 2023 we have delivered a management programme, again based around *Insights*, to provide our managers and supervisors with the skills to manage and support those they line manage or supervise. This leadership programme and coaching facilitated the creation of an effective consultative leadership team, which supports the Head of School. Furthermore, we are confident that these programmes have assisted in the feedback within the University's staff survey, which noted an improvement in the level of support that staff are receiving from their manager.

We remain committed to developing our people so they can fulfil their potential. This is especially important for research staff whose roles are fixed term and usually a stepping stone within their career. It is also true for professional services staff, who have transferable skills that can be used in any School and, therefore, often leave our School to take up promotion opportunities. This can be very disruptive and result in a loss of key institutional knowledge. **We will support RAs to participate in professional development opportunities** by working with PIs to ensure they build time for this within research project and continue with initiatives to build a strong RA community. We will provide **training** to professional services managers on workforce and service design planning and **identifying opportunities for staff to build re-grading cases. We will continue to provide leadership and management development opportunities** to our staff to ensure we are developing our future leaders and ensuring our managers are equipped to support and develop their staff.

Our specific goals, measures of success and actions are:

Strategic priority 1: **Recruit, retain and develop the best academic, research and professional services staff**

Measures of Success	
Performance indicator	**Target**
#Employee Engagement	**Return to or exceed 2018 Engagement %** *(baseline: 52% 2023 Staff Survey; 70% 2018 Staff Survey)*
#Staff who feel that the School deals with poor performance, discrimination, and inappropriate behaviour	**>50% by next survey** *(baseline: Staff Surveys: Dealing with bullying/harassment (50% 2023; 32% 2018); Dealing with discrimination 57% 2023; (36% 2018); Dealing in inappropriate behaviour (47% 2023; 39% 2018)*
#Percentage of PDRAs securing positions at end of their contract (UoE or elsewhere)	*Refer action to begin collecting data to identify baseline*
#Percentage of academic, research and PSS staff who successfully achieve promotion (internally and externally)	**% of staff achieving promotion** *(baseline data tbc to set target)*

Key Actions – Strategic Priority 1		
Action	**Milestones**	**Responsibility[1]** *Accountability[2]*
Develop staff engagement action plan and begin implementation	Engagement sessions with staff to explore staff survey results Develop action plan and consolidate with Athena Swan and EDI action plan (refer action under strategy priority 2)	People & Culture Committee *Director of People & Culture*
Ensure RAs are adequately encouraged and supported to participate in professional development opportunities and feel a part of the School	Promotion of opportunities for training and development. Liaise with IAD to influence opportunities offered by them and through Concordat action plan to support the career development of postdocs Continue to develop school post-doc community; develop mechanisms to consult with community and plan actions based on feedback.	Head of Research Services with PDRA Champion *Deputy Director of Professional Services and Director of Research*

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[1] Staff member within School responsible for ensuring the action is completed, in consultation with the Strategy Committee member who is accountable.

[2] Member of School Strategy Committee responsible for ensuring the action is progressed and reporting on status.

	Review of PDRs to identify opportunities and gaps	
Streamline school processes and develop a culture of continuous improvement and project management skills	Ongoing review and streamlining of processes supported by school systems	Head of Computing *Director of Professional Services*
	Develop and deliver change and project management training based on the skills, principles, methodologies (ideally using the University's (developing) project framework group)	Head of Operations *Deputy Director of Professional Services*
	Begin building a community and greater understanding of continuous improvement	
	Gather insight and ideas into where processes can be improved and bureaucracy reduced and develop governance structure to prioritise actions and apply existing resource	
Improve the School's estate and infrastructure, to ensure our working environment is fit for purpose and reflects the School's reputation as world-class in research and teaching	Improve AV for hybrid meeting spaces	Head of Computing
	Review of working spaces to support hybrid/flexible working	Deputy Director of Professional Services
	Review of working spaces to support growing staff and student numbers	
	Regular review and preparation of small capital funding requests	
	Review reception area and invest in making this space more welcoming and interesting to staff, students and visitors	
Review School's internal communication processes and approach to ensure the right messages get to the right people		Marketing Communications & Outreach Manager *Director of Professional Services*

Strategic priority 2: **Create a culture where staff and students feel they belong and that they feel valued, respected and encouraged to realise their potential**

Measures of Success	
Performance indicator	**Target**
*Gender, ethnicity and disability pay gaps	Gender pay gap: Zero by 2027 Ethnicity pay gap: Zero by 2027 Disability pay gap: Zero by 2027 *(baseline data needed from College and clarity from College on how these will be measured given Ethnicity and Disability are often undeclared)*
Percentage of female students and staff	**% of female staff aligned with % of female PGR students** *(baseline: 2020/21 % female academic staff 20.4% (57/280); % female PGR students 21.2% (108/509. 2021/22 female PGR students 21.7% (120/554); 21/22 staff data not available. Both full and part-time staff.* **% of female UG and PGT students remains above national average** *(baseline: 2021/22 % female UG national average (HESA) 17.3% - SoI 24.1% (285/1183) – full-time students only. % PGT national average (HESA) 32.8% - SoI 33.7% (143/424) – full-time students only. Part-time PGT HESA: 27.9% - SoI 26.8% (11/41).* **Increase in applications for our taught and research programmes from female students** *(baseline 2021/22 Number of female applications - UG 991; PGT 2481; PGR 284)* **Increase in applications from women for academic, research, computing and business development positions** *(baseline data tbc to set target % increase)* **Increase in applications from men for other professional services positions** *(baseline data tbc to set target % increase)*
Athena Swan Award	Silver Award in 2023/24

Key Actions – Strategic Priority 2		
Action	**Milestones**	**Responsibility**[3] *Accountability*[4]
Implementation of Athena Swan and EDI action plan	Jan-2024: Submission of Athena Swan Silver application By April-2024: Consolidation of Athena Swan, EDI and Staff engagement action plans; agree responsibilities and timelines for actions and mechanisms for monitoring and reporting September-2024: Begin implementation of actions (earlier if practical)	Athena Swan Champion and Director of People & Culture *Director of People & Culture*
Deliver Bystander training to ensure people know how to tackle inappropriate behaviour when they see it **Supplement Unconscious Bias training with wider Diversity & Inclusion or awareness training**		HR Administration Manager *Director of People & Culture*
Explore patterns of rate of promotion and drop-out across the grades for minority group staff	Provide training and mentoring around promotion and re-grading Provide and encourage staff to attend other confidence building training (e.g. imposter syndrome) Gather information on reasons for resignation of minority group staff Investigate and gather feedback on ramping on, ramping off policies and procedures	Director of People and Culture HR Administration Manager *Director of People & Culture*
As part of our NSS and Student Engagement action plans, design and implement actions that improve student culture		Head of Student Experience *Director of People & Culture*

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[3] Staff member within School responsible for ensuring the action is completed, in consultation with the Strategy Committee member who is accountable.

[4] Member of School Strategy Committee responsible for ensuring the action is progressed and reporting on status.

Research

The School has the leading research position in the UK and is recognised internationally for excellence of its research outputs. We are consistently ranked in the top 30 of the subject rankings in the world. We are ranked:

- 26th in the World's Top Computer Science Departments in the most recent Times Higher Education World University Rankings (unfortunately we dropped from 24th in 2023 but remain in the top 30);
- 4th in the Guardian Best UK Universities Rankings for computer science and information systems (having risen from 5th),
- 7th in the Times Good University Guide – Computer Science; and
- 20th and 15th in the QS World University Rankings for Computer Science & Information Systems, and Data Science respectively (having achieved our target of inclusion in the top 20 by 2028).

Our joint submission with EPCC topped the Research Professional Computer Science and Informatics rankings in the 2021 Research Excellence Framework, and Research Professional ranked Informatics first for the size of submission (144 FTE), power rating (100) and market share (7.6%).

We continue to be successful in attracting research income from a range of sources and in securing fellowships, and we have strong research engagement with the rest of the University and with industry. In AY22/23, we submitted research applications to the value of £91M and received awards to the value of £24M; and held 21% of the University's live EPSRC grants with a total value of £41M. Over the life of this plan, we aim to continue to increase the breadth and depth of our research, while increasing research income, enhancing the quality, interdisciplinarity and impact of our research.

As **Data Science and AI** become ever more pervasive in daily life and there remains strong student demand and funding opportunities, we recognise our responsibility to ensure that these techniques are used appropriately. Key to this strategic objective was launch of the Generative AI Laboratory (GAIL) in November 2023 – a multi-million-pound university-wide initiative, that is led by the School, and will push the forefront of generative AI to benefit society and stimulate economic growth. Also key to this objective is launch of our Autonomous Vehicle Laboratory in late 2023, alongside our continued involvement and leadership in the UKRI Trustworthy Autonomous Systems programme. In Spring 2023, we established the NQCC Software Lab, led by Professor Elham Kashefi in her capacity as Scientific Director of the National Quantum Computing Centre. The Lab, DTP funding for quantum postgraduate research studentships and award of a CDT in Quantum to start 2025, is part of an expanding programme of activities around quantum technology, maintaining our lead in this field of growing national importance.

The nature of our work lends itself to inter-disciplinary work and we will continue to explore opportunities for collaboration across the School and University on cross-cutting research themes. In **data intensive medicine/healthcare,** we are involved in joint initiatives with CMVM such as Advanced Care Research Centre (ACRC) and within CSE we are leading both our existing and a new CDT in Biomedical AI Innovation. A key priority for us will be to **continue to expand our reach in this area.**

While our research grant success and income remain strong, there are opportunities to increase our research activities through more funded projects, whilst fostering leadership skills in our academic staff. We will **implement mechanisms to support our academic staff to further improve our success rates in grant applications**, in particular to have support for large collaborative bids, which will in turn support their career progression. This support requires forward planning to ensure there is sufficient resource (academic and professional services staff) to collaborate and prepare the bid.

We have strong demand from postgraduate research students and have continued to invest in school-funded studentships as part of our CDTs, new staff joining the School and in key strategic areas to pump prime future research funding opportunities, through stimulating academic interest and building interdisciplinary connections. There are **opportunities for us to secure funding from external funders for studentships**, including increasing our EPSRC grant portfolio, which will increase DTP studentship funding.

Our CDTs remain strong with Biomedical AI, Natural Language Processing, and Robotics and Autonomous Systems admitting their final cohort of students in September 2023. We are proud to have been awarded 5.5 CDTs in the recent CDT calls (exceeding our target of 3.5) – we are leading the UKRI AI Centre for Doctoral Training in Biomedical Innovation; UKRI AI Centre for Doctoral Training in Responsible and Trustworthy in-the-world NLP; EPSRC Centre for Doctoral Training in Machine Learning Systems and the EPSRC Centre for Doctoral Training in Quantum Informatics (Quantum starting in September 2025 - a year later than the others); and we are co-lead with Heriot Watt of the UKRI AI Centre for Doctoral Training in Dependable and Deployable Artificial Intelligence for Robotics. The School is also involved in four of the AI Hubs awarded to the University.

A majority priority for the forthcoming year will be development and implementation of the programmes and associated administrative arrangements. Space remains a key issue for our PGR community; we have implemented a PGR student desk sharing framework, which has helped us maintain our student population, but we will continue have difficulty expanding. We are fortunate to be working with EFI to provide space for our new NLP CDT cohort and potentially other PGR student groups.

Most research and teaching in the School of Informatics is data intensive. This includes work in AI and machine learning, but also much of the of work in computer systems, computer graphics, robotics, bioinformatics, neuroinformatics, and computer security. To support this work, we need two types of provision: (1) A high-capacity centrally run service designed for standard data-intensive computing workloads (most AI research falls under this category), and (2) An Informatics-run service that is highly customisable and meets the specialised research and teaching needs in areas such as computer systems, machine learning, and computer security - these areas require experimental hardware or software set-ups that a central service cannot support. Both types of activity are expanding rapidly, and current provision is at full capacity, limiting our ability to apply for grants, forge industry collaborations, and attract world-class researchers. Need (1) is being addressed by the expansion of ISG's Eddie service and through the EIDF provision that EPCC are building up, however we need to continue working with EPCC to ensure our needs can be met – the School will be providing funding for two years for a staff member to be based in EPCC/EIDF. This person will be employed by EPCC but will support and prioritise Informatics staff HPC access, needs and requirements. Need (2) should be resolved by an Estates project currently underway to design the installation of a standalone cooling unit on the Forum roof – if this can be built then this will allow us to install additional servers in our server room.

The breadth of the School's research laboratories has expanded over recent years. While much of the School's research is computer-based and can be conducted from an individual office or home, we have an increasing number of specific research laboratories – general robotics laboratories, speech technology laboratories (involving human participants), prosthetics and robotics for healthy ageing laboratory (involving human participants), cyber security laboratories, autonomous vehicle laboratory and other computer laboratories used for generalist and specialist research and teaching. While we have academic leads for each of these research facilities, we need strategic oversight to ensure we are maximising opportunities for cost recovery of running and equipping these labs and that we are maximising the use of the space, avoiding duplicate equipment and ensuring we have adequate equipment replacement and maintenance plans.

Strategic priority 3: **Increase our research activities through more funded projects, fostering in our academic staff the skills and ambition to lead projects of increasing scale and globalisation**

Measures of Success	
Performance indicator	**Target**
#Times Higher Ed World University CS Subject Ranking	**In the top 20 by 2028** *(26th 2024; 24th 2023; 25th 2022)*
#Guardian Best UK Universities Rankings – Computer Science and Information Systems	**Remain in top 5** *(4th in 2023; 5th 2022)*
#Times Higher Education (UK) Ranking for CS & Informatics	**Increase ranking at next REF** *(ranked 6 in REF2021; 15 in REF2014)*
Number of REF 4 papers and 4* Impact case studies	**Increase % of submitted research outputs deemed 4* at next REF** *(2021 61%; 2014 33%)* **Maintain % of submitted impact cases studies deemed 4* at next REF** *2021 100%; 2014 48%)*

#QS World University Ranking	**Remain in the top 20**
	Data Science (15th 2023); Computer Science & Information Systems (20th 2023; 23rd 2022; 26th 2021)
Number of research grant applications each year	**Equivalent of academic staff FTE** (i.e. everybody making one application a year on average)
#Value of research grant income and awards (total income and award for School)	**Increase in total research grant income and £ overhead income** *(baseline data tbc to set target)*
#Value of research income per academic FTE	**Increase in total research grant awards** *(baseline: 2022/23: 391M applications; 324M awards)*
	£tbc research grant income per academic staff FTE pa *(baseline data tbc to set target)*
#Diversity in research grant funders	**No one funder accounts for more than one-third of research grant income over 3-year rolling average** *(baseline data tbc)*
*Share of UKRI income	**Increase in UKRI application success rates** *(baseline data tbc to set target – measure may change to maintain success rates if we are already above average)*
*Percentage of Faculty and PDRAs holding Fellowships	**Increase in %** *(baseline xx Faculty; xx PDRAs tbc to set target)*
*Number of PhD students	**% growth in PhD students aligns with % growth in academic staff**
#Number of CDTs	**3.5 CDTs** *(baseline 2022/23: 2.5) – target exceeded 2023/20924 awarded 5.5 CDTs*
Number of research projects that align with the UN Sustainability Goals and/or Edinburgh Earth Initiative	**20% of research project bids have such a tag by 2027**
	20% of proposed dissertation projects have such a tag by 2027

Key Actions – Strategic Priority 3		
Action	**Milestones**	**Responsibility** *Accountability*
Ensure we have a broad and sustainable portfolio of PhD funding, including CDTs	Implementation of awarded CDTs	Head of Student Services with CDT Directors
Development of strategic plan for NQCC Quantum Software Lab to ensure continuity beyond end of current funding		Head of Business Operations, Quantum Software Lab *Director of Commercialisation & Industry Engagement*
Ensure that each Institute has a robust 5 year plan to increase and maintain research output and teaching ability, factoring in risks and accompanying mitigations	Business plan for recruitment in the Autumn should be extended to a 5 year plan with a risks table and mitigations Institutes identified as having high risks with high impact should be closely examined and prioritised with recommended action and resource plan	Directors of Institute and BDE for individual institutes and College/School HR *Head of School*
Implement mechanisms to support staff in preparing large collaborative bids (target of one major collaborative project led by Informatics - funded in AY24/25)	Clarify support to be provided by ERO (investment proposed) HoRS, DDoPS and DoR to discuss options to outline support that can be provided for discussion with Research Committee	Director of Research and Head of Research Services *Director of Research*
Implement mechanisms to support academic staff to further improve our success rates in grant applications and to apply for funding from a wide variety of funders, to ensure sustainability and remove reliance on a single funding source	Work with Research Committee to identify suitable leaders of bids such as EPSRC programme grant/EC synergy grants and provide appropriate support to the lead to facilitate bid submission	Director of Research and Head of Research Services *Director of Research*
Improve effective use of server room capacity and increase use of shared GPU clusters	5 year plan for HPC Server Room cooling project complete EIDF access and usage protocols in place Implement improved facilities for monitoring usage and transparency of compute resource	Director of Computing and Head of Computing *Head of School*

Ensure research funding proposals and bids are fully and appropriately costed and priced considering eligible cost and opportunity	Matrix of chargeable costs and mechanisms to apply to bids	Head of Research Services *Director of Research*
Develop and implement research facilities strategic management framework	Implement mechanisms to ensure research facilities are self-sustaining, ensuring research laboratories develop multi-year equipment plans and source funding for purchasing of equipment Develop and implement a mechanism for monitoring and reporting on research facilities (to provide transparent reporting to the School on how allocated space is used effectively; equipment needs are planned, budgeted and funding secured	Deputy Director of Professional Services
Ensure that ethical principles (including design and implementation, societal impact, responsible research and applicable regulation) are considered and reviewed at all stages of research	Analyse current ethics processes and policy for research within the School, from proposal stage to experimentation, factoring in all aspects of Responsible Research including Dual Use and benchmark with similar Schools both within and out with UoE. Make recommendations to Research Committee on changes necessary. Ensure staff are receive appropriate training in this regard	Head of Research Services with Chair of Ethics and Director of Research *Head of School*
Expand our research and expertise in sustainability, either through leadership of projects or in collaboration with other Schools	GAIL project(s) to reduce environmental impact of compute needed for NLP Create a definition that PIs can use to identify where their research maps to each of the 17 UN SDGs and mechanisms to monitor/report where working on such projects with other Schools	Director of GAIL *Head of School* Head of Research Services *Director of Research*

Strategic priority 4: **Increase the visibility of our excellent research on the world-stage through enhanced communications and enhancing our interactions and connectedness with policy makers and government**

Measures of Success	
Performance indicator	**Target**
[To be inserted when GAIL Communications Strategy and measures of success identified – see action]	
Increased contact with government and policy makers	Increase in collaborations forged and funding with Government and policy-makers (baseline: tbc) Increase in joint projects and appointments with the Centre for Technomoral Futures, e.g. on safe AI and Robotics (baseline: tbc)

Key Actions – Strategic Priority 4		
Action	**Milestones**	**Responsibility** *Accountability*
Develop and implement an integrated public relations strategy and plan that increases the visibility of the University's research and activity in Generative AI and related topics.	Jan-24: PR Agency and Head of Communications appointed Feb-2024: GAIL Communications Strategy developed (including measures of success) Mar-2024: Public Relations Plan developed	Head of Communications, GAIL *Director of Professional Services*

Develop and implement an external communications plan for the remainder of the School's research and activity (i.e. not Gen AI).	May-2024: School communications strategy developed (including measures of success) August-2024: Communications plan developed	Marketing Communications & Outreach Manager *Director of Professional Services*
Review the School's external facing website to improve the information architecture, make it easier to navigate and make it more appealing to diverse audience of potential students and staff.	May-2024: Identify priorities for website review; appoint agency to re-design June-2024: Develop plan for reviewing content	Marketing Communications & Outreach Manager *Director of Professional Services*
Increase interactions the Centre of Technomoral Futures (CTMF) and enhance interactions with government and policy makers	Jan-24: Joint Chancellor's Fellow advertised with informatics and CTMF Feb-24: Policy-maker and UK/Scottish engagements by HoS, Director of the CTMF and other Informatics staff April'24: Strategy for engagement with policy-makers and government developed	Head of School *Head of School*

Learning & Teaching

The School has a diverse portfolio of programmes and courses, and strong demand from across the world to study with us; moreover, we have outstanding students who achieve at the highest levels and make contributions both in the UK and around the world. We aim to deliver high quality teaching programmes, securing high levels of student satisfaction.

The major priorities for the School over the planning period within our Learning & Teaching priority area will be to improve the student experience and to undertake a review of our curriculum in alignment with the College and University priorities associated with the Curriculum Transformation Programme.

We aim to maintain our UG student population of around 1,000 (plus visiting students) for the next two academic years. From AY26/27 begin to gradually increase our UG student population by c.50 students a year, as planned in our GAIL investment proposal - but subject to our curriculum changes being in place which reduce staff workload, space in which to teach the additional students and associated study space. For PGT we plan to maintain our AY23/24 intake target of 350 and thereafter increase by 20 per year as planned in our GAIL investment proposal. We are proud to have moved up the rankings (to 4th) within the Guardian's Best UK Universities Rankings for Computer Science and Information Systems and achieved our goal to be ranked in the top 20 in the QS World University Rankings (we are 20th in Computer Science & Information Systems, and 15th in Data Science). However, student satisfaction scores through NSS and PTES continue to be of great concern for the School and University. **Addressing student satisfaction will be one of our highest priorities** through a school-led Student Experience Project, which includes a specific NSS action plan and a curriculum and assessment review, the latter having impact on both student and staff workloads.

Our curriculum review will include a review of our Year 1 undergraduate degree programmes which has not been reviewed since 2019. We have formed a working group to to examine the cohesiveness of core Informatics content with the rest of our teaching, the appropriateness of School of Mathematics courses for our students, through to the potential of further integrating critical and ethical skills across our position. This will allow us the opportunity to consider the appropriateness of our first-year courses for incoming students, some of whom find the transition to University challenging, as well as seamlessly integrate with the upcoming Curriculum Transformation Programme. We will also begin a review of the remainder of our curriculum.

During the pandemic, the transition to hybrid teaching was highly successful and we gained a significant amount of experience of online teaching, however since the return to campus, the majority of our teaching has reverted to in-person. We have developed a Digital Teaching Strategy, which includes sub-projects to assess which of our existing courses and programmes are suitable to deliver online for pedagogical reasons; opportunities for online/digital exams; opportunities to deliver online CPD to industry; and using the existing DSTI infrastructure to deliver more online courses. In the coming year we will aim to keep the existing DSTI provision current and continue to update the Digital Teaching Strategy plan, exploring the business opportunities around online provision, with existing resources, with the aim to expand in future years.

There are opportunities for data education beyond core computer science. We have recently recruited a new academic staff member who will have responsibility for developing a cognitive social science course for delivery of non-Informatics students, where there is currently unmet demand from schools in CaHSS. A number of our staff have been involved in the design, development and delivery of EFI courses in recent years, however the first full year of delivery by EFI identified that the courses need to be designed with less technical content than courses designed for students undertaking our degrees. We are recruiting a University Teacher in Design Informatics who will undertake some of this EFI teaching under broad direction from the academic staff with the discipline expertise, which will allow our academic staff to utilise their experience back within the School.

Demand for our taught programmes remains high, however, we did not achieve our PGT student intake target for AY23-24 for reasons we do not know at the time of writing this plan. The number of applications was higher than in previous years and the number of offers made were consistent with

prior year conversion rates. **We will increase our effort on conversion activities for AY24-25 intake, accepting the fact that every year is different, and this runs the risk of exceeding our intake targets.**

Recognising the benefits of diversity in our student population and the financial risk of dependence on any single market, we continue to focus on growing the demand from Scottish and UK students and from high quality international students from a range of countries. College has identified five priority markets of **India, USA, Malaysia, Indonesia, UAE and Saudi Arabia**, with Nigeria and Ghana as potential markets to explore in the future. We believe that Thailand and Mexico may also be appropriate markets for our School but our primary focus will be on those five markets. Our immediate AY23-24 priority is to focus on converting offers to enrolments from these countries, while also increasing our recruitment activity for AY24-25 intake, focussing on the above-mentioned priority markets. This will include working with College to gather intelligence on these markets, reviewing the way our programmes are presented to ensure they are attractive to these markets and how we offer of scholarships.

In recent years, we have struggled to retain our WP students and we will **implement mechanisms to ensure WP students are appropriately supported** through their programme. The above-mentioned first year curriculum review will factor in aspects of retention including WP students. The new Student Support Model provides a mechanism for us to do this more effectively than we have in the past. The Centre for Open Learning and College have developed a STEM Foundation Programme intended to remove barriers to undergraduate study for WP and fee-paying international students and will be extending this to our School by 2027. This will provide an opportunity to a significant pool of applicants that do not meet our contextual entry requirements, whilst contributing to our objective to increase our intake of domestic students.

Over the past couple of years, we have implemented various improvements to our teaching support resource allocation to ensure equity in allocation of resource and made improvements in our processes to support timely appointment of tutors and demonstrators. There are still challenges in securing sufficient teaching support staff to provide the support required by Course Organisers, and in the coming period we will consider mechanisms to increase demand from teaching support staff, and ensuring new and continuing tutors and demonstrators receive adequate training and support. We are also aware that the various changes to systems and the School over the years has resulted in various changes to responsibilities and roles. **We will undertake a review of our academic administrative roles** to ensure that we have up-to-date role descriptions, and those non-academic administrative duties are identified to ensure work is undertaken by those best placed to do the work. We believe that by reducing the administrative burden on academic staff, it will improve the staff experience and therefore also the student experience.

Strategic priority 6: **Be the best school in our discipline for student and teacher experience**

	Measures of Success	
Performance indicator	**Target**	
*Student satisfaction as reported in the NSS, PTES and PRES	**Attain level of at least 80% overall student satisfaction** *(baseline 2022-23: tbc)*	
	Improve scores in NSS 'Assessment and Feedback' to a level *(baseline 2022/23: tbc)*	
	Improve student survey participation rates *(baseline PRES 16%; PTES 22%, NSS 48%)*	
*Academic staff engagement	**Improvement in academic staff engagement scores** *(refer People)*	
#UG student withdrawals within first year of study (including WP students)	**Reduce UG student withdrawals within first year of study** *(baseline data tbc)*	
*Graduates entering graduate level employment or further study; and #Graduates starting their own company	*(School baseline data needed from College)*	

Key Actions – Strategic Priority 6		
Action	**Milestones**	**Responsibility** *Accountability*
Improve the UG and PGT student experience through a comprehensive Student Experience Project	Elements of project include: • NSS Action Plan (action plan and milestones to be developed) • Assessment project – as below • Teaching admin – as below (review of academic admin ..) • Supporting student societies • Celebrating student successes	Head of Student Services *Director of Teaching*
Improve the PGR experience	Support PGR community building activities through continuing funding for cohort building activities	Head of Student Services *Director of Graduate School*
Review of curriculum and assessments with the goal to reduce workload for students, academic and teaching support staff, whilst maintaining high calibre degree programmes		Curriculum Review Project Coordinator and Assessment Project Coordinator *Director of Teaching*
Review of academic admin roles and related administrative processes and responsibilities	Review of academic admin roles – review/develop role responsibilities and identify elements that do not need academic oversight/management. Priority processes to be reviewed identified, with broad project plan for timing of reviews Review Course Organiser responsibilities and identify elements that do not need academic oversight/management	Director of Professional Services

Strategic priority 7: Strengthen our international standing as a world-leading educator

Measures of Success	
Performance indicator	**Target**
#Proportion of home students in UG and PGT student population #Proportion of international students in UG and PGT student population; and	**TBC** *Baseline Home (SRF+RUK): 2021/22: % UG Home students: 67.9% (808/1190); PGT Home students: 12.6% (59/467); PGR Home students: 57.5% (325/565)* *Baseline: International: 2021/22: UG Intl students: 32.1% (382/1190); PGT Intl students: 80.9% (378/467); PGR Intl students: 41.8% (236/565) – includes PGT OL n=30; 6% of PGT population*
*Ratio of largest overseas market to 5th and 10th largest overseas (or #Proportion of target international markets (as per Internationalisation Strategic Plan) #Application to offer rates from target international markets #Offer to enrolment rates from target international markets	**TBC - incorporate targets College have identified for Schools**
*Number (and proportion) of undergraduate entrants from an SIMD0-20 area	**TBC** *(baseline: tbc – CSE: 43 - 8.1%)*
*People gaining qualifications via certified data skill courses and MOOCs	**Number of enrolments in our DSTI courses** *(baseline data tbc)* **Number of CPD data skill courses delivered and number of enrolments within**

Key Actions – Strategic Priority 7		
Action	**Milestones**	**Responsibility** *Accountability*
Develop our curriculum to include relevant courses on Climate and Sustainability	Incorporate sustainability into new and revised courses, where practical to do so, through	Deputy Director of Teaching (Curriculum) *Director of Teaching*

	collaboration with other Schools for input or more directly from School expertise	
Develop an outside course to respond to student demand and contribute to Data Science and Curriculum Transformation Programme ambitions	AY24/25: Development of computational social science (working title) course in collaboration with SSPS to address demand for social science data science/informatics course. First intake AY25-26	Deputy Director of Teaching (Curriculum) *Director of Teaching*
Increase number of courses delivered through DSTI Programme	Identify existing courses, which are appropriate to deliver online for pedagogical reasons, and develop a coherent plan for development and delivery [prior to 2025/26 planning round for resource consideration]	Digital Teaching Strategy Lead *Director of Teaching*
Assess industry demand and business model for delivery of CPD for AI, ideally leveraging DSTI infrastructure	Market analysis of industry demand for CPD for AI and develop a coherent plan for delivery of CPD including a marketing strategy [prior to 2025/26 planning round for resource consideration]	GAIL Business Development Executive *Director of Commercialisation & Industry Engagement*
Diversify our international student market and ensure we have an appropriate proportion Scottish and RUK students within our UG programmes and Home students for our PGT programmes	Regional Leads for India/US and South America in place for AY23-24 Establish a student recruitment and internationalisation working group Jan-24: Conversion plan for offer holders for AY24/25 intake developed Feb-24: Student recruitment/marketing priorities for AY25/26 intake identified and mechanisms in place to monitor and review Work with College to gather market intelligence on our priority markets, reviewing the way our programmes are presented to ensure they are attractive to these markets and need and approach to offering scholarships	Director of Professional Services and Director of Internationalisation

Social and Civic Responsibility

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. We have strong links with industry partners and collaborators and links to schools across the University, and over the lifespan of this plan, we aim to continue to expand and strengthen relationships with industry and between the School, other parts of the University, the city and our communities.

We have a robust pipeline of industry partnerships and funding, having grown and diversified our industry funding over the past few years to mitigate the risks associated with over-reliance on a limited number of partners and regions. We continue to lead the College and the University in industrial engagement - for AY22/23 the School's combined translational and industrial awards totalled £16.3M; the highest contribution (40.3%) of CSE Schools to the College awards totalling £40.4M. The expertise of our staff is highly sought after by industry and public sector bodies, and in some cases the more appropriate route for this is through consultancy. As well as the benefits for the companies and the individuals, this brings benefits to the School through income, but more importantly in establishing relationships, which often lead to broader opportunities, such as funded PhD studentships.

The School operates an Industrial Advisory Board that meets twice a year – each meeting taking a focus on teaching or research. The Board consists of leading industry executives, entrepreneurs and funding bodies and is key in enabling real-world impact arising from our research and talent from teaching.

As we move towards REF2029, we will continue to develop and deliver our Impact Strategy based on five routes to deliver economic and social impact:

- **Collaboration with large multinational companies,** which includes significant effort to broaden the geographic span of companies we engage with. The Cisco Quantum and AI centre of excellence was delivered in AY22/23 with funding secured from the US; the Quantum Software Laboratory was established with significant support from European and US companies; the Blockchain Laboratory, which is now developing the Edinburgh Decentralisation Index, continues to grow with an ever-deepening relationship with IOG based in the US and discussions being held with the Bank of England and the Financial Services Authority in the UK. New relationships delivering income include our first contract with the Japanese trading house – Nomura.

- **Collaboration with SMEs** such as ongoing research work with Kawada Robotics in Japan and the Quantum Computing research projects funded by NuQuantum.
- **Formation of start-up and spinout companies**. The school has a rich history of delivering successful start-ups and spin-outs. In AY23/24 the School has developed and begun delivery of a new undergraduate course in Entrepreneurship. The Royal Society of Engineering supports our Entrepreneur in Residence, who works closely with our PGR students to deliver opportunities for the creation of new enterprises. We have also appointed our first Entrepreneurship Fellow – a postdoctoral researcher from our Institute for Perception, Action & Behaviour (IPAB) who has developed some exciting technology which can be commercialised.
- **Collaboration with public / third sector organisations,** which is exemplified by our work with Strathclyde and Glasgow Universities to form the Scottish Quantum Applications Cluster and funded directly from Scottish Government and in collaboration with Scottish Development International, bringing together strengths of Glasgow, Strathclyde and Edinburgh (including EPCC) to attract significant inward investment to Scotland.
- **Open Source software** which has been successful in strengthening our relationship with Huawei.

Significant focus going forward will be given to developing opportunities associated with the new Edinburgh Generative AI Laboratory (GAIL), as this is an area of potential significant growth.

During 2023 we celebrated 60 years of research in Computer Science and AI through a series of events, including a weekend of activities for our alumni. We had lost connections with many of our alumni as we have had insufficient resource to support activities and communication over the last decade and will begin to re-building those connections by working with Development & Alumni to support their funded events, while developing a school approach and plan for future resourcing of school led alumni activities.

Strategic priority 7: **Strengthen and diversify relationships between the School and our industry partners, other parts of the University, the city, our communities and our alumni**

Measures of Success	
Performance indicator	**Target**
#Number of UoE schools with whom we are collaborating	Maintain top position as the most collaborative School within the University *(baseline: 2021/22 – 22 out of 24 Schools)*
#Number of MSc projects with industry partners	*(baseline data tbc to set target)*
#Number of external project supervisors	*(baseline data tbc to set target)*
#Number of industry, third sector and public sector collaborators	*(baseline data tbc to set target)*
#Total value of industrial and translation research awards	*2022/23 Translational and industrial awards £16.22M*
#Number and value of academic consultancies	*(baseline data tbc to set target)*
#Number of industry funded studentships	*(baseline data tbc to set target)*
#Number of school aged children participating in Outreach activity; and % SIMD20 school aged children	20% of total from SIMD20 by 2030 *(baseline data tbc to set target)*

Key Actions – Strategic Priority 7		
Action	**Milestones**	**Responsibility** *Accountability*
Develop a strategy for maintaining engagement with our alumni	Development of Alumni Engagement Plan, objectives and resource plan [prior to 2025/26 planning round for resource consideration]	Marketing Communications & Outreach Manager and (academic) Alumni Coordinator *Director of Professional Services*
Develop and deliver Outreach activities that reach school aged children	Delivery of Tutoring Scheme Development of longer term Outreach Plan, objectives and resource plan [prior to 2025/26 planning round for resource consideration]	(academic) Outreach Coordinator and Marketing Communications & Outreach Manager *Director of Professional Services*
Develop and deliver our Impact Strategy to deliver economic and social impact through: • **Collaboration with large multinational companies** • **Collaboration with SMEs** • **Formation of start-up and spinout companies.** • **Collaboration with public / third sector organisations** • **Open Source software to encourage adoption**	Liaise with government/policy makers in responsive mode and proactively either directly or through EI and advisors	Head of School and Director of Commercialisation & Industry Engagement
Develop a strategy for increased engagement and income from industry around Generative AI, aligning with GAIL's goals and the Director's strategic vision (Director is TBA at time of writing this plan)	Market survey for Generative AI 2 year Strategy for engagement in the area of Generative AI	GAIL Business Development Executive *Director of Commercialisation & Industry Engagement*

Strategic priority 8: Grow entrepreneurship opportunities and education

Measures of Success	
Performance indicator	**Target**
*Number of spin-out companies	*(baseline data tbc to set target)*
#Number of staff and student entrepreneurship activities	*(baseline data tbc to set target)*
#Number of students joining Venture Builder	*(baseline data tbc to set target)*
#Value of venture capital raised in spin-outs and start-ups	*(baseline data tbc to set target)*
#Number of RAE and RSE Enterprise Fellows and Industry Fellowships	*(baseline data tbc to set target)*

Key Actions – Strategic Priority 8		
Action	**Milestones**	**Responsibility** *Accountability*
Develop and deliver our Impact Strategy to deliver economic and social impact through: • **Formation of start-up and spinout companies.**	Continue delivery of UG3 Entrepreneurship course Develop resourcing plan for longer term delivery of UG3 Entrepreneurship course [prior to 2025/26 planning round for resource consideration]Delivery of entrepreneurship workshops by Entrepreneur in Residence Develop a 5 year plan for developing entrepreneurship skills within staff and students and associated resourcing plan [prior to 2025/26 planning round for resource consideration]	Director of Teaching Director of Commercialisation & Industry Engagement