The University of Edinburgh

Internal Periodic Review

Earth Sciences and Geography

(School of GeoSciences)

Undergraduate Provision

12 – 13 March 2025

Contents

Executive summary

This report comprises the outcomes from the internal review of undergraduate provision in Earth Sciences and Geography, 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 the sense of belonging and community among students and staff, local access to professional support from Student Experience Team and Teaching Office staff, and the approach to using Generative AI as a learning tool and excellent practice in ethical use of Generative AI and critical analysis of outputs. Further commendations are included in the report.

Key recommendations

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

- **Structure and strategy:** the School to develop a shared vision and strategy for research-led undergraduate provision to ensure fairly and transparently allocated resource and to ensure resilience.

- **Assessment and feedback:** the School to continue with development of standard marking rubrics and ensure these are consistently implemented and shared with students to ensure that they know what is expected of them, and so that they are better able to understand the development of their learning and skills as they move through their degree programmes.

- **Fieldwork:** related to subject-specific remit item – the School consider opportunities for embedding preparation for fieldwork activity in the curriculum. The School should consider the implications of fieldwork locations in relation to sustainability (for example financial and carbon footprint impacts) and in engaging with the implications of calls to decolonise the curriculum for all fieldwork undertaken in the School.

Further detail on the above and additional recommendations are included in the report.

Commendations, recommendations and 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 approach to using Generative AI as a learning tool. There was some excellent practice relating to the ethical use of Gen AI and critical analysis of outputs from it in 2nd year MA Geography. (Learning and Teaching)	2.1
2	A wide choice of programmes and courses, involving research-led teaching across a variety of disciplines and subjects, is a feature of the School's undergraduate provision, one that seems important to students, which the review team **commends**. (Learning and teaching)	2.1
3	The review team **commends** the School on its sense of belonging and community. This was evident among both students and staff. There is collegiality among staff who felt supported by colleagues. Students identify positively with their cohort and with the School. Community Champions are proactive and looking to develop peer support opportunities such as the reintroduction of the GeoPALS scheme. (Community)	2.3
4	The review team **commends** the Student Experience Team (SET) and the Teaching Office staff. These are impressive resources, providing support for academics and enabling academic activity. Having local access to this support – informed by School-specific expertise as well as understanding and knowledge of the University more widely – is extremely valuable and both students and staff were very grateful for the professional support provided by the SET and the Teaching Office. (Student Support)	2.3
5	The review team **commends** the strong examples of cohort activity (especially through a connection with fieldwork and within the context of a relatively small cohort group) as the School has responded to the introduction of the new student support model. (Student support)	2.3
6	The SET has developed a tracker resource which records SSLC actions and responsibilities and students have access to these so they can see progress made. The review team **commends** the development of the SSLC tracker. (Student voice)	2.4
7	Tutors and demonstrators are a crucial part of teaching within the School. The review team **commends** the co-ordinating team which is providing good support, training and processes to enable the tutoring and demonstrating function; this is a small team supporting a large number of tutors and demonstrators. (Tutors and demonstrators)	2.7
8	The review team found evidence of some good support for teaching and for early career staff which the review team **commends**. An example is an away day for new academic colleagues. More generally, the Teaching Office is a valuable resource for teaching. Some support	2.7

	was also happening informally which emphasises the collegial nature of staff cohorts within the School. (Learning and teaching)	

Recommendations

Areas for development and enhancement – progress to be reported.

Priority	Recommendation	Section in report	Responsibility of
1	**Structure and strategy** The review team **recommends** that the School develops a shared vision and strategy for research-led undergraduate provision to ensure fairly and transparently allocated resource to ensure resilience. The complex School structure does not appear to support teaching resilience. Academic staff recruitment seems to be dominated by the needs of the research institutes and so either new staff have to deliver teaching that is not in their immediate research area, or programmes have to be retrofitted for available expertise. (The review team noted that this may be more of an issue in Earth Sciences than Geography because of more prescriptive accreditation requirements.) This makes it difficult to rotate staff away from some intense teaching demands and leaves the system vulnerable to staff absence, making longer term strategic planning difficult. Embedding teaching strategy more centrally within the overall School strategy is important for consistency and setting expectations within the School's structure. Furthermore, it is important to ensure that all key voices are included in committee discussions (for example, the Tutor and Demonstrator team appear to be missing from Education Committee when tutoring is essential for teaching delivery).	1	School
2	**Assessment and feedback** The review team **recommends** that the School continue with development of standard marking rubrics and ensure these are consistently implemented and shared with students to ensure that they know what is expected of them, and so that they are better able to understand the development of their learning and skills as they move through their degree programmes. The moderation process should be checked to ensure it is working as expected.	2.2	School

	The review team **recommends** that the School consider setting baseline expectations on feedback and ensure these are communicated and implemented across the School.	2.2	School
3	**Fieldwork** (subject specific remit 1) The review team **recommends** that the School consider opportunities for embedding preparation for fieldwork activity in the curriculum. The School should consider the implications of fieldwork locations in relation to sustainability (for example financial and carbon footprint impacts) and in engaging with the implications of calls to decolonise the curriculum for **all** fieldwork undertaken in the School. There is potentially a missed pedagogical opportunity, where sustainability and the intellectual power relations around (de)colonisation could inform field learning and teaching. It is important to involve students in discussions around the fieldwork review. Consideration should also include how student adjustments, inclusivity and accessibility are embedded in fieldwork. Where alternative forms of assessment to fieldwork are needed, equitable opportunities should be available, for example a virtual experience rather than an essay.	2.1	School
4	**Tutoring and demonstrating** The review team **recommends** that the School consider developing open, standard and transparent processes around recruitment of tutors and demonstrators and co-ordination of training support for consistency of experience. In addition to providing the subject content for each class ahead of time, there should also be an agreed minimum provision of guidance on each class format (for example, tutorial handbook and/or formal meetings ahead of classes to explain how the class should be run). There should be clear articulation of expectations for the different roles and responsibilities of tutor, demonstrator and course assistant, and these distinctions should be consistent throughout the School. Clarity on expectations around marking activity should also be set out to encompass tariffs and anticipated time allocated to marking.	2.7	School
5	**Student support model**		

	The review team **recommends** that the School should ensure consistency in the provision of academic elements within the student support model. The review team found evidence of unevenness of provision between programmes and some duplication of effort. There are areas of good practice that could be more consistently shared. The review team also found that an unintended consequence of the new student support model may have increased expectations of academic staff that, the review team heard, some academic staff were able to respond to (perhaps because of stage of career) and others were not. This introduced new forms of inequalities in student experience. A wider discussion of what should be expected of Cohort Leads is necessary. The review team **recommends** that the University considers this as part of the evaluation of the student support model, particularly in relation to the Cohort Lead model.	2.3 2.3	School SSCIG
6	**Employability** (subject specific remit 2) The review team **recommends** that the School embed careers and skills development more explicitly within the core taught curriculum, making more visible to students the skills they are already gaining. There are a lot of support and resources available from the Careers Service and the School should actively engage with the Service to help support their employability ambitions.	2.6	School

Suggestions

For noting – progress reporting is not required.

No	Suggestion	Section in report
1	The review team only met with a limited number of teaching staff during the review visit. Therefore it was difficult to make well-informed commendations and recommendations in relation to learning and teaching activity The review team suggests that Academic Quality and Standards considers how to provide more opportunities for teams to meet with teaching staff in future IPRs.	2.1

Section A – Introduction

Scope of review

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

The Internal Periodic Review of Earth Sciences and Geography in 2024/25 consisted of:

- The University's remit for internal review (see Appendix 2)
- The subject specific remit items for the review:
    - Fieldwork
    - Future skills and careers awareness
- 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 Robert Mason, School of History, Classics and Archaeology
External	Professor Jo Sharp, University of St Andrews
External	Dr Alison Stokes, University of Plymouth
External	Dr Lynda Yorke, Bangor University
Internal	Dr Kristel Torokoff, School of Physics and Astronomy
Student	Souparna Mandal, School of Engineering
Administrator	Susan Hunter, Academic Quality and Standards

The School

The School is one of seven within the College of Science and Engineering. It is organised into three research institutes; Earth and Planetary Sciences, Geography and the Lived Environment, and Global Change. Earth Sciences and Geography are two of three subject areas taught at undergraduate level within the School (the third being Ecological and Environmental Sciences).

Physical location and summary of facilities

Geography teaching is located in the central campus at High School Yards with Earth Sciences based at the King's Buildings campus in the Grant Institute and Crew Building.

Dates of previous reviews

Geography – 6 and 7 February 2020
Earth Sciences – 11 and 12 March 2019

Reflective Report

The Reflective Report was prepared by:

- Dan Swanton, Director of Teaching
- Faten Adam, Head of Student Services
- Anthony Newton, Director of Students
- Chloe Cutler-Burton, Student Experience Manager
- Mark Wilkinson, Director of Quality
- Clare Barnes, Academic Lead for Tutors and Demonstrators

The Report was shared with academic staff and professional services involved in delivering the Geography programmes; School Education committees; Student Staff Liaison Committee (SSLC), and all staff and students involved in meetings as part of the review.

Consultation phase
As part of identifying the remit items:

- Discussions at SSLC
- The School had commissioned a company to undertake a portfolio review, and as part of that process, there were focus groups with students which helped identify the themes

Updates on the report were shared with School Education Committee and Undergraduate Education Committee which has student reps, as well as with SSLCs.

Section B – Main report

1 Strategic overview

The School offers honours degrees in Geography and honours and integrated masters degrees in Earth Sciences. The Geology programmes were closed in 2023/24 with Geology now incorporated in the new Earth Sciences and Earth Sciences and Physical Geography programmes.

The majority of students in Earth Sciences and Geography programmes are Scottish or Rest of UK domiciled with a smaller proportion of international students. The School successfully increased its Scottish domiciled student population following a previous internal review recommendation from 2020.

The School is structured around three research institutes with line management of teaching staff located within these research institutes. The undergraduate degree profile does not easily map to the research institutes and the School is aware that this presents some challenges, including that large numbers of academic staff are being line managed by Heads of Research Institutes.

The key decision-making body is the School Planning and Resource Committee. Reporting to this committee are the School Education Committee, which has responsibility for the strategic overview of taught provision (undergraduate and postgraduate), learning and teaching strategy and policy, and new programme and course approval (in advance of the Board of Studies). Operational management of taught undergraduate programmes is delegated to the Undergraduate Education Committee (with two other sub-committees for postgraduate programmes and student recruitment respectively). The review team noted that this committee structure reflected the complexity of the School's organisational structure.

The review team found evidence that the complexity of the School's structure was presenting challenges in relation to resourcing for teaching and strategic planning for research-led undergraduate teaching. The review team **recommends** that the School develops a shared vision and strategy for research-led undergraduate provision to ensure fairly and transparently allocated resource to ensure resilience. The complex School structure does not appear to support teaching resilience. Academic staff recruitment seems to be dominated by the needs of the research institutes and so either new staff have to deliver teaching that is not in their immediate research area, or programmes have to be retrofitted for available expertise. (The review team noted that this may be more of an issue in Earth Sciences than Geography because of more prescriptive accreditation requirements.) This makes it difficult to rotate staff away from some intense teaching demands and leaves the system vulnerable to staff absence, making longer term strategic planning difficult. Embedding teaching strategy more centrally within the overall School strategy is important for consistency and setting expectations within the School's structure. Furthermore, it is important to ensure that all key voices are included in committee discussions (for example, the Tutor and Demonstrator team appear to be missing from Education Committee when tutoring is essential for teaching delivery).

At the time of this review, the University is facing a challenging financial situation and 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

Earth Sciences and Geography teaching teams participate in annual programme reviews and away days to share practice and focus on curriculum development work. The School also used ABC curriculum design for course design and there is a steer on ELDeR (Edinburgh Learning Design Roadmap) workshops for programme development. Academic staff are also involved in the University Curriculum Transformation Programme.

The review team **commends** the approach to using Generative AI as a learning tool. There was some excellent practice relating to the ethical use of Gen AI and critical analysis of outputs from it in 2nd year MA Geography. Engagement with Gen AI is currently led by Course Organisers and although the School is considering its approach, it is awaiting developing institutional guidance in this area.

A wide choice of programmes and courses, involving research-led teaching across a variety of disciplines and subjects, is a feature of the School's undergraduate provision, one that seems important to students, which the review team **commends**.

Fieldwork is a critical pedagogical principle in Geography and Geosciences as set out in the Royal Geographical Society Accreditation process and in the Quality Assurance Agency Subject Benchmark statements. The School had asked the review team to explore this area as one of its subject specific remit items to help it consider how to future-proof its fieldwork activity. A School review of fieldwork is already underway and identified challenges include staff allocation, equality of student experience, concerns around the sustainability of long distance travel, accessibility and the unknown consequences of the current institutional context. Professional services staff also identified challenges with having to work with a third-party intermediary and the University financial system. The review team welcomes the School's fieldwork review, and hopes that this will lead to extending some of the excellent practice already happening in some parts of the School, into standard practice across the whole School. As fieldwork is a compulsory element for some programmes, the School does not charge students for this. The School also identifies fieldwork as a strong cohort building opportunity, fostering connections between students and staff and PhD students. Students the review team met with also identified the wide provision of fieldwork trips, addressing the requirements of a GeoSciences degree, as a key influence on their choosing to come to the University. The review team **recommends** that the School consider opportunities for embedding preparation for fieldwork activity in the curriculum. The School should consider the implications of fieldwork locations in relation to sustainability (for example financial and carbon footprint impacts) and in engaging with the implications of calls to decolonise the curriculum for **all** fieldwork undertaken in the School. There is potentially a missed pedagogical opportunity, where sustainability and the intellectual power relations around (de)colonisation could inform field learning and teaching. It is important to involve students in discussions around the fieldwork review. Consideration should also include how student adjustments, inclusivity and accessibility are embedded in fieldwork. Where alternative forms of assessment to fieldwork are needed, equitable opportunities should be available, for example a virtual experience rather than an essay. The current University financial context also presents a need to think creatively on delivering fieldwork. The review team also considers that the points in this recommendation would support the School's future skills and careers awareness remit item.

The review team only met with a limited number of teaching staff during the review visit. Therefore it was difficult to make well-informed commendations and recommendations in relation to learning and teaching activity The review team suggests that Academic Quality and Standards considers how to provide more opportunities for teams to meet with teaching staff in future IPRs.

2.2 Assessment and Feedback

Recent curriculum work within the School resulted in changes to align with the University's assessment and feedback principles and priorities supported by the School assessment toolkit. Changes include mapping to provide a balance of assessment types in Earth Sciences and assessment design in MA Geography to equip students with critical analysis, reflective practice and collaborative skills.

The School has developed School and programme grade criteria; however, it appears that these are not consistently used across the School. The review team **recommends** that the School continue with development of standard marking rubrics and ensure these are consistently implemented and shared with students to ensure that they know what is expected of them, and so that they are better able to understand the development of their learning and skills as they move through their degree programmes. The moderation process should be checked to ensure it is working as expected. The review team also found evidence of inconsistency in the amount of assessment between subject areas. which was overburdening staff involved in marking and also Teaching Office staff who support the assessment process. Mapping pieces of assessment, involving timings and student workloads, across each semester of each programme (in consultation with the Teaching Office as well as academic colleagues), would support the effectiveness of assessment in the learning process.

The review team found that there was also evidence of inconsistency in the quality of feedback and the application of the common marking scheme, as well as variability of feedback practice. The students with whom they met identified inconsistency as a more significant issue than timeliness of feedback return. The review team **recommends** that the School consider setting baseline expectations on feedback and ensure these are communicated and implemented across the School.

2.3 Supporting students in their learning

The review team **commends** the School on its sense of belonging and community. This was evident among both students and staff. There is collegiality among staff who felt supported by colleagues. Students identify positively with their cohort and with the School. Community Champions are proactive and looking to develop peer support opportunities such as the reintroduction of GeoPALS scheme. This is clearly supported by having local access to the Student Experience Team, Teaching Office and Digital Education Team.

The review team noted that before the new student support model was rolled out across the University, the School of GeoSciences already had a system in place for providing pastoral support to students from professional services staff who were separate from the academic team. Following the introduction of the new student support model, the number of student advisers in the Student Experience Team (SET) had increased within the School. This team is also providing support for students on course choices when they first arrive at the University. The review team

commends the Student Experience Team (SET) and the Teaching Office staff. These are impressive resources, providing support for academics and enabling academic activity. Having local access to this support – informed by School-specific expertise as well as understanding and knowledge of the University more widely – is extremely valuable and both students and staff were very grateful for the professional support provided by the SET and the Teaching Office.

The review team found evidence of some good practice in relation to cohort activity. In some areas this was driven by Cohort Leads but in others it was student-led. It appeared that Cohort Lead activity worked best with smaller cohorts, for example where cohort activities are embedded in field-based teaching. Where this was the case Cohort Leads were able to be more proactive and communication was easier. Fieldwork, usually taking place across a particular cohort, provides an excellent opportunity for promoting cohort identity and permitting students to work with a Cohort Lead, especially when this takes place at the start of the academic year. However, the review team recognises that this puts significant demands on Cohort Lead time.

Students the review team met with were confident that they could approach the SET for advice and that the SET, as a first point of contact, would be able to direct them to appropriate sources. Students were confident that they could approach academic staff for advice on specific courses, although sources of advice appeared less clear when on placement. Since the introduction of the new student support model, staff felt that something was missing in terms of academic support, such as the provision of references and advice on course choice. Although there was evidence of some excellent Cohort Lead activity, especially where a Cohort Lead had the chance to work with a relatively small group of students within a fieldwork context, this was not consistent across the School, and the students who met with the review team recognised these inequalities. Students also acknowledged that some additional academic contact, particularly in the early years might help them.

The review team **commends** the strong examples of cohort activity (especially through a connection with fieldwork and within the context of a relatively small cohort group) as the School has responded to the introduction of the new student support model. The review team **recommends** that the School should ensure consistency in the provision of academic elements within the student support model. The review team found evidence of unevenness of provision between programmes and some duplication of effort. There are areas of good practice that could be more consistently shared. There may also be opportunities to liaise with other areas within the University to learn from practice in this area. The review team also found that an unintended consequence of the new student support model may have increased expectations of academic staff that, the review team heard, some academic staff were able to respond to (perhaps because of stage of career) and others were not. This introduced new forms of inequalities in student experience. A wider discussion of what should be expected of Cohort Leads is necessary. The review team **recommends** that the University considers this as part of the evaluation of the student support model, particularly in relation to the Cohort Lead model.

2.4. Listening and responding to the Student Voice

The School has had a strong performance in the National Student Survey (NSS) within the institution and is doing some work with final year students to encourage reflection on the full period of their degree programmes. Honours year students the review team met with felt that low satisfaction scores were less of a reflection on the

School and more related to University-wide issues they had experienced in recent years. Where issues are identified, the School finds these generally map to institutional priorities. Issues can also be identified through the Student Staff Liaison Committees (SSLCs) and the School has taken steps to enhance these committees to focus on gathering student feedback. The SET has developed a tracker resource which records SSLC actions and responsibilities and students have access to these so they can see progress made. The review team **commends** the development of the SSLC tracker.

As noted above, students have a clear sense of belonging and community within their programmes. The School has introduced Student Community Champions (commended above) at undergraduate level this academic year to strengthen the connection between the SET and students.

2.5 Accessibility, Inclusivity and Widening Participation

The School operates outreach activity specifically targeted at widening participation (WP) students and members of the SET are registered as WP mentors and provide tailored support. The School collaborates with the Disability and Student Learning Service to support disabled students and contributes to the Centre for Open Learning's International Foundation Programme which aims to diversify recruitment and support international students. As noted in section 2.1 above, there are opportunities to enhance accessibility and inclusivity in fieldwork.

The School is aware of potential barriers for some students in their ability to take up placements, for example if these are not paid opportunities or require relocation away from Edinburgh. Discussions are ongoing on how the School can support more accessibility in this area and plans to embed activity in the curriculum.

2.6 Development of Employability and Graduate Attributes

The School had asked the review team to focus on employability as part of this review in relation to the remit item, future skills and career awareness. There are already some good ideas and practice on skills and employability within the School, and the team encourages the School to develop these. There was some evidence of cohort events being used to signpost careers resources and events, however there were difficulties in coordinating these events across the School. The School has tried some mentoring activity, including alumni mentoring, however this is resource-intensive and often depends upon proactive colleagues. A member of the School SET has a remit to support mentoring and the Careers Service is developing resources for mentoring. The review team **recommends** that the School embed careers and skills development more explicitly within the core taught curriculum, making more visible to students the skills they are already gaining. There are a lot of support and resources available from the Careers Service and the School should actively engage with the Service to help support their employability ambitions.

2.7 Supporting and developing staff

Academic staff are encouraged to undertake continuing professional development. The preferred route for most is through the Edinburgh Teaching Award to gain AdvanceHE accreditation. New staff have a 50% reduction of their teaching allocation in their first year to allow them to undertake professional development.

Specialised training in mental health first aid, suicide intervention and dealing with student disclosures of sexual violence is provided for all SET staff.

Tutors and demonstrators are a crucial part of teaching within the School. The review team **commends** the co-ordinating team which is providing good support, training and processes to enable the tutoring and demonstrating function; this is a small team supporting a large number of tutors and demonstrators. The tutors and demonstrators the review team met were clearly committed to their roles, enjoyed their teaching and the colleagues they worked with.

The review team heard evidence of some inconsistencies in experience relating to the training and support available at course level. There was also some evidence of opaque processes in recruitment for these roles. Consistent practice in allocation of resources and teaching was not always clear and the review team heard examples of practice not aligned with School policy. The review team **recommends** that the School consider developing open, standard and transparent processes around recruitment of tutors and demonstrators and co-ordination of training support for consistency of experience. In addition to providing the subject content for each class ahead of time, there should also be an agreed minimum provision of guidance on each class format (for example, tutorial handbook and/or formal meetings ahead of classes to explain how the class should be run). There should be clear articulation of expectations for the different roles and responsibilities of tutor, demonstrator and course assistant, and these distinctions should be consistent throughout the School. Clarity on expectations around marking activity should also be set out to encompass tariffs and anticipated time allocated to marking.

The review team found evidence of some good support for teaching and for early career staff which the review team **commends**. An example is an away day for new academic colleagues. More generally, the Teaching Office is a valuable resource for teaching. Some support was also happening informally which emphasises the collegial nature of staff cohorts within the School.

2.8 Learning environment (physical and virtual)

In 2023-24, Earth Sciences and Geography piloted a ‘bring your own device’ scheme on undergraduate courses. This was initiated due to a lack of suitable space for data science and analysis teaching. The scheme is supported by the Library laptop loan service to ensure accessibility for all students. ‘Bring your own device’ has since been extended to other data science teaching across the School. There are some challenges in identifying spaces with suitable access to power sources and Wi-Fi which means staff need to check spaces prior to booking.

A GeoSciences Student Hub on SharePoint was introduced by the SET in 2023 to provide key teaching and learning information for students.

3 Assurance and enhancement of provision

The School has appropriate mechanisms in place for setting and maintaining academic standards. There is a well-established governance and quality assurance framework, ensuring continuous improvement through Board of Studies oversight, External Examiner engagement, student feedback mechanisms, and alignment with national academic frameworks.

Standards are continuously reviewed through annual monitoring activity through the 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 (although response tends to be limited) and alignment with the SCQF framework.

There are processes in place for analysis of key themes from External Examiner reporting through the University's External Examiner Reporting System. The School notes that responses to External Examiner reports can be variable in some areas and is working with College to ensure consistency.

Appendices

Appendix 1: Range of provision considered by the review

Programmes:
Environmental Geoscience (BSc Hons) - 4 Years (Full-time)
Earth Sciences (BSc Hons) - 4 Years (Full-time)
Earth Science and Physical Geography (BSc Hons) - 4 Years (Full-time)
Geophysics and Geology (BSc Hons) - 4 Years (Full-time)
Environmental Geoscience (BSc Hons)
Geophysics and Geology (BSc Hons)
Geology (MEarthSci)
Geology (BSc Hons)
Geophysics and Meteorology (BSc Hons)
Geology and Physical Geography (BSc Hons)
Geology and Physical Geography (MEarthSci)
Geophysics (BSc Hons)
Geophysics and Geology (MEarthPhys)
Geophysics and Geology with Professional Placement (MEarthPhys)
Geophysics and Meteorology (MEarthPhys)
Geophysics and Meteorology with Professional Placement (MEarthPhys)
Geophysics (MEarthPhys)
Geophysics with Professional Placement (MEarthPhys)
Earth Sciences (MEarthSci Hons) - 5 Years (Full-time)
Earth Science and Physical Geography (MEarthSci Hons) - 5 Years (Full-time)
Geophysics and Geology with Professional Placement (MEarthPhys Hons) - 5 Years (Full-time)
Geophysics and Geology (MEarthPhys Hons) - 5 Years (Full-time)
Geography and Archaeology (MA Hons)
Geography and Economics (MA Hons)
Geography and Economic and Social History (MA Hons)
Geography with Environmental Studies (MA Hons)
Geography (BSc Hons)
Geography (MA Hons)
Geography and Politics (MA Hons)
Geography and Social Anthropology (MA Hons)
Geography and Sociology (MA Hons)
Geography and Social Policy (MA Hons)
BSc General GEO
BSc Ordinary Sciences GEO
Full Year Courses for Visiting Students GEO
Semester 1 Courses for Visiting Students GEO
Semester 2 Courses for Visiting Students GEO

Courses:
Earth Dynamics
The Dynamic Earth
Oceanography
Introduction to Geophysics
Natural Hazards
Physics of the Earth
Introduction to the Geological Record
Earth Modelling and Prediction 2
Global Tectonics and the Rock Cycle

Geomaterials
Earth Science Fundamentals for Geophysicists
Evolution of the Living Earth
Environmental Geochemistry of the Earth's Surface
Geophysical Data Science
Earth Modelling and Prediction 2
Introduction to the Geological Record
Earth Science Data Analysis 1
Earth Sciences for Society
Geology and Landscapes
Earth Materials: From atoms to planets
Rock Forming Processes
Earth Science Data Analysis 2
Field Skills for Earth Sciences
Field Skills for Earth Sciences and Physical Geography
Field Course in Tropical Marine and Terrestrial Geoscience
Field Skills for Geology and Physical Geography
Structural Analysis of Rocks and Regions (SARR)
Research Methods in Physical Geography (RMPG)
Mathematical and computational methods in Geophysics
Research Training for Geophysics
Global Environmental Change- Foundations
Replacement 4th-year Environmental Geoscience field course
Environmental Geosciences Projects
Geology Dissertation
Hydrocarbon Reservoir Quality
Topics in Global Environmental Change
Geomagnetism
Dissertation in Geology and Physical Geography
Applied Environmental Geochemistry
Environmental Problems and Issues
Global Environmental Change
Geophysics Project 1
Geophysics Project 2
Geoscience Outreach
Geophysics Project
Advances in Metamorphism
Hydrogeology 2: Simulation of Groundwater Flow and Transport
Formation and Evolution of Continents
Hydrogeology 1: Applied Hydrogeology
Earth Surface Processes
Environmental Geoscience 4th Year Field Course
Geoscience Outreach and Engagement
Frontiers in Research
Ore Mineralogy, Petrology and Geochemistry
Igneous Petrogenesis
Topics in Palaeobiology and Evolution
Applied Hydrogeology and Near Surface Geophysics
Earth's Atmospheric Composition
Practical Geochemistry and Data Analysis
Field Skills for Geology
Palaeontology and Sedimentology
Igneous, Metamorphic and Ore Processes
Petroleum Systems
Geophysical Imaging and Inversion

Geophysical Measurement and Modelling
Geophysics International Field Course
Planetary Geochemistry
Planetary Interiors
Geophysical Investigation of Earth Resources
Natural Hazards and Risk
Nuclear Waste Management: Principles, Policies and Practice
Evolution of the Modern Earth and Cyprus Excursion for Geology and Physical Geography
Evolution of the Modern Earth and Cyprus Excursion for Geologists
Geophysics Professional Placement
Changing Marine Biogeochemical Cycles
Geological Evolution of the British Isles
Planetary Science
Hydrogeology 2: Simulation of Groundwater Flow and Transport
Earth's Atmospheric Composition
Planetary Science
Scientific Computing Skills
Earth Modelling and Prediction
Topics in Global Change
Environmental Sensitivity and Change
Geomorphology
Economic and Political Geography
Social and Cultural Geography
Human Geography
Fundamental Methods in Geography
Physical Geography
Global Change
Research Skills in Physical Geography
Environmental Geography
Critical Approaches to Landscapes, Power and Society
Scotland's Futures
Geographies of economies, environment and politics
Quantitative Methods in Geography
Qualitative Methods in Geography
Geography Small Research Project
Geography Fieldwork: Foundations (Physical)
Research Design in Geography
The Nature of Geographical Knowledge
Geography Fieldwork: Foundations (Human): Cape Town
Geography Fieldwork: Foundations (Human)
Key Methods in Physical Geography
Physical Geography Year 3 Field Course (Spain)
Key Methods in Human Geography
Geography Fieldwork: Foundations (Human)
Geography Small Research Project
Fieldwork in Human Geography (A)
Fieldwork in Human Geography (B)
Catchment Water Resources
Principles of Geographical Information Science
Geography Dissertation
Remote Sensing and Global Climate Change
Geography in the Archive
Physical Geography Fieldwork: Iceland
Glacial Processes and Geomorphology
Physical Geography Fieldwork: Scottish Highlands

Eroding Landscapes: Mountains, Hills and Rivers
Human Geography Fieldwork: Journey to the Western Isles
Encountering Cities
Volcanoes, Environment and People
The Geography of Health
Divided Cities
People, landscape change and settlement: the last 15,000 years
Landscape Dynamics - techniques and applications
Geography Dissertation in Sustainable Development
Researching with media: ordinary, popular and indigenous people's knowledges
Development and Decolonization in Latin America
Geographies of Food
Space, place and sensory perception
Writing Landscape
Ice and Climate
Geography, Science, Civil Society
Frontiers in Human Geography: Capital, Land & Power
Environmental Justice
Advanced Ethnography: Documenting City Life
Land and Landscape: Explorations in Society and Nature
Geographies of the Border
Capital, Land and Power
The Blue Humanities: Studying the Sea
Geographies of Mobility
Data Science for Geographers
Research Design for Physical Geography
The Art of Listening: Advanced Qualitative Research
Fundamentals of Research Design
Researching with Media
Eroding Landscapes: Mountains, Hills and Rivers
Principles of Geographical Information Science
The Geography of Health
Volcanoes, Environment and People
Geographies of Food
Queer Geographies: Spatialising Sexuality and Gender
Problematising Environment and Society
Fieldwork in Human Geography
Religion, Place and Politics
Global Hydrology
Black Geographies
Project Design and Literature Analysis
Geoscience Research Project
Frontiers in Earth Science
MEarthSci field training
Research Methods and Transferable Skills
Geophysics Project for Placement Students
Introduction to Three Dimensional Climate Modelling
Meteorology: Atmosphere and Environment
Meteorology: Weather and Climate
Atmospheric Dynamics
Atmospheric Physics
Physics of Climate
Atmospheric Science Field Skills

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
- Massive Open Online Courses MOOCs (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:

- Reflective Report
- Data Reports, including offers, entrants, course pass rates and degree outcomes
- External Examiner Reports
- School Annual Quality Reports
- Student Experience Survey (NSS)
- Careers Service and Graduate Outcomes Report
- Student Staff Liaison Committee Minutes
- Study and Work Away data
- Degree programme tables
- QAA Subject Benchmarks
- EDI Student Report (EDMARC)
- Academic Standards Scrutiny

During the review visit

- GeoSciences Student Support Diagram

Appendix 4: Number of students

Internal Periodic Review

Student Analytics, Insights & Modelling

Entrants for selected Programmes

(The number of students who enter on to the selected programmes each year.)

	2024/25		2023/24		2022/23		2021/22		2020/21	
Programme	**Entrants**	**Students**	**Entrants**	**Students**	**Entrants**	**Students**	**Entrants**	**Students**	**Entrants**	**Students**
Earth Science and Physical Geography (BSc Hons) - 4 Years (Full-time)	11	11	31	28	0					
Earth Science and Physical Geography (MEarthSci Hons) - 5 Years (Full-time)	1	1	7	7						
Earth Sciences (BSc Hons) - 4 Years (Full-time)	26	22	18	18	0					
Earth Sciences (MEarthSci Hons) - 5 Years (Full-time)	4	4	8	7						
Environmental Geoscience (BSc Hons)			0		24	23	23	27	31	31
Environmental Geoscience (BSc Hons) - 4 Years (Full-time)	21	21	23	24	0		0			
Full Year Courses for Visiting Students GEO		1		6				3		
Geography (BSc Hons)	39	40	39	45	45	46	47	45	37	34
Geography (MA Hons)	69	70	95	96	47	47	58	57	69	73
Geography and Archaeology (MA Hons)					3	2	1	1	3	3
Geography and Economics (MA Hons)			0		11	12	10	8	10	11
Geography and Politics (MA Hons)			0		7	7	9	9	5	6
Geography and Social Anthropology (MA Hons)			0		6	6	4	4	8	8
Geography and Social Policy (MA Hons)			0		5	5	2	3	1	1
Geography and Sociology (MA Hons)					3	4	7	7	3	3
Geology (BSc Hons)			0		19	18	19	18	8	8
Geology (MEarthSci)					2	3	3	3	4	3
Geology and Physical Geography (BSc Hons)			0	1	10	10	12	16	8	8
Geology and Physical Geography (MEarthSci)					5	5	1	2	2	2
Geophysics (BSc Hons)	6	8	6	6	8	8	3	3	6	6
Geophysics (MEarthPhys)	2	2	2	2	1	1	2	1	3	3
Geophysics and Geology (BSc Hons)					3	3	0		1	1
Geophysics and Geology (BSc Hons) - 4 Years (Full-time)	3	3	2	2	0					
Geophysics and Geology (MEarthPhys Hons) - 5 Years (Full-time)	1	1	0							
Geophysics and Geology (MEarthPhys)					0		1	1	2	2
Geophysics and Geology with Professional Placement (MEarthPhys Hons) - 5 Years (Full-time)	0		2	2						
Geophysics and Meteorology (BSc Hons)	3	3	4	3	1	1	4	4	2	2
Geophysics and Meteorology (MEarthPhys)	0		1	2	1	1	0	1	1	1
Geophysics and Meteorology with Professional Placement (MEarthPhys)	1	1	1	1	2	2	1	1	1	1
Geophysics with Professional Placement (MEarthPhys)	0		0		2	2	0		1	1
Semester 1 Courses for Visiting Students GEO		20		24		26		6		1
Semester 2 Courses for Visiting Students GEO				33		24		21		2
Total	**187**	**208**	**239**	**307**	**205**	**256**	**207**	**241**	**206**	**211**