The University of Edinburgh

Internal Periodic Review

School of Engineering

Postgraduate Research Provision

5-6 February 2024

Contents

Executive summary

This report comprises the outcomes from the internal review of postgraduate research provision in the School of Engineering.

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 their support for graduate research students and their focus on enhancing the student experience. Further commendations are included in the report.

Key Recommendations

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

- The review team **recommended** that the School continue work to understand the circumstances and needs of the research student population, to target support and enhance provision to improve the overall student experience.
- The review team **recommended** the School work with students to assess student communication and develop strategies to enhance student engagement. In particular, information about courses, training, events and seminars across the School should be easily accessible, in one space.
- The review team **recommended** that the School work with staff and students to agree guidelines and expectations for working on campus, whilst leaving some flexibility to account for individual needs and circumstances.

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 **commended** the School for the 2nd Year Conference event.	2
2	The review team **commended** the School for topping-up subsidies for students on lower funding levels.	2.5
3	The review team **commended** the professional services team within the Graduate School for their commitment to, and support for, postgraduate students.	2.3
4	The review team **commended** the School for their efforts to reduce the impact of RAAC on students; re-locating staff and students at very short notice, funding extensions for disrupted research and creating drop-in sessions to support affected students.	2.8
5	The review team **commended** EngGradSoc for the organisation of student activities and promoting a sense of community amongst the student body.	2.4
6	The review team **commended** the Graduate School for funding EngGradSoc events and for creating School-run social activities.	2.4
7	The review team **commended** the School for applying a blind-sifting method for the first round of postgraduate research scholarship applications, to ensure any unconscious bias is removed from the initial selection process.	2.5
8	The review team **commended** the School for their proactive approach in engaging and working with central teams to assist with addressing issues experienced with the new People and Money system.	1
9	The review team **commended** the School's outreach programme to promote higher education in STEM subjects within schools.	2.5

Recommendations

Areas for development and enhancement – progress to be reported.

Priority	Recommendation	Section in report	Responsibility of
1	The review team **recommended** that the School continue work to understand the circumstances and needs of the research student population, to target support and enhance provision to improve the overall student experience.	2.5	School
2	The review team **recommended** the School work with students to assess student communication and develop strategies to enhance student engagement. In particular, information about courses, training, events and seminars across the School should be easily accessible, in one space.	2.6	School
3	The review team **recommended** that the School and College work with staff and students to agree guidelines and expectations for working on campus,	2.8	School and College

	whilst leaving some flexibility to account for individual needs and circumstances.		
4	The review team **recommended** that the School and College engage with students to plan for hybrid working within the campus environment.	2.8	School and College
5	The review team **recommended** that the School dedicate a portion of funding for scholarships for Widening Participation students.	2.5	School
6	The review team **recommended** that the School leverage the alumni resource for networking, careers and training needs.	2.6	School
7	The review team **recommended** that the School revisit and consider T&D policies regarding contract limitations, taking student finances into consideration.	2.7	School
8	The review team **recommended** that the School continue to develop their in-house system to allow supervisors to track student T&D hours.	2.7	School
9	The review team **recommended** that the School engage with existing outreach activities to enhance Widening Participation in PGR recruitment.	2.5	School
10	The review team **recommended** that the School review amount of support to attend conferences.	2.6	School
11	The review team **recommended** that the School and College continue to liaise with staff, students, EUSA, Estates, and Accommodation, Catering and Events (ACE) to improve the availability and quality of catering, leisure and sports facilities on the KB campus.	2.4	School and College

Suggestions

For noting – progress reporting is not required.

No	Suggestion	Section in report
1	The review team **suggested** that the School look at creating a hub via MS SharePoint, potentially as a student internship project, to replace the current Wiki space.	2.6
2	The review team **suggested** that the responsibilities and purpose of the Student Staff Liaison Committees be better communicated to students.	2.4
3	The review team **suggested** that the School expand the 2nd Year conference, space allowing, to invite the whole School.	2
4	The review team **suggested** that the School-organised events programme be expanded, and better communicated to students.	2.4
5	The review team **suggested** a focus-group approach might be taken to ascertain the circumstances and needs of the research student body.	2.5
6	The review team **suggested** that the School work with the College Office to establish the general approach/policies, across the Schools, to desk allocation for research students.	2.8

7	The review team **suggested** that the School undertake an audit of the current available space to establish exactly where the deficiencies lie. .	2.8
8	The review team **suggested** that the School remain active in the planning around the new building to ensure it meets their needs as far as possible.	2.8
9	The review team **suggested** that the School look at a hotdesking system for students in their write-up period.	2.8
10	The review team **suggested** that the School could provide students with noise-cancelling headphones and bookable study pods in research spaces to encourage students back onto campus.	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 Engineering (postgraduate research provision) in academic year 2023/24 consisted of:

- The University's remit for internal review (see Appendix 2)
- The subject specific remit items for the review:
    - What should a modern Engineering PhD include, beyond critical path research?
    - Review Widening Participation and Equality, Diversity and Inclusion best practice with appropriate support.
- 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	Dr Ruth McQuillan Usher Institute
External Member	Professor Bill Nimmo Professor of Energy Engineering and Sustainability Head of the Faculty of Engineering Graduate School University of Sheffield
External Member	Professor Xiao Yun Xu Professor of Biofluid Mechanics Director of Graduate School, Faculty of Engineering Imperial College London
Internal External Member	Professor Martin Dindos Director of Graduate School School of Mathematics
Internal External Member (Shadow)	Dr Belen Martin-Barragan Business School
Postgraduate Research Student Member	Philippa Costello School of Social and Political Sciences
Review Team Administrator	Sarah Wyse Academic Administration Officer College of Arts, Humanities and Social Sciences
Review Team Administrator (Shadow)	Claire McIntyre Timetable Planning Manager Student Analytics, Insights and Modelling

The School

The School of Engineering is part of the College of Science and Engineering, and consists of seven institutes:

- Bioengineering;
- Imaging, Data and Communications;
- Energy Systems;
- Infrastructure and Environment;
- Integrated Micro and Nano Systems;
- Materials and Processes;
- Multiscale Thermofluids

Physical location and summary of facilities

The School is located within the King's Buildings Campus, and is spread over a number of buildings across the campus.

Date of previous review

19-20 October 2017

Reflective Report

Author: Dr Jonathan Terry

Consultation: Head of School, Head of Graduate School, School Director of Quality, Deputy Director of Professional Services, Graduate School Office Supervisor.

Remit themes were determined with input from all professional services, research and academic staff members and all PGR students via survey. Final remit items were circulated to all staff and postgraduate research students and discussed during the Student Postgraduate Experience Committee.

Section B – Main report

1 Strategic overview

The School of Engineering is part of the College of Science and Engineering. The School offers the following postgraduate research degrees awards: MSc(R); MPhil; PhD; PhD (IS); EngD.

The Edinburgh Research Partnership[1] in Engineering was ranked 1st in Scotland and 3rd in the UK by REF2021 (Research Excellence Framework). The School of Engineering is also partnered with several interdisciplinary centres and Centres for Doctoral Training (CDTs) within the University:
Advanced Care Research Centre;
Centre for Science at Extreme Conditions;
Centre for Biomedical Engineering;
Scottish Mechanotransduction Consortium;
Edinburgh Materials Mircoanalysis Centre;
Edinburgh centre for Synthetic Biology;
BRE Centre for Fire Safety Engineering.

The School of Engineering has tripled in size over the past fifteen years. The School is aiming for a ratio of 1:3 academic staff/students. The School also employs a number of technical support and professional services staff.

The School hopes to introduce a new four-year PhD structure that would better fit the funding model that the majority of students hold. The proposal for this new programme structure is awaiting School-level review/ approval after which it will be presented to the College Curriculum Approval Board (CCAB).

One of the main external challenges faced by the School is the estate - in terms of size, quality and location of buildings, and the lack of facilities available for staff and students. (A new School building is due to open in 2026 which should provide the School with 30% more space. Although this will significantly aid the School in addressing concerns about space, it will not fully resolve the issue.)

The People and Money system has been extremely problematic for the School, particularly around procurement, as specialist equipment and hazardous substances can now be ordered without the required School oversight/authorisation. In addition, the School has experienced issues with the invoicing and payment of student stipends and research grants, the timing for raising requisitions for conferences, as well as suppliers withholding services due to payment delays. The review team commended the School for its proactive approach in engaging central teams to assist with addressing these issues and for creating comprehensive guidance for staff around the use of People and Money in order to mitigate some of the difficulties experienced with the new system.

2 Enhancing the student experience

The approach to enhancing Learning and Teaching

Students in their second year of a doctoral degree are required to participate in an annual conference in April, where they present a poster to showcase their work. The review team commended the conference and suggested that the School expand the event, space allowing, to invite the whole School. The review team commented that a similar College-wide conference event may be beneficial for all Science and Engineering students, perhaps towards the end of their research period, in the third year.

[1] The Edinburgh Research Partnership in Engineering is a strategic alliance between Heriot-Watt University and the University of Edinburgh

2.2 Assessment and Feedback

Assessment methods

Research students are progressed and assessed in accordance with the University's *Postgraduate Assessment Regulations*. Where research programmes contain taught courses for credit, assessment of the taught elements adhere to the University's *Taught Assessment Regulations*.

Annual Reviews are standard progression points for PhD students and are recorded via EUCLID. The workflow and sign-off requirements around this process can create delays.

2.3 Supporting students in their learning

Academic and student support structures and mechanisms

The Graduate School was recognised by the student representatives as being extremely helpful and approachable. The review team **commended** the professional services team within the Graduate School for their commitment to, and support for, postgraduate students.

Graduate students are provided with a PC, and are given the choice between a desktop or a laptop. Upgrades/specialist software can be provided for specific projects.

It was noted that, in CDT programmes where a student is based in an industrial/commercial setting, there can be a disparity between what industrial supervisors expect of the students and what the students can produce within a particular timeframe. Where this has been the case, the School/supervisor has acted successfully to manage expectation in terms of academic delivery.

2.4. Listening and responding to the Student Voice

Postgraduate Research Experience Survey (PRES)

The School performed well in the overall student experience, with a score *c*.80% in this area[2]. However, it performed less well in the areas of research culture and community.

Engaging students in their learning, including building and supporting academic communities

Students cited various reasons for electing to study a research degree with the University of Edinburgh.

Students expressed frustration with the lack of on-campus facilities – particularly as the few that were available pre-pandemic, such as the EUSA-managed gym, closed and have not been replaced. There are very few spaces available for research students to socialise within the King's Buildings site, which negatively impacts community building and increases reluctance for students to return to campus. The review team **recommended** that the School and College continue to liaise with staff, students, EUSA, Estates, and Accommodation, Catering and Events (ACE) to improve the availability and quality of catering, leisure and sports facilities on the KB campus.

The review team **commended** EngGradSoc for the organisation of student activities to create a sense of community amongst the student body. The review team also **commended** the Graduate School for funding EngGradSoc events and for creating School-run social activities. The students noted that there are very few events in the winter months and that the School-organised events are not as well advertised as they could be, and more events would be welcome. The review team **suggested** that the School-organised events programme be expanded, and better communicated to students. It was also commented that the School should ensure that they do not become reliant upon the events created by student societies to facilitate social activity within the School.

[2] PRES return rate for the School of Engineering, 2023, was 24.77%

Some of the CDT programmes, particularly IDCORE, were noted to have community-building activities at programme-level, however, those students noted that they only knew others from their programme, but would welcome more School-based events to allow them the opportunity to engage with students on different Engineering pathways. (It was noted that some IDCORE students identified more with their placement company than with the School/University.)

Student Staff Liaison Committees (SSLCs),

Students did not seem aware of the most appropriate route for feedback and issues to be directed, or of the remits and hierarchies of the School and College Staff Student Liaison Committees. The review team **suggested** that the responsibilities and purpose of these committees be better communicated to students.

2.5 Accessibility, Inclusivity and Widening Participation (WP)

It was highlighted that WP is often difficult to identify amongst the postgraduate research population, particularly for international students and the data available is not as thorough as with the taught student population. The School noted a desire to better understand the needs of its research students (for example, students with families or other caring responsibilities), particularly in the context of the current cost of living crisis. The review team **recommended** that the School pursue this venture to recognise where gaps/challenges exist, and the circumstances and needs of their students and how to best support them. It was noted that the School would benefit from defining WP in a postgraduate research context. It was **suggested** that a focus-group approach might be taken to ascertain this information.

The School explained that gender diversity has been an historic issue and previous years have focused on levelling the male: female ratio within the student and academic staff population. The impact of child-care responsibilities is thought to have been a factor in the drop in number of female students since the pandemic; however, the School noted that applications for parental leave have been evenly spread across the student population over recent years. It was explained that all School-funded students receive parental leave, but this is not always the case for internationally funded students. The School strive to make up any difference in funding gaps for students, where possible, which was **commended** by the review team. It was noted that the central campus library has created a creche to support student parents attending campus activities. Consultation is underway to create a similar space within the King's Buildings campus.

The review team **commended** the School for their successful outreach programme that encourages STEM subjects within primary schools and promotes further education in Engineering. PhD students work with school pupils on a particular project and those pupils have the opportunity to showcase their completed work. The review team **recommended** that this programme could be extended to work with secondary schools also, which could help to attract more UK applicants to research degrees in the future. Other voluntary outreach activities undertaken by PhD students include the opportunity to enlist in the Edinburgh Beltane scheme and to participate in events for the Edinburgh International Science Festival. The School try to ensure that the student representatives involved in these outreach activities embody the diversity of individuals that undertake postgraduate study, however, are mindful not to overburden individual students in the process. Although there is no formal recognition available for students who undertake these activities, they do enhance a graduate's CV.

Approach to Diversity and Inclusion e.g., opportunities to enrich the learning experience

Various studentships and scholarships are available for PhD applicants. The review team **commended** the School for applying a blind-sifting method for the first round of postgraduate research scholarship applications, to ensure unconscious bias does not influence the decision on which applicants are taken

forward for consideration. However, the review team suggest that the School check the effectiveness of this method to weigh up the benefit versus the workload for professional services staff. The review team recommend that the School ringfence a portion of funding for WP student scholarships.

2.6 Development of Employability and Graduate Attributes

Employability embedded in the curriculum e.g., work-based learning CDT programmes and higher degree programmes that contain integrated study

The School has a number of CDT programmes that involve industrial placements, and works with a number of industrial partners to deliver research degrees that provide both practical on-site training and experience as well as allowing students to develop a network of contacts in their chosen area of study. In addition, doctoral programmes that include taught courses for credit provide graduates with formal recognition of courses undertaken to enhance knowledge and understanding within their research qualification. Students on standard doctorate programmes have the opportunity to take a variety of level-11 taught courses on a 'class only' basis, however, there is no means of recording this information on the student record. P&M can record this for students who have a staff profile, i.e., those that act as T&Ds; however, the School would welcome a means of recording this information for all students.

Preparing students for their future career

Data on graduate destinations reveal that most engineering doctoral graduates go on to pursue engineering-related careers, or careers based in research activity.

Students on programmes that do not feature industrial placements or taught elements as part of the programme structure, are still required to undertake particular training courses in, for example, lab training, data protection, research ethics, thesis planning, etc. In addition, students are encouraged to undertake additional courses such as writing for research publications.

Students highlighted that they would like the opportunity to attend seminars outside their own immediate discipline/institution; however, they did not have access to a timetable of these events.

The School would like students to seek additional training whilst progressing through PhD. The review team noted a wide range of courses and resources available to students, provided by the School, the Careers Service, and IAD created to enhance student employability skills. However, these were not clearly flagged to students. The review team acknowledged that the school do have a Wiki containing information for staff and students; however, many students were unaware of this space or found it difficult to navigate/search for the information required.

The Review Team recommended that an online space/hub be created with links to centrally updated information, signposting courses and training for research students and to provide a calendar of events and seminars across the School to ensure that students can access information easily and in one space. The review team suggested that the School look at creating a hub via MS SharePoint, potentially as a student internship project, to replace the current Wiki space (noting that SharePoint is widely used across the University for internal-facing content).

Students receive £2k to attend conferences. In addition, some of the institutes have additional funds that students can apply for to attend specific events. The review team felt this figure may be a little low, and recommended that the School revisit this amount to ensure it is comparable with the other Schools within the College.

The Alumni network are invited to large events, but it was noted that these are infrequent, due to lack of space to hold events and a difficulty in keeping track of alumni, many of whom work internationally.

The review team **recommended** that the School tap into the alumni resource, both to talk to students about individual experiences and destinations, and to advise regarding practical training needs for modern Engineering graduate degree roles. These events could be hosted online, which would allow participation from graduates who are based overseas. The School may benefit by seeking advice from central Alumni Services in terms of managing communication with graduates.

Potential employers often offer summer internships, which many students cannot take advantage of due to time and visa restrictions. Short industrial placements can be taken; these are often dependant on the supervisor and their network of contacts.

2.7 Supporting and developing staff

Early career development and ongoing support for academics

The School has a mentoring scheme in place to support new academics, whereby a new academic is paired with an experienced academic from a different institute who acts as a point of contact for support and guidance. Similarly, where a principal supervisor is new to the role, the second supervisor will always be a senior academic.

Supervisor training is undertaken every five years for existing supervisors. As well as the University training, the School has bespoke training specific to Engineering. New supervisors are provided with additional training which includes the framework for progression, assessment, what is expected of students in terms of publications, &c. and how to treat confidential issues that may arise. Supervisors are advised to use the student two-month report to set out expectations in terms of what is expected and what the student might expect in terms of resources and supervisor time.

Internal examiners who are new to the role, or new to the University, must have a Non-Examining Chair appointment to participate in their first viva assessment to support the process and ensure academic rigour.

Support and training for tutors and demonstrators

There are currently 264 PhD students acting as tutors/demonstrators within the School of Engineering. The School runs two in-person Tutor and Demonstrator (T&D) inductions per academic year to complement the main intake points in September and January. Students must complete this training, as well as their two-month report, before they can apply for a T&D position. Student suitability is judged by a committee.

Implementation of the Policy for the Recruitment, Support and Development of Tutors and Demonstrators

The application process, coupled with the induction timeframe, means that most students cannot undertake T&D roles within the first six months of their first year. Whilst acknowledging the School rationale for this, some students highlighted that they have more time in first year to take on a T&D role and that the duties, and the time-management aspect, of these roles are valuable for their PhD studies.

Students felt that T&D induction could be made available online, with an end of course assessment, for the benefit of those that commence programmes outside of the standard intake months and who have to wait for the in-person training sessions.

The School does not allow students to continue T&D roles beyond 42 months, to allow students to focus on completion of their degree, and as a means of addressing completion rates.

The students highlighted that the removal of the ability to undertake T&D work in the write up period means that they may need to seek employment elsewhere, often working longer hours for the same

pay. The review team **recommended** that the School review this policy to allow more flexibility for consideration of students who are on track with their thesis to be allowed to continue T&D roles.

Supervisors do not currently have oversight of the T&D hours of their students. The School is working to develop an in-house system to allow Supervisors to view this information. The review team **recommend** that the School continue with this project to allow supervisors to monitor the T&D hours of their students.

Students are paid via time cards submitted through People and Money, with any anomalies clarified by the Course Organiser. Students can be enrolled as tutors and/or markers, depending on the discipline. Full training is given regarding marking schemes, rubrics, and expectations around student feedback. Similarly, students are provided with feedback on their performance and marked scripts are sample-moderated to ensure consistency and accurate application of marking criteria. Students who excel in tutoring roles can be nominated for the Edinburgh Teaching Award. Students also have the opportunity to feedback, informally, to the Course Organisers on aspects of the course.

Students felt that they were supported in these roles, both by Course Organisers and lab technicians. It was confirmed that they felt the workload matched their expectations. Marking is monitored/moderated by the Course Organiser to ensure parity.
The School is currently looking at the potential to enrol undergraduate Masters students in tutoring roles for pre-honours classes.

2.8 Learning environment (physical and virtual)

Many older buildings are not designed for their current purpose. The review team **suggested** that the School undertake a thorough audit of the current available space versus what is required.

One of the challenges the School has faced with rapid expansion has been related to desk space. The issue has been exacerbated by Covid-related extensions and further space reduction due to RAAC[3]. Currently, all postgraduate students are provided with an allocated desk; however, these are not in constant use due to many students preferring to work from home.

RAAC has impacted *c.*80 students and staff from the James Clerk Maxwell Building, as a result of restricted building access for structural assessment/remedial work. Consequently, affected students have been relocated to available space and labs across the campus which has had a detrimental effect on student culture and community, and put pressure on the School to find alternative spaces with very little to no prior notification or assistance from central University services. The impact is expected to last for 12-24 months. The review team **commended** the School for its efforts to reduce the impact on students and for implementing funded extensions and drop-in sessions for affected students.

Post-pandemic, the School has seen a reduction in the number of students working within the campus, with many preferring to work from home. The School currently allocates a desk to all research students; however, many of these are not used frequently. Students have been largely resistant to the idea of hotdesking and the School felt that a hotdesking system would further reduce the feeling of community within the School.

[3] Reinforced autoclaved aerated concrete

Many students prefer to work from home when scheduling online meetings and events, due to noisy office environments and a desire not to disturb others. The review team **suggested** that the School could address this issue by providing students with noise-cancelling headphones and installing bookable study pods in research spaces, similar to those available in the library. The review team **recommended** that the School and College liaise with students to ensure a suitable environment for hybrid working on campus.

The School noted a resistance to hotdesking amongst the student population, and would like to avoid this system if possible. It was noted, however, that some students are laboratory-based and would not require desk access every day and so a desk-share approach may be a viable option. The review team **suggested** that this could be coupled with the implementation of a hotdesking system for the write-up period only.

The School expressed a desire to understand how other Schools within the College approach the issue of desk space for postgraduate research students. The review team **suggested** that the School contact the College office for advice and assistance in how to obtain this information.

The review team **recommended** that the School and College work with staff and students to agree guidelines for expectations for working on campus whilst leaving some flexibility to account for individual needs and circumstances.

The review team noted that some of these issues are temporary; however, the School needs to accommodate its current student body and plan for any future expansion. The review team **suggested** that the School remain active in the planning around the new building to ensure it meets its needs as far as possible.

The review team **suggested** that the School work with the students to create internal guidance around expectations for campus working for research students and staff, which highlights the benefit of mixing with peers and academics.

3 Assurance and enhancement of provision

The School operates within the University's Quality Assurance Framework and the review team is confident that academic standards are rigorous and robust. The approach within the School for setting and maintaining academic standards is effective, demonstrated within annual quality monitoring and reporting.

Appendices

Appendix 1: Range of provision considered by the review

List of Programmes

MAS code	Title
PRENGOFFRE1F	EngD Offshore Renewable Energy (Joint with UoEx, UoS - UoE Lead) - 4 Years
PRENGOFFRE1P	EngD Offshore Renewable Energy (Joint with UoEx, UoS - UoE Lead) - 8 Years
PRENGSISYS1F	EngD Sensor and Imaging Systems (Joint with UoG, HWU, UoS - UoE Lead) - 4 Years
PRENGSISYS2F	EngD Sensor and Imaging Systems (Joint with UoG, HWU, UoS - Non UoE Lead) - 4 Years
PRMPHBIOEN1F	MPhil Engineering (Bioengineering) - 2 Years
PRMPHBIOEN1P	MPhil Engineering (Bioengineering) - 4 Years (Part-time)
PRMPHENGEL1F	MPhil Engineering - Integrated Micro and Nano Systems (IMNS) - 2 Years
PRMPHENGEL1P	MPhil Engineering - Integrated Micro and Nano Systems (IMNS) - 4 Years
PRMPHENGEL2F	MPhil Engineering (Digital Communications) - 2 Years
PRMPHENGEL2P	MPhil Engineering and Electronics (Digital Communications) - 4 Years
PRMPHENGEL3F	MPhil Engineering (Energy Systems) - 2 Years
PRMPHENGEL3P	MPhil Engineering (Energy Systems) - 4 Years
PRMPHENGEL4F	MPhil Engineering (Infrastructure and the Environment) - 2 Years
PRMPHENGEL4P	MPhil Engineering (Infrastructure and the Environment) - 4 Years
PRMPHENGEL5F	MPhil Engineering (Materials and Processes) - 2 Years
PRMPHENGEL5P	MPhil Engineering (Materials and Processes) - 4 Years
PRMPHENGIN1F	MPhil Engineering - 2 Years
PRMPHENGIN1P	MPhil Engineering - 4 Years
PRMSCENGEL1F	MSc by Research Engineering and Electronics (Digital Communications) - 1 Year
PRMSCENGEL2F	MSc by Research Engineering and Electronics (Energy Systems) - 1 Year
PRMSCENGEL3F	MSc by Research Engineering and Electronics (Infrastructure and the Environment) - 1 Year
PRMSCENGEL3P	MSc by Research Engineering and Electronics (Infrastructure and the Environment) - 2 Years
PRMSCENGEL4F	MSc by Research Engineering and Electronics - Integrated Micro and Nano Systems (IMNS) - 1 Year
PRMSCENGEL4P	MSc by Research Engineering and Electronics - Integrated Micro and Nano Systems (IMNS) - 2 Years
PRMSCENGEL5F	MSc by Research Engineering and Electronics (Materials and Processes) - 1 Year
PRMSCENGEL5P	MSc by Research Engineering and Electronics (Materials and Processes) - 2 Years
PRMSCENGELBP	MSc by Research Engineering and Electronics (Digital Communications) - 2 Years
PRMSCENGELCP	MSc by Research Engineering and Electronics (Energy Systems) - 2 Years
PRMSRBIOEN1P	MSc by Research Engineering (Bioengineering) - 2 Years
PRMSRBIOEN2F	MSc by Research Engineering (Bioengineering) - 1 Year
PRPHDBIOEN1F	PhD Engineering (Bioengineering) - 3 Years
PRPHDBIOEN1P	PhD Engineering (Bioengineering) - 6 Years (Part-time)
PRPHDENGEL1F	PhD Engineering (Digital Communications) - 3 Years
PRPHDENGEL1P	PhD Engineering (Digital Communications) - 6 Years
PRPHDENGEL2F	PhD Engineering (Energy Systems) - 3 Years
PRPHDENGEL2P	PhD Engineering (Energy Systems) - 6 Years
PRPHDENGEL3F	PhD Engineering (Infrastructure and the Environment) - 3 Years
PRPHDENGEL3P	PhD Engineering (Infrastructure and the Environment) - 6 Years
PRPHDENGEL4F	PhD Engineering - Integrated Micro and Nano Systems (IMNS) - 3 Years
PRPHDENGEL4P	PhD Engineering - Integrated Micro and Nano Systems (IMNS) - 6 Years
PRPHDENGEL5F	PhD Engineering (Materials and Processes) - 3 Years

PRPHDENGEL5P	PhD Engineering (Materials and Processes) - 6 Years
PRPHDENGIN1F	PhD Engineering with Beihang University (UoE Lead) - 3 Years
PRPHDENGIN2F	PhD Engineering with Beihang University (Non UoE Lead) - 3 Years
PRPHDENPHD1F	PhD Engineering - 3 Years
PRPHDENPHD1P	PhD Engineering - 6 Years
PRPHDERPEN1F	PhD Edinburgh Research Partnership (ERP) in Engineering - 3 Years
PRPHDINTSM3F	PhD with Integrated Study Integrative Sensing and Measurement (UoE lead with Glasgow) - 4 Years
PRPHDINTSM4F	PhD with Integrated Study Integrative Sensing and Measurement (Non-UoE lead with Glasgow) - 4 Years
PRPHDSOFMI4F	PhD Soft Matter and Functional Interfaces (UoE lead with Durham, Leeds) (Engineering) - 4 Years

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)

Appendix 3 Additional information considered by review team

Prior to the review visit:

- Reflective Report
- College Academic Scrutiny Report
- IPR Year-On Response (2017 Report)
- List of programmes and courses
- School QA model
- School Annual Quality Reports
- School Programme Handbooks
- Programme Statistics Dashboard (applications, progression, completion, degree classification)
- PRES results and free text
- School response to PRES
- SSLC minutes
- Equality and Diversity Student Report
- School organisational and structural charts
- Careers and graduate outcomes
- List of Supervisors
- University Remit

Appendix 4 Number of students

Session Year	2023/4		2022/3		2021/2		2020/1		2019/20	
Programme Name	Entrants	Students	Entrants	Students	Entrants	Students	Entrants	Students	Entrants	Students
Advanced Care (PhD with Integrated Study) - 4 Years (Full-time)	8	8	10	10	9	9				
Advanced Care (PhD with Integrated Study) - 8 Years (Part-time)	0		0		1	1				
Applied Photonics (Non-UoE Lead with Heriot- Watt, Dundee, Glasgow, St. Andrew's & Strathclyde) (EngD) - Full-time 4 Years	7	7	8	8	6	6		10	10	10
Applied Photonics (Non-UoE Lead with Heriot- Watt, Dundee, Glasgow, St. Andrew's & Strathclyde) (PhD with Integrated Study) - 4 Years (Full-time)	3	3	1	1	4	4	2	1	2	2
Applied Photonics (UoE Lead with Heriot- Watt, Dundee, Glasgow, St. Andrew's & Strathclyde) (PhD with Integrated Study) - 4 Years (Full-Time)	0	1			1	1	1			
Applied Photonics (UoE Lead with Heriot- Watt, Dundee, Glasgow, St. Andrew's & Strathclyde) (EngD) - Full-time 4 Years	1				1	1	8			
Edinburgh Research Partnership (ERP) in Engineering		1		1			1	1	3	5
Engineering (Bioengineering) (MSc by Research) - 1 Year (Full-time)	2	2	1	1	0		4	4	1	1
Engineering (Bioengineering) (PHD) (Full-time)									0	
Engineering (Energy Systems) (PhD) (Full-time)			0						0	
Engineering (Joint with Pontificia Universidad Catolica de Chile) (PhD) - 3 Years (Full-Time)			1	1	1	1	2	2		
Engineering (MPhil) - 2 Years (Full-Time)	0		0		0		2	2	0	
Engineering (non-UoE lead with KU Leuven) (PhD) - 3 Years (Full-time)			1	1	1	2				
Engineering (PhD) - 3 Years (Full-time)	56	54	93	92	82	82	108	108	104	104
Engineering (PhD) - 6 Years (Part-time)	2	2	1	1	0		1	1	1	1
Engineering and Electronics - Integrated Micro and Nano Systems (IMNS) (MSc by Research) (Full-time)	2	2	0		1	1	1	1	2	2
Engineering and Electronics (Digital Communications) (MSc by Research) (Full-time)	0		1	1	2	2	1	1	0	
Engineering and Electronics (Digital Communications) (MSc by Research) (Part-time) (MSc by Research) (Part-time)			0		0				0	
Engineering and Electronics (Infrastructure and the Environment) (MSc by Research) (Full-time)	0		0		0		0		0	
Engineering and Electronics (Infrastructure and the Environment) (MSc by Research) (Part-time)	0		1	1	0					
Engineering and Electronics (Materials and Processes) (MSc by Research) (Full-time)	1	1	0		1	1	1	1	0	
Offshore Renewable Energy (Joint with UoEx, UoS - UoE Lead) (EngD)	9	9	10	10	12	12	7	7	11	11
Soft Matter for Formulation and Industrial Innovation (UoE lead with Durham and Leeds) (Engineering) (PhD with Integrated Study) - 4 Years		1								
Wind and Marine Energy Systems and Structures (UoE Lead with Strathclyde and Uni of Oxford) (PhD with	3	3	4	4	5	5	4	4	1	1