

The University of Edinburgh

Internal Periodic Review

School of GeoSciences

Postgraduate Research Provision

18 - 20 March 2025

Contents

Executive summary	3
Key Commendations	3
Key Recommendations	3
Commendations, Recommendations & Suggestions	4
Commendations	4
Recommendations	4
Suggestions	6
Section A – Introduction	7
Scope of review	7
Review Team Members	7
The School	7
Physical location and summary of facilities	8
Date of previous review	8
Reflective Report	8
Section B – Main report	9
1 Strategic overview	9
2 Enhancing the student experience	10
2.1 The approach to enhancing Learning and Teaching	10
2.2 Assessment and Feedback	11
2.3 Supporting students in their learning	12
2.4 Listening and responding to the Student Voice	13
2.5 Accessibility, Inclusivity and Widening Participation	14
2.6 Development of Employability and Graduate Attributes	14
2.7 Supporting and developing staff	15
2.8 Learning environment (physical and virtual)	16
3 Assurance and enhancement of provision	16
Appendices	18
Appendix 1: Range of provision considered by the review	18
Appendix 2: University remit	20
Appendix 3: Additional information considered by review team	21
Appendix 4: Number of students	21

Executive summary

This report comprises the outcomes from the internal review of postgraduate research (PGR) provision in the School of GeoSciences.

The review team found that the School has effective management of the quality of the student learning experience, academic standards, and enhancement and good practice.

The report provides commendations on the School's provision, recommendations for enhancement that the School will be asked to report progress on to the Senate Quality Assurance Committee and suggestions on how to support developments.

Key Commendations

The review team commended the School for its breadth of activity in promoting Equality, Diversity and Inclusion (EDI), the provision of student support and pastoral care by both academic and professional services staff, the recognition of existing challenges and the work being undertaken to address and seek improvements in these areas. Further commendations are included in the report.

Key Recommendations

The top three recommendations identified by the review team for the School to prioritise were:

- **Annual Review Checkpoints – Consistency of Expectations:** The School should clarify the expectations of annual review activity beyond the year one confirmation panel, helping ensure greater consistency of practice. The School should consider establishing a thesis committee/panel for each student to meet with them annually to review progress and offer the opportunity to privately discuss issues of concern.
- **Managing Student-Supervisor Relationships:** The School should work toward a culture which encourages students to report issues with their supervisors, and to subsequently protect those that do report issues. The approach should include working collaboratively with students to identify common issues and potential solutions. Similarly, the School should explore implementing a system whereby students can provide feedback on their supervisor outwith key review checkpoints.
- **Tutoring and Demonstrating – Course Organiser Training:** The School, in collaboration with the tutor and demonstrator student representative, should review the provision of training sessions for course organisers in their work with tutors and demonstrators, in order to support consistency of experience. This should consider the possibility of making training mandatory.

Commendations, Recommendations & Suggestions

Commendations

Key strengths and areas of positive practice for sharing more widely across the institution.

No.	Commendation	Section in report
1.	The review team commends the School on its efforts to offer a clear pathway from MScR to PhD.	1
2.	The review team commends the Director of PGR for his demonstrable commitment to the role and for being visible to students, particularly in relation to student support matters.	1
3.	The review team commends the PGR Office and how swiftly it has become embedded within the School as a valuable resource of support to students and programme organisation, particularly taking into consideration the scale of recent staffing changes.	1
4.	The review team commends the School in its effort to recognise and improve their PhD programme via its redesign, in order to best meet student needs.	2.1
5.	The review team commends the School on its openness in acknowledging the existing issues pertaining to student-supervisor relationships, specifically around reported bullying and harassment within supervisory teams.	2.3
6.	The review team commends the ongoing efforts of the School to actively address challenging student-supervisor relationships, in what is often a nuanced and complex area.	2.3
7.	The review team commends the work of some research groups in the School to work collaboratively with students in developing codes of conduct between students and supervisors.	2.4
8.	The review team commends the breadth of ongoing activity within the School relating to EDI, such as the Women of Colour Network and the review of E4 WP forms.	2.5
9.	The review team commends the School in its work to bring PGR students together with academic staff in order to strengthen research culture and a sense of community.	2.8

Recommendations

Areas for development and enhancement – progress to be reported.

Priority	Recommendation	Section in report	Responsibility of
1.	Annual Review Checkpoints – Consistency of Expectations The review team recommends that the School clarifies the expectations of annual review activity beyond the year one confirmation panel, helping ensure greater consistency of practice. The School should consider establishing a thesis committee/panel for each student to meet with them annually to	2.2	School

	review progress and offer the opportunity to privately discuss issues of concern.		
2.	Managing Student-Supervisor Relationships The review team recommends that the School works toward a culture which encourages students to report issues with their supervisors, and to subsequently protect those that do report issues. The approach should include working collaboratively with students to identify common issues and potential solutions.	2.3	School
	The review team recommends that the School should explore implementing a system whereby students can provide feedback on their supervisor outwith key review checkpoints.	2.4	School
3.	Tutoring and Demonstrating – Course Organiser Training The review team recommends that the School, in collaboration with the tutor and demonstrator student representative, reviews the provision of training sessions for course organisers in their work with tutors and demonstrators, in order to support consistency of experience. This should consider the possibility of making training mandatory.	2.7	School
4.	4 Year PhD The review team recommends that the School uses the transition towards a 4-year PhD as an opportunity to actively review monitoring and submission processes, as well as to ensure that the activities undertaken within the PhD outwith thesis submission, such as tutoring and demonstrating, are more formally recognised as central to the PhD experience.	2.1	School
5.	Student Support The review team recommends that the School reviews the purpose of the role of advisor in order to ensure a more consistent student experience when interacting with this role.	2.3	School
	The review team recommends that the School further raises awareness of available resources which signpost students to student support resources across the University.	2.3	School

	The review team recommends that the School and the University's Report and Support service discuss how to maximise awareness of relevant support resources for PGR students within the School.	2.3	School and University (Report and Support service)
6.	Training and Support for Supervisors The review team recommends that the School considers what training provision is required to be undertaken by supervisors in relation to areas such as EDI, and how the reach of that training is maximised across the School.	2.7	School
	The review team recommends that the School explores alternative ways for supervisors to share and reflect on their practice, for example via the sharing of case studies showcasing good practice.	2.7	School

Suggestions

For noting – progress reporting is not required.

No.	Suggestion	Section in report
1.	The review team suggests that the School take into consideration the clash between the PhD Conference and confirmation panel meetings and identify whether there is any scope to move these dates.	2.2
2.	The review team suggests that steps are taken to ensure that student representatives receive sufficient training in order to confirm awareness of their key responsibilities within the role.	2.4
3.	The review team suggests that the School undertakes a review of student representation across relevant School and College-level committees.	2.4
4.	The review team suggests that the School should seek to raise awareness of its student representatives, and which committees they are members of, amongst the School's wider student population.	2.4
5.	The review team suggests that School staff continue to work proactively with students around mechanisms to enhance the sense of student community across all buildings.	2.8

Section A – Introduction

Scope of review

Range of provision considered by the review (see Appendix 1).

The Internal Periodic Review of the School of GeoSciences in 2024/25 consisted of:

- The University's remit for internal review (see Appendix 2)
- The subject specific remit items for the review:
 - The 4 Year PhD
 - Research Culture
- The Reflective Report and additional material provided in advance of the review
- The meeting of the review team including consideration of further material (see Appendix 3)
- The final report produced by the review team
- Action by the School and others to whom recommendations were remitted following the review

Review Team Members

Convener	Professor Jeni Harden Professor of Social Sciences in Medicine Usher Institute
External member	Dr Thomas Smith School of Geography and Planning Cardiff University
External member	Professor Tristan Quaife* Department of Meteorology University of Reading <i>*Contributed prior to review but did not attend review visit</i>
Internal member	Professor Fabio Nudelman Professor of Biomineralization School of Chemistry
Shadowing internal member	Dr Kirsten Cowan Senior Lecturer in Marketing The Business School
Student member	Lige Cui Deanery of Biomedical Sciences
Administrator	Patrick Jack Academic Policy Officer Academic Quality and Standards, Registry Services

The School

The School of GeoSciences is one of seven within the College of Science and Engineering. It is organised into three research institutes: Global Change (GC); Earth and Planetary

Science (EPS); and Geography and the Lived Environment (GLE). The Institutes house wide-ranging research and teaching facilities.

The School hosts two Natural Environment Research Council (NERC) training units. From 2014, the School has directed a NERC Doctoral Training Partnership (DTP). From 2020, the School has hosted the Centre for Satellite Data in Environmental Science (SENSE), a NERC Doctoral Training Centre, shared with the University of Leeds.

Physical location and summary of facilities

The School is located in multiple buildings across both the Central Campus and Kings Buildings. Most social science and humanities staff and students are located on the Central Campus within buildings in High School Yards. Natural sciences staff and students are predominantly based at Kings Buildings in the Grant Institute and Crew Building.

Date of previous review

The previous Postgraduate Programme Review (PPR) was held on 20-21 March 2019.

Reflective Report

The Reflective Report was prepared by:

- Professor Eric Laurier, Director of PGR
- Agapi Stylianidou, PGR Manager

In terms of student input into the Reflective Report, students were engaged in this process through staff-student liaison meetings in 2023 and 2024, the student-led GradSchool society, the PGR Away Day in 2024, focus groups in 2023, and a follow-up survey to the PRES outcomes in 2023.

The Reflective Report was reviewed and approved by the Head of School.

Section B – Main report

1 Strategic overview

The School of GeoSciences is a large and diverse School. There are 126 FTE academic staff working across a range of disciplines, as well as 75 FTE professional services staff. The School is located in multiple buildings across both the Central Campus and Kings Buildings. All academic staff and PGR students are affiliated with one of the School's three institutes: Global Change (GC); Earth and Planetary Science (EPS); and Geography and the Lived Environment (GLE). The Institutes house wide-ranging research and teaching facilities and provide staff and research students with an identity, links with national and international learned societies, and a base from which to develop cross-disciplinary research.

The School of GeoSciences offers three main PhD programmes with associated MPhil programmes, each of which are associated with the School's three institutes: Geology & Geophysics; Atmospheric & Environmental Sciences; Human Geography & Environmental Sciences. In addition, the School has students registered on three MScR programmes, the NERC SENSE Earth Observation CDT programme, and a number of additional PhD programmes with small numbers of students, such as collaborative programmes with external higher education institutions and PhD programmes attached to Economic and Social Research Council (ESRC) funding.

GeoSciences hosts two NERC training units. From 2014 the School has directed a NERC Doctoral Training Programme. Its first iteration was as E3, and from 2019 the DTP continued as E4 with an increased network of collaborators and a similar number of studentships. From 2024/25, it is being renewed again as E5, maintaining its number of studentships through greater levels of matched funding from participating schools though with a smaller proportion than based in GeoSciences. From 2020, the School has hosted SENSE, a NERC Doctoral Training Centre, shared with the University of Leeds. SENSE was extended by NERC to run for an additional period and GeoSciences match-funded the studentships. Its final recruitment concluded last year.

There has been a downward trend in PGR entrants in recent years and the review team heard that this is a cause of concern for the School. This has been attributed to a number of factors, including: reductions in UKRI funding; the closures of the Hydro Nation Scholars programme, the Carnegie Trust and SENSE; the reduction of funding streams E4 to E5 (NERC). The review team noted that the shrinkage of available studentship numbers is evident across the wider HE sector; however the School faces more localised challenges around navigating the increasingly complex funding landscape, which is routinely subject to change. This challenge is unlikely to be resolved in the short term, however the review team heard that the University has recognised these financial challenges and will undertake relevant costings which may in turn create opportunities to increase PGR student numbers within GeoSciences.

The review team noted the School's ongoing discussions around enhancing the pathway between MScR and PhD provision as a means of increasing PGR student numbers. Numbers of MScR students who progress from MScR to PhD study are low, however those who do generally perform very well on their PhD. The review team **commends** the School on its efforts to offer a clear pathway from MScR to PhD.

The School's PGR team is led by the Director of PGR, who undertakes a range of responsibilities relating to student support, supervisor training and reviewing PhD

student applications. The review team **commends** the Director of PGR for his demonstrable commitment to the role and for being visible to students, particularly in relation to student support matters.

In terms of professional services staff, 4.25 FTE staff are employed within the School's PGR Office. Administrative support within the School has undergone a restructure, with the roles of PGR Manager being developed and PGR Administrator being upgraded. The review team learned that wide staffing changes have recently taken place within the PGR Office. The PGR Manager was appointed in April 2024, who subsequently recruited the remainder of the current members of staff within the PGR Office. The review team **commends** the PGR Office and how swiftly it has become embedded within the School as a valuable resource of support to students and programme organisation, particularly taking into consideration the scale of recent staffing changes.

The School's PGR Committee reports to the GeoSciences Planning and Resource Committee (SPARC) and to the College of Science and Engineering (CSE). PGR planning and decision-making is made through the PGR Committee which meets three times or more per year. E4 and SENSE are independent and cross-College, however they do co-ordinate with the PGR Committee. Funding PhD Students, their projects and supervisory teams are managed and co-ordinated by the PGR Committee.

At the time of this review, the University is facing a challenging and uncertain financial climate. The review team is mindful of the potential impacts on both staff and students.

2 Enhancing the student experience

2.1 The approach to enhancing Learning and Teaching

CSE has recently been encouraging a transition toward introducing 4-year PhDs to replace the traditional 3-year PhD. 10% or fewer of GeoSciences doctoral students complete their programme by the 3-year prescribed period of study, with the majority completing in approximately four years. Many applicants for PhDs plan for a 3-year PhD as advertised, when in fact this does capture the reality of the PhD timeline. There are a number of reasons as to why PhD students are taking longer to complete their programme, such as increased time spent on: training; tutoring and demonstrating; producing conference papers; publishing articles; pursuing impact, internships and outreach. In terms of internships, the review team heard that GeoSciences are seeking to simplify the bureaucracy of this process to accommodate internships built into the PhD from the outset. It is not intended that internships will become mandatory; however, the aim is to simplify the process for those students who do undertake an internship, particularly from a visa perspective. The review team further heard that E5 will have internships incorporated within their programmes moving forward.

GeoSciences are therefore proposing a transition to a 4-year Programme, similar to the model introduced in the School of Biological Sciences, which represents the current timeline and the increased expectations and activities of the current generation of PhD students. The review team **commends** the School in its effort to recognise and improve their PhD programme via its redesign, in order to best meet student needs.

The review team noted that while 4-year PhDs would be more costly, the School could provide greater clarity around year-on-year activity for PhD students across their programme. The review team learned of the current frustration experienced by students around the potential substantial gap in time between the submission of their thesis and the point of award following the viva process. This creates challenges for students who are offered full-time employment during the intervening period, as well as financial pressures on students who are no longer receiving funding. However, it was noted that transitioning to a 4-year PhD programme may introduce greater flexibility and help mitigate the impact of these challenges. The review further noted that a 4-year programme would support students in their forward planning of fieldwork, particularly for those who are new to fieldwork or who have lengthy lead-in periods around confirming fieldwork arrangements. It was noted that some academic staff within the School suggested that enhanced messaging to students around programme timelines within the existing model could address some of these concerns, as opposed to necessitating a transition to a 4-year programme.

The review team highlighted that when the 4-year programme is presented to College for approval, the proposal should contain a strong financial and pedagogical rationale which emphasises increased flexibility and enhances career development, as well as a stronger sense of progression using formalised monitoring checkpoints to ensure timely submission and completion. The review team **recommends** that the School uses the transition towards a 4-year PhD as an opportunity to actively review monitoring and submission processes, as well as to ensure that the activities undertaken within the PhD outwith thesis submission, such as tutoring and demonstrating, are more formally recognised as central to the PhD experience.

2.2 Assessment and Feedback

Supervisors are the primary providers of regular formative and summative feedback for MScR and PhD students. Students typically have two supervisors who complement the PhD student's research. The review team heard that this supervisory model largely works well due to removal of a single point of failure. Meetings with supervisors, while expected to take place at least monthly, can fluctuate between individual supervisors across the School and can depend on factors such as varying working cultures across disciplines and students undertaking fieldwork away from campus.

There are pre-established checkpoints whereby supervisors provide formal feedback. This takes place via the confirmation panel in Year 1 and via subsequent annual reports. Feedback is primarily provided on drafts of papers for publication and thesis chapters. Via the School's PGR Conference, Year 1 MScR and PhD students provide talks for which they receive oral and written feedback from academic and research staff and their peers. Year 2 students present posters and receive oral feedback. The review team heard that the dates for the PGR Conference and confirmation panel meetings for Year 1 PhD students currently clash, in some cases leading to a negative impact on student experience. The review team **suggests** that the School take into consideration the clash between the PhD Conference and confirmation panel meetings and identify whether there is any scope to move these dates.

The review team noted the perceived lack of formal feedback on progress in some cases beyond the Year 1 confirmation panel. The School noted the need to consider how to enhance processes and structures around the confirmation panel and subsequent annual review meetings, particularly in the context of a 4-year PhD programme. The review team **recommends** that the School clarifies the expectations

of annual review activity beyond the year one confirmation panel, helping ensure greater consistency of practice. The School should consider establishing a thesis committee/panel for each student to meet with them annually to review progress and offer the opportunity to privately discuss issues of concern.

2.3 Supporting students in their learning

Student wellbeing is centred around the School PGR team, with supervisors and the PGR Office being part of the front line in providing pastoral care for students. In GeoSciences, the advisor plays a further role as a point of contact for the student outside of their supervisory team. The advisor can assist in helping the student reflect on their progress, their aspirations, and the work they do around, rather than within, their PhD. The ethos in PGR is to provide a net of potential trusted contacts so that each student has more than one colleague to approach if they are experiencing challenges.

In terms of the advisor role, the review team heard that advisors are assigned to students approximately two weeks post-arrival and should meet with their students at least annually. The review team noted comments from students that while some advisors provide a valuable mediatory role between students and their supervisory teams, other advisors do not proactively engage with their students and it can be unclear as to what issues students can approach their advisor about. The review team noted the inconsistency of expectation amongst PGR students around the role of advisor in providing student support. While some students understood the role as providing pastoral care, the review team heard that many advisors do not feel qualified to address more serious issues relating to student wellbeing; rather, their responsibility is to signpost students to relevant sources of support across the University. The review team additionally noted the lack of clarity around workload tariffs for the advisor role. The review team **recommends** that the School reviews the purpose of the role of advisor in order to ensure a more consistent student experience when interacting with this role.

In terms of supervisors, the review team heard that providing support for students around setting key milestones throughout their PhD programme and encouraging students to routinely manage their workload both underpin positive supervisory relationships. Enhancing research culture was a key focus of this review, with a number of discussions centring around how to best manage breakdowns in working relationships between students and their supervisors. The review team **commends** the School on its openness in acknowledging the existing issues pertaining to student-supervisor relationships, specifically around reported bullying and harassment within supervisory teams.

The review team noted that the School proactively intervenes in instances where students report issues with their supervisory teams and do change students' supervisors as and when required. The School also acts to change advisors if they have been reported as being inactive. The review team heard that students do not receive internal guidance at the outset of their programme as to how to best manage relationships and conversations with their supervisors. It was further heard that many students feel that they cannot pursue formal complaints against their supervisors due to the potential repercussions on their future careers in doing so, as well as the highly-formalised complaint process handled by the central University which is perceived as a barrier. The review team **commends** the ongoing efforts of the School to actively address challenging student-supervisor relationships, in what is often a nuanced and complex area. However, the review team **recommends** that the

School works toward a culture which encourages students to report issues with their supervisors, and to subsequently protect those that do report issues. The approach should include working collaboratively with students to identify common issues and potential solutions.

The review team heard that students can find it challenging to access relevant information regarding resources for student support resources on the GeoSciences SharePoint. The review team **recommends** that the School further raises awareness of available resources which signpost students to student support resources across the University.

The review team heard of how the culture of reporting harassment differs in Scotland to that of some other nations. This has led to some uncertainty amongst international students around how best to report issues of this nature. This was noted as a concern, particularly when the University has resources in place to support with harassment and discrimination. The review team **recommends** that the School and the University's Report and Support service discuss how to maximise awareness of relevant support resources for PGR students within the School.

2.4. Listening and responding to the Student Voice

Listening and responding to the student voice presents challenges for the School due to the size and diversity of its PGR student population which is spread across different buildings and campuses. However, the School seeks to maximise responsiveness through various platforms such as the PGR Student Representative Committee, PGR focus groups, supporting the GradSchool Committee, and actively evidencing how issues have been responded to.

The review team heard that the School is seeking to revise its student representative structure, moving the focus away from estates issues to more functional roles such as a student representative for tutors and demonstrators (T&Ds). While there are written descriptors for student representative roles, it was noted that some student representatives remain unclear on their roles and it can be challenging to receive engagement and feedback from their peers. The review team **suggests** that steps are taken to ensure that student representatives receive sufficient training in order to confirm awareness of their key responsibilities within the role. This could be via bespoke sessions which discuss specific roles and involve inviting former representatives, or providing peer mentoring opportunities. This would better equip students around understanding their role as representatives and how it feeds into student voice and quality enhancement. Similarly, the review team **suggests** that the School should seek to raise awareness of its student representatives, and which committees they are members of, amongst the School's wider student population.

While appreciating the need to encourage student voice via additional student representation, the review team noted the considerably high number of student representatives across the School and wider College. It was discussed whether institute representatives could be shared across committees and interchanged as and when required. The review team **suggests** that the School undertakes a review of student representation across relevant School and College-level committees.

As detailed in section 2.3, the PGR team have built a culture of trust with PGR students around supporting them when things go wrong on their programme, particularly around working relationships with their supervisors. The review team **commends** the work of some research groups in the School to work collaboratively

with students in developing codes of conduct between students and supervisors. However, the review team heard that students are currently unable to provide formal feedback on their supervisors in person. While students are able to do this during their confirmation panel, it was noted that this is perhaps not the best platform to do this and earlier opportunities should be provided, perhaps via the student's advisor. The review team **recommends** that the School should explore implementing a system whereby students can provide feedback on their supervisor outwith key review checkpoints.

2.5 Accessibility, Inclusivity and Widening Participation

In accordance with the University's Accessible and Inclusive Learning Policy the School of GeoSciences has taken positive steps to ensure that PGR students with protected characteristics can participate fully and equitably in their education. The School also aligns with the University's Research Cultures Action Plan and the PGR Culture Plan which reflect the values of Equality, Diversity and Inclusion (EDI), wellbeing, citizenship, ethics and integrity and learning.

The review team heard details of localised activity relating to EDI, such as the School's Women of Colour Network, which welcomes all staff and students who are women or gender minorities of colour. The primary purpose of the network is to provide a community of mutual support for women of colour, mentoring opportunities, and to provide a platform to exchange ideas and knowledge. The review team noted the incoming Director of PGR's extensive involvement in BAME initiatives across the University. The review team further noted the progress achieved with regard to widening participation (WP) via the review of relevant E4 forms and panels. The review team **commends** the breadth of ongoing activity within the School relating to EDI, such as the Women of Colour Network and the review of E4 WP forms.

The review team noted that while considerable subsidy is provided for undergraduate WP students, there is insufficient funding to attract large numbers of WP students to continue into postgraduate study, particularly amongst Scottish students. Challenges were noted around support of a coherent College-level WP Strategy, however this is currently being taken into consideration as part of a wider College services review. While financial resources are provided for PGR students via donors, funding tends to be ringfenced for specific fieldwork or research activity as opposed to full PGR studentships. The review team heard that the School is hopeful that the Darlington Scholarships, which aim to widen access to eligible PG programmes at the University of Edinburgh, will encourage WP students into PGR study in the longer term.

2.6 Development of Employability and Graduate Attributes

The School provides a range of activities to help develop employability and graduate attributes of its PGR students, including regular networking events, a dedicated industrial engagement unit, internship schemes, annual careers workshops and publicising career readiness provision offered by the University's Careers Service and Institute for Academic Development.

It was noted that the School regularly explores how to better incorporate employability within PhD programmes, such as encouraging students to take up relevant employment opportunities during their period of study, for instance via internships or T&D roles. As referred to in 2.1, it was further noted that the introduction of a 4-year PhD programme could provide greater opportunity for students to undertake internship opportunities and/or obtain training qualifications in

addition to their PhD award. The review team heard that supervisors have a role to play in discussing career aspirations and development with their students, both during the application stage and during annual reviews, particularly as they possess relevant disciplinary expertise.

2.7 Supporting and developing staff

In terms of training requirements for supervisors, supervisors are provided with a detailed explanation of expectations and procedures via the PGR SharePoint and they are required to undertake the *Fundamentals of Supervision* training provided by the IAD. Supervisors are also required to attend in-School supervision training sessions every five years. However, the review team heard that encouraging supervisors to undertake routine training is a challenge and the School is exploring ways in which to address this, such as creating more bespoke sessions around communicating effectively with students and badging the provision as CPD activity. While funding bodies develop supervisor training, it is often difficult for the School to monitor who has undertaken these sessions.

The School is encouraging larger meetings held within the School to begin their business by referencing the University's Dignity and Respect policy. The review team **recommends** that the School considers what training provision is required to be undertaken by supervisors in relation to areas such as EDI, and how the reach of that training is maximised across the School. The review team **recommends** that the School explores alternative ways for supervisors to share and reflect on their practice, for example via the sharing of case studies showcasing good practice.

In terms of T&Ds, there were 178 PhD students who taught in the School during 2023/24. While PhD students are strongly encouraged to undertake a T&D role during their programme of study, it is not mandatory. The review team heard that T&Ds receive a two-part induction course, as well as mandatory courses on topics such as data security, external provision relating to teaching skills and mental health. Students are paid to attend these sessions and they also receive funding to undertake an additional eight hours of relevant training activity. Optional sessions have begun this year around assessment and feedback and field demonstration. It was noted that T&Ds would find it valuable if there was a central SharePoint resource in place which housed all induction and relevant training material.

The review team noted that T&Ds within GeoSciences generally report a positive experience in terms of their induction and expectations in comparison to other Schools. Appreciation was recorded for the staff members within the School who support T&Ds, with it being noted that they are able to swiftly address any issues and contact COs directly on behalf of T&Ds. However, frustrations were noted around professional development being limited for T&Ds, such as not being able to mark or provide feedback on summative assessment at honours level.

The review team heard that there is an inconsistency in the extent to which course organisers (COs) engage with T&Ds employed on their course. It was reported that T&Ds frequently receive no contact from COs, thus they are either left alone to identify their week-to-week responsibilities or are required to prompt their CO to provide them with relevant details. Similarly, it was noted that COs are often unaware of the difference in the responsibilities between the specific roles of the tutor and the demonstrator. The review team further heard that while written guidance is provided, previous training provision for course organisers (COs) with regard to T&Ds is no longer in place due to low attendance and limited capacity within the School to

deliver these sessions. It was noted that these sessions will likely be required to recommence due to the impending changes around the T&D recruitment process and, if these sessions were in place and were well attended by COs, it would help ease the administrative burden on the staff who support T&Ds in responding to individual queries from COs. The review team **recommends** that the School, in collaboration with the tutor and demonstrator student representative, reviews the provision of training sessions for course organisers in their work with tutors and demonstrators, in order to support consistency of experience. This should consider the possibility of making training mandatory.

The review team heard that PGR professional services staff receive various training provision and CPD opportunities. This has included training on suicide prevention, student mental health, first aid, and management. SENSE has also funded PRINCE2 project management certification. However, the review team noted that professional services staff can find it challenging to incorporate CPD activity into busy workloads.

2.8 Learning environment (physical and virtual)

The School seeks to bring research teams together in shared offices in close proximity to their supervisors and facilities. The shared office brings considerable benefits in creating a learning community, peer groups and a sense of being part of the research culture of the School. Offering desk space presents administrative challenges in terms of establishing which desks are being used. Despite the challenges with physical space, GeoSciences is committed to continuing to provide dedicated desks and office space for PGR students.

The review team heard that due to the School being based in three buildings across two different campuses, this can prevent the development of student community and a sense of belonging to the School as a whole, as well as preventing potential interdisciplinary connections being made between students. The challenges of encouraging first year PhD students to engage with other PhD students was noted, as were the issues experienced of encouraging professorial staff to engage in student-led activity such as the student-led GradSchool society. The review team **suggests** that School staff continue to work proactively with students around mechanisms to enhance the sense of student community across all buildings.

However, the review team noted that strong connections are made at the sub-disciplinary level and that activity at the national level can foster interdisciplinary connections. The review team heard of details of one example within the Biosphere research group, whereby weekly seminars receive positive engagement. The review team **commends** the School in its work to bring PGR students together with academic staff in order to strengthen research culture and a sense of community.

3 Assurance and enhancement of provision

The School has appropriate mechanisms in place for setting, maintaining and reviewing academic standards across its PGR provision. There is a well-structured governance and quality assurance framework, ensuring continuous improvement through Board of Studies oversight, Committee structures, student feedback mechanisms, and alignment with national academic frameworks.

Standards are continuously reviewed through annual monitoring activity via School's Annual Quality Report and Annual Programme Reviews. In addition, standards are

maintained and reviewed through External Examiner reporting, efficient mid-course feedback structures and alignment with the SCQF framework.

The School engages in a range of collaborative activity with external partners in order to support a range of activity such as collaborative studentships, particular funding schemes, wider University initiatives and drawing on relevant expertise.

Appendices

Appendix 1: Range of provision considered by the review

Programmes:

Subject Area	Programme Code	Programme Name
Geography	PRPHDHGETS1F	Human Geography and Environmental Sciences with Internship (ESRC) (PhD) - 3.5 Years (Full-time)
Geography	PRPHDHGETS1P	Human Geography and Environmental Sciences with Internship (ESRC) (PhD) - 7 Years (Part-time)
GeoSciences not specified	PRMPHECORM1P	Atmospheric and Environmental Sciences (MPhil)
GeoSciences not specified	PRMPHGEOGE1F	Geology and Geophysics (MPhil) (Full-time)
GeoSciences not specified	PRMPHGEOGE1P	Geology and Geophysics (MPhil) (Part-time) - 4 Years
GeoSciences not specified	PRMPHGEOPY1F	Geography (MPhil) (Full-time)
GeoSciences not specified	PRMPHGEOPY1P	Geography (MPhil) (Part-time)
GeoSciences not specified	PRMSCGEOIP2F	GeoSciences (Individual Project) (Taught) (MSc by Research) - 1 Year (Full-Time)
GeoSciences not specified	PRMSCGEOPY1P	Human Geography (MSc by Research) (Part-time)
GeoSciences not specified	PRMSCGEOPY3F	Human Geography (MSc by Research) (Full-time)
GeoSciences not specified	PRMSCGSATS1F	GeoSciences (Individual Project) (MSc by Research) (Full-time)
GeoSciences not specified	PRMSCGSATS1P	GeoSciences (Individual Project) (MSc by Research) (Part-time)
GeoSciences not specified	PRMSCPALGE1F	Palaeontology and Geobiology (MSc)(R) - 1 Year (Full-time)
GeoSciences not specified	PRMSCPALGE1P	Palaeontology and Geobiology (MSc)(R) - 2 Years (Part-time)
GeoSciences not specified	PRPHDATENS1F	Atmospheric and Environmental Sciences (PhD) with Aarhus University
GeoSciences not specified	PRPHDATENS2F	Atmospheric and Environmental Sciences (PhD) with McGill University
GeoSciences not specified	PRPHDGEOGE1F	Geology and Geophysics (PhD) (Full-time)
GeoSciences not specified	PRPHDGEOGE1P	Geology and Geophysics (PhD) (Part-time)
GeoSciences not specified	PRPHDGEOKU1F	GeoSciences (UoE lead with KU Leuven) (PhD)
GeoSciences not specified	PRPHDGEOPY1F	Geography (PhD) (Full-time)
GeoSciences not specified	PRPHDGEOPY1P	Geography (PhD) (Part-time) - 6 Years
GeoSciences not specified	PRPHDGSGGN1F	GeoSciences (non UoE lead with Groningen) (PhD)

GeoSciences not specified	PRPHDGSKUL1F	GeoSciences (non UoE lead with KU Leuven) (PhD)
Physical Sciences	PRPHDGEOSP1F	PhD in GeoSciences (with placement) (PHD)
Earth, Environmental and Ecological Sciences	PRMPHECORM1F	Atmospheric and Environmental Sciences (MPhil)
Earth, Environmental and Ecological Sciences	PRPHDAESES1F	Atmospheric and Environmental Sciences (Environmental Sustainability) (PHD)
Earth, Environmental and Ecological Sciences	PRPHDAESES1P	Atmospheric and Environmental Sciences (Environmental Sustainability) (PHD) (Part-time)
Earth, Environmental and Ecological Sciences	PRPHDAESGC1F	Atmospheric and Environmental Sciences (Global Change) (PHD)
Earth, Environmental and Ecological Sciences	PRPHDECORM1F	Atmospheric and Environmental Sciences (PhD)
Earth, Environmental and Ecological Sciences	PRPHDECORM1P	Atmospheric and Environmental Sciences (PhD) (Part-time)
	PRPHDNESEO1F	NERC SENSE Earth Observation CDT with Leeds University (UoE lead) (PhD)
	PRPHDNESEO1P	NERC SENSE Earth Observation CDT with Leeds University (UoE lead) (PhD)
	PRPHDPUCGE1F	PUC Edinburgh Dual Award in Geosciences (PhD)

Courses:

Research Planning and Management in the GeoSciences
 Project Design and Literature analysis
 Topics in Palaeobiology and Evolution
 Palaeontology and Geobiology Dissertation (MRes)
 Core quantitative data analysis 1 and 2
 Research Skills in the Social Sciences: Data Collection
 Methodological Debates in Human Geography
 Dissertation in Human Geography

Appendix 2: University Remit

The University remit provides consistent coverage of key elements across all of the University's internal reviews (undergraduate and postgraduate).

It covers all credit bearing provision within the scope of the review, including:

- Provision delivered in collaboration with others
- Transnational education
- Work-based provision and placements
- Online and distance learning
- Continuing Professional Development (CPD)
- Postgraduate Professional Development (PPD)
- Provision which provides only small volumes of credit
- Joint/Dual Degrees
- Short Courses (even if non-credit bearing)

1. Strategic overview

The strategic approach to:

- The management and resourcing of learning and teaching experience,
- The forward direction and the structures in place to support this.
- Developing business cases for new programmes and courses,
- Managing and reviewing its portfolio,
- Closing courses and programmes.

2. Enhancing the Student Experience

The approach to and effectiveness of:

- Supporting students in their learning
- Listening to and responding to the Student Voice
- Learning and Teaching
- Assessment and Feedback
- Accessibility, Inclusivity and Widening Participation
- Learning environment (physical and virtual)
- Development of Employability and Graduate Attributes
- Supporting and developing staff

3. Assurance and Enhancement of provision

The approach to and effectiveness of maintaining and enhancing academic standards and quality of provision in alignment with the University Quality Framework:

- Admissions and Recruitment
- Assessment, Progression and Achievement
- Programme and Course approval
- Annual Monitoring, Review and Reporting
- Operation of Boards of Studies, Exam Boards, Special Circumstances
- External Examining, themes and actions taken
- Alignment with SCQF (Scottish Credit and Qualifications Framework) level, relevant benchmark statements, UK Quality Code
- Accreditation and Collaborative activity and relationship with Professional/Accrediting bodies (if applicable)

Appendix 3: Additional information considered by review team

Prior to the review visit:

- School Reflective Report
- Data Reports for PGR (including, but not limited to, entrants, awards and demographic data)
- School Annual Quality Reports (2019-24)
- College Scrutiny of Academic Standards
- School Graduate Outcomes Survey data
- Student Experience Surveys (PRES)
- PGR Student Committee minutes (2023-24)
- List of supervisors and supervision load data
- Careers Service report
- School PGR Office SharePoint
- EDI Student Report (EDMARC) 2024
- Generative AI guidance: For Staff
- Generative AI guidance: For Students
- Research Cultures Action Plan | The University of Edinburgh
- Student voice | The University of Edinburgh
- Student representation | The University of Edinburgh
- Quality Assurance Framework | The University of Edinburgh

Appendix 4: Number of students



INTERNAL PERIODIC REVIEW ENTRANTS FOR SELECTED PROGRAMMES

The number of students who enter on to the selected programmes each year. If the number of entrant is 0, it means that there are applications for the programme, but there is no entrant.

Programme Name	2020/21		2021/22		2022/23		2023/24		2024/25	
	Entrants	Students	Entrants	Students	Entrants	Students	Entrants	Students	Entrants	Students
Atmospheric and Environmental Sciences (MPhil)	0		0							
Atmospheric and Environmental Sciences (PhD)	30	25	18	14	19	14	25	25	7	7
Atmospheric and Environmental Sciences (PhD) (Part-time)	1	2	0				0		0	
Geography (MPhil) (Full-time)	0									
Geography (MPhil) (Part-time)	0									
Geography (PhD) (Full-time)	13	12	12	11	9	8	6	5	9	9
Geography (PhD) (Part-time) - 6 Years	0		1	1			0		1	1
Geology and Geophysics (MPhil) (Full-time)	1	1	0		2	2				
Geology and Geophysics (PhD) (Full-time)	15	15	12	12	11	11	15	15	7	7
Geology and Geophysics (PhD) (Part-time)	0		0		1	1	0		0	
GeoSciences (Individual Project) (MSc by Research) (Full-time)	3	3	4	5	7	7	4	4	6	6
GeoSciences (Individual Project) (MSc by Research) (Part-time)	1	1			1	1	0			
GeoSciences (Individual Project) (Taught) (MSc by Research) - 1 Year (Full-Time)	0		2	2	0		0		2	2
GeoSciences (non UoE lead with KU Leuven) (PhD)							1			
Human Geography (MSc by Research) (Full-time)	3	3	2	2	0		1	1	0	
Human Geography (MSc by Research) (Part-time)			0							
Human Geography and Environmental Sciences with Internship (ESRC) (PhD) - 3.5 Years (Full-time)									1	1
NERC SENSE Earth Observation CDT with Leeds University (UoE lead) (PhD)		5		4		3		1		
Palaeontology and Geobiology (MSc)(R) - 1 Year (Full-time)	8	8	7	7	10	10	4	4	7	7
Palaeontology and Geobiology (MSc)(R) - 2 Years (Part-time)	0		2	2						
PhD in GeoSciences (with placement) (PHD)							1			