

Senate Handbook

Research Students' Handbook

This Handbook supplements the General Student Handbook, and should be read in conjunction with it.

Contents

1	Intro	duction	4
2		Responsibilities	5
3		Registration and Induction	6
	3.1	•	6
	3.2		6
4	Peop	le	8
	4.1	Your Supervisors	8
		4.1.1 Technicians	9
	4.2		9
		Other members of your Supervision Team	10
		The Progress Review Team	11
	4.5	•	12
5		rvision	13
	5.1	Your Supervisors' responsibilities	13
	5.2	·	13
6		ress Reviews	15
	6.1	Progress Review meetings	15
		Matters to be covered in progress reviews	16
	6.3	Scheduling of reviews	18
	6.4	Formal review outcomes	18
		Additional reviews	19
		Qualitative Grading Criteria	19
7		Thesis	23
•	7.1		23
		Help with your thesis	23
	7.3	Submitting your thesis	24
	7.4	Extensions	24
8		arch Student Examination	26
Ü		Your oral examination	26
		Who will examine you?	26
	8.3	•	28
		What to expect from your Supervisor(s)	28
	8.5	Potential outcomes of your examination	30
	8.6	Communication of your outcomes and marks	33
9		iges to Registration	34
J	9.1	Voluntary suspension	34
	9.2	Forced removal: requests by the University to suspend	35
	5.2	your studies	55
	9.3	Forced removal: disciplinary investigations	36
	9.4	Returning to study	36
	9.5	Annual Leave	37
	9.6	Sick Leave	37
	9.7	Maternity and Paternity Leave	37
	9.8	Early terminations of registration	38
	9.9	Transfer to an alternate award	38
10		ptional Circumstances	40
. 0		Definition of exceptional circumstances	40

	10.2	Requirements and evidence	41
	10.3	Exceptional circumstances request procedure	43
	10.4	Appeals against the initial decision	43
	10.5	Confidentiality of exceptional circumstances requests	44
11	Acade	emic Misconduct	45
12	Resp	onsible Innovation and Ethical Approval	47
13	Data	Management Plans	47
14	Intelle	ectual Property and Copyright	48
15	Docto	oral Researchers Core Development Programme	48
16	Healt	h and Safety	48
17	Stude	ent Support	50
	17.1	Learning Support Officers	50
	17.2	Library Support	51
18	Stude	ent complaints and appeals	51
		Mutual Expectations Framework	52
Appe	ndix B	Research student induction checklist	58
Appe	ndix C	An explanation of the oral examination for students	59
Appe	ndix D	Research thesis formats	61
Appe	ndix E	Student Academic Engagement Policy	68
Appe	ndix F	Guidance for students working off-site	70
Appe	ndix G	Guidance for Undertaking Vivas Remotely	75
Appe	ndix H	Research Student Additional Work Guidance and	78
		Notification form for Students	
Appe	ndix l	Alternative PhD route	80

Changes to this document since version 1.6 (August 2023):

- Change of reference from School to Faculty (throughout)
- Addition of statement on staff responsibilities (Introduction)
- Addition of statement defining working days (Introduction)
- Reference added to Research Student Charter (2)
- Revised wording added on working hours (2)
- Addition of statement on health and safety (4)
- Revised wording on changes to supervision team (4)
- Guidance added on thesis word counts (7.1)
- Clarification added that students will fail their award if they do not submit corrections (8.4)
- Guidance added around self-certification for sickness (9.6)
- Revised wording on Intellectual Property and Copyright (14)
- Addition of Mutual Expectations Framework (Appendix A)
- Revised guidance on additional work for students (Appendix H)
- Revised guidance on PhD by Portfolio route (Appendix I)

1 Introduction

This Handbook is designed to support research students in their programmes of supervised research, and their learning support and assessment. It supplements the General Student Handbook, which should be read by all students of the University. The purpose of this Handbook is to outline to students the general expectations and procedures that they are required to adhere to in the management of their studies.

These procedures have been approved by Senate's Research Committee and the Pro-Vice-Chancellor (Research and Innovation) on behalf of Senate and reflect both University Laws and national guidance and expectations set by the Quality Assurance Agency. Senate expects all research students to follow the Handbook in all respects.

This Handbook applies to a range of awards arising from programmes of supervised research. These include:

Master by Research
 Master of Philosophy
 Doctor of Business Administration
 Doctor of Engineering
 Doctor of Philosophy

MSc by Res
MPhil
DBA
EngD
PhD

It excludes awards arising from candidates submitting for a doctorate through a portfolio of published work (including PhD (see Appendix I) and DSc degrees).

An alternative PhD route is offered to students working in industry who have obtained a significant body of research data which could be used towards a PhD. Appendix I sets out the processes to be followed for such a route.

Students undertaking taught modules as part of their research degree are managed, for those taught modules, under the Senate Handbook: Assessment Rules (Taught Courses).

This Handbook (version 1.6) applies fully to all research students, with the following exceptions:

- A Data Management Plan must be completed for students registering after 1st October 2016 but should also be applied to other students if deemed appropriate, based on their registration length/project stage.
- The review process detailed in this Handbook applies to all students, notwithstanding that;
 - Students who registered in SWEE and SATM for their award prior to March 2018 may request to use the previous review system as detailed in version 3.2 of the Managing Research Student Handbook through an application to the DoR.
 - o Students who registered in SoM for their degree before July 2017 will continue to use the previous review system as detailed in version 3.2 of the Managing Research Student Handbook. The new process does not apply to the DBA.
 - o Students who registered in CDS for their degree before June 2018 will continue to use the previous review system as detailed in version 3.2 of the Managing Research Student Handbook.

Throughout this Handbook timescales are referred to as measured in working days. Working days do not include any weekend days or days where the University is closed (public bank holidays or published University closure days).

This Handbook assigns responsibilities for various processes and decisions to particular postholders in the University. Where required for the operation of the University, specific responsibilities may be given to other members of the University by agreement between the relevant University Officers, such arrangements are to be recorded by the Secretary to Senate until such time as the Handbook is updated.

2 Your Responsibilities

Research students at Cranfield are expected uphold the general expected standards of behavior and commitment, as outlined in:

- The Senate Handbook: General Student Handbook:
- The Senate Handbook: Disciplinary Procedures (Student Handbook);
- The Student Charter
- The University's Research Student Charter.

As part of your programme of supervised research, you agree to undertake a number of ongoing responsibilities, these include:

- your own personal and professional development, including, where possible, recognising when you need help and seeking it in a timely manner;
- maintaining regular contact with your Supervisor(s), and preparing adequately for meetings with them:
- keeping to agreed timetables and deadlines (including the planning and submitting of work¹) and generally maintaining satisfactory progress with your programme of research;
- maintaining records of research and meetings in such a way that they can be accessed and understood by anyone with a legitimate need to see them;
- raising awareness of any specific needs or circumstances likely to affect your work, including any additional work outside of your studies (see Appendix I);
- attending any development opportunities (research-related or other) that have been identified when agreeing your development needs with your Supervisors;
- being familiar with the regulations and policies that affect you, including those relating to your award, health and safety, intellectual property, electronic repositories, data management and ethical research;
- adhering to any housekeeping rules and expectations in your study and social areas;
- Any additional responsibilities specific to your research which may be identified during the course of your registration.

At the outset of your registration and throughout your studies, you will, with your Supervisors, jointly agree plans to cover:

- the initial objectives of the research, taking account of any sponsor's requirements;
- your development and general educational needs;
- the means by which you and your Supervisor(s) will communicate and how you will arrange regular meetings;
- the means of monitoring progress in the research and training aspects of the programme.

In addition, if you are funded by UKRI or any other external body you are responsible for checking and bound by the terms and conditions of their funding agreements.

You (or your supervisors) are not permitted to make any recording (audio or video) of any meetings without the express permission of all involved.

Full-time research students are expected to study at least 37 hours per week on their research programme (pro-rata for part-time students). This does not include paid work. Study periods might on occasion fall outside core working hours (8.30 – 17.30). When studying outside of core hours where tasks involve the use of laboratory facilities, this should be discussed and approved in advance with your supervisors (and where appropriate laboratory technicians). Students should familiarise themselves with the University's lone working guidance and the risk assessment should be reviewed for study outside core hours. Where students are required/need to work longer hours on their research, these should be exceptions and not the norm.

¹ Please note all submission times are based on the UK time zone.

3 Your Registration and Induction

3.1 Being a registered student

When you commence your studies, you become "registered" with the University, and remain so until either you have been conferred with a final award, or leave the University either through your own choice or through an enforced termination of registration put into place by the University.

Within this period of registration, there is a formal "period of study": this is the period of time outlined on your registration form at the start of the studies, and for which you pay tuition fees.

By registering as a student you agree that you:

- accepts the terms of the offer of admission and will comply with the Laws of the University
 and other rules properly issued by or on behalf of the University that may be in force from
 time to time
- will pursue your studies with due application and diligence;
- will agree to any medical examinations relevant to the undertaking of your course, if and when required by the University, and will agree to the results of any examination being made known to the University;
- will pay all tuition fees (including all fees for registration, tuition and initial assessment during the specified registration period) and other charges as notified and when due. Changes to registration, extensions and additional tuition and assessment may require additional fees.

It is your responsibility to ensure that Registry are kept appraised of all changes to your name and contact details subsequent to your initial registration and at least until you leave the University at the end of your studies or at graduation. You should update your details through the EVE portal.

3.2 Induction

Your supervisors are responsible for ensuring that you receive a full induction, which will ensure that you are aware both of your responsibilities, the requirement of self-directed learning and of the learning facilities and opportunities that are available to you.

Your Induction should cover:

- The responsibilities of Supervisors and of students (see Appendix A);
- an articulation of the format and frequency of meetings that will take place to discuss your academic progress and additionally what availability the Supervisors will provide outside of these times;
- Faculty orientation, including the immediate research environment and general Faculty facilities, and associated health and safety information;
- Your responsibilities in relation to the University's Student Academic Engagement Policy (see appendix E);
- Your responsibilities in relation to off-site working (see Appendix I);
- other learning support that is available;
- An explanation of the Cranfield ethics policy and details of how to apply for ethical approval for your research projects;
- Additional work outside of your study (Appendix I); and
- Research Students' Annual Leave.

Appendix B provides a detailed checklist of areas that should be covered at induction.

In addition, Doctoral students should make use of the PhD student timeline, which is an interactive guide through all the stages of a typical 3-year PhD. The timeline can be found on the intranet.

Cranfield has three set intake dates per year. On each intake date an induction event will be held. Any students who register, due to exceptional circumstances, outside of the set intake dates will be invited to attend the next University induction event. Specific induction events will also be arranged within each Faculty, and at Theme level through the Cranfield Doctoral Communities and Network. These induction events are intended to compliment the induction that should be covered by your Supervisory Team as outlined above.

If you have any questions or concerns about your induction please contact your supervisors.

4 People

A number of key persons will be involved in supporting you towards completion of your research degree. The academic roles that are in place to support you in your research programme include:

- (a) **Your supervisors** (including two academic supervisors, one of whom is appointed as the Primary Supervisor²);
- (b) a Progress Review Team;
- (c) a Pastoral Adviser;
- (d) where appropriate, a Helper and/or an Industrial Adviser and/or an External Mentor.

The members of each Team, and their roles, are outlined in this Section. Together, these people are responsible for ensuring that you are appropriately supported in your research and that you are making adequate academic progress.

4.1 Your Supervisors

Your Supervisors play an important part in the success of your research degree, and have a number of responsibilities towards you, including:

- (a) maintaining the quality of your academic supervision;
- (b) ensuring that the research facilities and supervision are appropriate for the conduct of your research:
- (c) contributing to your formal review documentation in line with University procedures and timelines:
- (d) ensuring that you are progressing through your research programme, within University and Faculty-level regulations and policies, review and assessment arrangements, and expectations of appropriate levels of student learning support.

Your supervisors are also responsible for your health and safety and your research activities and should be aware of the university's health and safety policy, procedures and general health and safety arrangements. Good health and safety standards are achieved through an effective health and safety induction delivered by your supervisor, where you will be informed of and made aware of the fundamental health & safety requirements at the beginning of your course, and this is supplemented during your studies in teaching and research environments.

The relevant Director of Research (under delegated authority from the Head of Faculty) always appoints at least two Supervisors, one of whom will be designated as your Primary Supervisor, and assume ultimate responsibility for the duties of Supervisors as outlined above. The University has introduced a supervision cap, limiting the number of students any academic can act as supervisor to, in order to promote a good student experience for all students.

Your Primary Supervisor will be a member of academic staff in the same Faculty as you are registered with. Associate Supervisor(s) may be appointed from a different Faculty to the lead Faculty by mutual agreement between the two Faculties. Your Primary Supervisor should be usually based at the same site as you, however where this is not the case, at least one Associate Supervisor should be based at the same site as you.

Wherever possible, all Supervisor appointments are confirmed prior to your registration, and in all circumstances they should be confirmed within one month of the date of your registration. If you have any concerns about the appointments of your supervisors you should contact your Primary Supervisor³ or SAS Lead.

² May be referred to as Lead Supervisor.

³ Throughout the rest of this Handbook, the term "Supervisor" will normally apply to the primary Supervisor.

If you have any issues with a member of your supervision team you should, in the first instance speak to your Pastoral Advisor or SAS lead. Voluntary changes to a supervision team are not the norm, and will only be considered, by the Director of Research, with good reason.

Any changes to your supervisors are authorised by the Director of Research. It should be noted that the University cannot guarantee that the members of a Supervision Team will remain the same through your full registration period: it may be necessary to change the Supervision Team as a result of staff personal circumstances (including retirement, resignation or promotion), changes in the focus of the research project or real or perceived conflicts between members of the Supervision Team and/or with a research student. Wherever possible, all changes should be discussed in advance with you.

There may be reasons where your primary supervisor is absent from the University for a significant period of time and unable to supervise you – where this is the case the University may seek a timely replacement for you if necessary and appropriate. Where an associate supervisor is unable to supervise you for a period of time, your primary supervisor will support you (either themselves or by facilitating other expertise as required).

Where you are without a primary supervisor for a period of time (either temporarily or where a replacement is being sought) you will be supported by others in your School, which may include your other supervisor(s), Thematic Doctoral Leads or Directors/Deputy Directors of Research. . If you have any concerns regarding this you should contact the SAS Research Lead in your School.

Occasionally the University may use staff from outside of the University to supervise research students, where additional expertise is required from outside the University in order to support a student's research. Your **Primary supervisor must be a member of academic staff of the Faculty in which you are based.** Associate Supervisors may be external to the University. All external supervisors will be appropriately trained on the University's policies and procedures. An external supervisor may be used in the event that the University does not have the capacity of expertise to provide this role internally, or where either the Associate or Primary Supervisor has left the University, but wishes (with the mutual agreement of the other supervisor, the relevant Director of Research and student) to remain as part of the supervision team In all cases the external supervisor can only act as the Associate Supervisor.

The Director of Research (or representative) will be responsible for overseeing the use of external supervisors and ensuring that external supervisors provide appropriate support to the student.

4.1.1 Technicians

Where appropriate a technician may be part of the formal supervisory team. Similar to external supervisors, technicians taking on these roles will have substantial research experience in business or industry but may not have a formal academic qualification.

In line with internal and external supervisors, technicians taking on a supervision role must obtain Recognised Teacher Status and must attend the University training on supervising research students, including refresher courses.

4.2 Pastoral Advisers

The relevant Director of Research in your Faculty will appoint one or more persons to fulfil the role of Pastoral Adviser. Pastoral support and advice is primarily sought on matters not directly related to your programme of supervised research (e.g. academic matters such as progress review, quality of supervision or access to appropriate facilities, health, finance and pastoral matters).

Pastoral support is usually provided to all research students through their Student and Academic Support (SAS) Lead in their Faculty. Your SAS Lead should be the first point of contact for raising concerns. Your SAS Lead will then determine the most appropriate individual or Professional Service Unit to deal with the matter which may include support from Student Wellbeing and Disability Support and the Cranfield Student's Association.

If concerns are raised regarding academic matters, the Thematic Doctoral Community Leads in each Faculty are usually the designated Pastoral Advisers. Your SAS Lead may request that you consult in confidence with any of the TDC leads if you have any concerns about the quality of your supervision, the conduct of a meeting with your Progress Review Team, or of the quality of the facilities provided to support your programme of research. Where a Pastoral Adviser is part of your Supervisory Team or Progress Review Team, a TDC lead from outside of your research theme will be approached.

Your Pastoral Adviser may, in consultation with you, raise concerns with the relevant Director of Research, relevant Assistant Registrar in your Faculty, Director of Theme, Head of Faculty or Student Wellbeing and Disability Support (studentsupport@cranfield.ac.uk), as appropriate.

4.3 Other members of your Supervision Team

In addition to the appointment of the formal posts outlined above, the relevant Director of Research may allocate additional members of the University, or external advisers to provide advice, guidance and support to you: these may include temporary or permanent research staff and other research students. These people are not formally Supervisors and therefore do not have the regulatory responsibilities of a Supervisor appointment. Commonly, these may be:

i) Technical support

Technicians who are allocated to the research student to provide information and assist with understanding of background knowledge and techniques, train in the application and use of equipment, instrumentation and other facilities in the research environment.

Technicians are not directly allocated to a research student but will deliver and augment some aspects of the Supervisors responsibilities, such as providing day to day oversight of research facilities, monitoring of health, safety and quality standards of operation and ensuring compliance with University procedures and standards.

Technicians who are not directly allocated to a research student but deliver health and safety inductions, provide information and assist with understanding of background knowledge and techniques, train in the application and use of equipment, instrumentation and other facilities in the research environment.

ii) Helper

These may be research or professional staff, or more advanced research students, who are allocated to you to aid in your understanding and application of specific knowledge or techniques, or the use of equipment or other facilities in the research environment.

iii) Industrial Adviser

An Industrial Adviser may be appointed in circumstances where you undertake studies offcampus and particularly in an industrial laboratory or research facility. It is common for the host company to allocate a member of staff to oversee the activities on-site: they may also contribute specialist knowledge or skills development related to your project.

iv) Mentor

A mentor may be appointed to provide a broader context to your project and to your progression. A Mentor's contribution many include: information, advice and guidance on networking in the external setting, obtaining research data or resources, or access to facilities, sites, equipment or personnel.

4.4 The Progress Review Team

As Part of your research degree your progress will be reviewed at set points during your registration period as detailed in section 6 of this Handbook. These reviews will be conducted by a Progress Review Team.

Your Progress Review Team will include:

- (a) a Progress Review Team Chair;
- (b) one or more Reviewers.

The members of your Progress Review Team are appointed, under delegated authority by the relevant Director of Research. Your Supervisor will nominate the members of the Review Team and the SAS Research Lead will assign the Chair from a pre-agreed list. The Progress Review Panel Chair and the Reviewer/s should be independent of your day-to-day management. The Chair and one or more Reviewers may be appointed from a different Faculty to your lead Faculty by mutual agreement between the two Faculties.

It is usual that at least one of the members of the Progress Review Team will have previous experience in cognate areas of research to your project, and at least one of the Reviewers must have sufficient knowledge and experience to provide a sufficient contribution to an academic debate about the content of your progress.

The Progress Review Team should normally be appointed within three months of your registration date. Any changes to the Progress Review Team are authorised by the relevant Director of Research: it should be noted that the University cannot guarantee that the members of a Progress Review Team will remain the same through your full registration period: it may be necessary to change the Progress Review Team as a result of staff personal circumstances (including retirement, resignation or promotion), changes in the focus of the research project and/or real or perceived conflicts between members of the Progress Review Team and/or with a research student. Wherever possible, all changes should be discussed in advance with you.

The responsibilities of a Progress Review Team include:

- (a) meeting with you at regular defined intervals to review academic progress through your research programme;
- (b) recommending to the Academic Registrar whether or not you should remain registered for your intended degree, and advising on whether your scheduled registration period remains appropriate;
- (c) producing any formal review documentation in line with University procedures and timelines;
- (d) advising you, your supervisor (and the University) via the progress review form of any areas for reflection and/or specific or general training needs identified through the gradings related to your academic progress.

In addition, the Progress Review Panel Chair has further specific responsibilities, including:

(a) ensuring any confidential matters raised in a progress review meeting (as prompted by the review form) are followed up and resolved with appropriate staff members.

- (b) ensuring the meeting is run properly and recorded appropriately;
- (c) ensuring that clear outcomes of the meeting are captured to contribute to your formal student record, including a recommendation about your ongoing registration and any conditions that might apply to this;
- (d) completing the formal review documentation in line with Senate expectations;
- (e) ensuring that any actions resulting from the meeting are carried out in a timely manner;
- (f) ensuring follow up discussions take place with the supervisory team in the event of major reservation or unsatisfactory gradings.

Your Progress Review Team will monitor your supervision levels on a periodic basis through your progress review meetings, primarily through your supervisor meeting records (see section 5.2). The members of your Progress Review Team will make themselves available to you at any point should you wish to raise any confidential concerns you may have about the conduct of your Supervisor(s) or their ability to provide appropriate academic support. Under no circumstances are members of your Progress Review Team able to act in a supervisory capacity or as examiners for your thesis.

4.5 Your Examiners

The relevant Director of Research will appoint Examiners to conduct the examination of your thesis, on the recommendation of your Supervisor(s). The Examiners will be appointed at the point at which you are reaching the completion of your thesis.

The appointed Examiners will include at least one internal examiner and one external examiner.

Your Internal Examiner(s) should be members of academic staff or Recognised Teachers and cannot be one of your supervisors or a member of your Progress Review Team.

Your Examiners (both internal and external) will:

- review your thesis and prepare appropriately for your oral examination;
- write an initial report on your thesis prior to the viva, and, following the viva, a report on your performance and achievement;
- provide a final outcome for your award.

In addition to your examiners an internal Independent Chair of Examiners will also be appointed, who will not have any direct association with you or with the area of your research. The Independent Chair will exclude themself from your actual examination and focus instead on ensuring the conduct of the examination process is fair and appropriate. It is the duty of each of the other examiners to present to the Independent Chair any potential conflict of interests in serving on the board. This includes declaring any personal, professional or familial relationship with you (for example, internal examiners should not have served as a Supervisor or member of your Progress Review Team).

5 Supervision

5.1 Your Supervisors' Responsibilities

Your supervisors are responsible for overseeing your day-to-day academic progress.⁴ In practice, this includes:

- ensuring on initial registration that you have all the information you need in order to begin your research, and that you understand the environment in which you will be studying, and any risks that may need to be managed;
- ensuring that you are informed about any limitations relating to your study/research, including, for example: access to facilities; standard procedures to be followed; University expectations for the proper conduct of research (including ethical approval via the Cranfield University Research Ethics System);
- monitoring your academic progress (in accordance with agreed timetables and targets) and addressing any causes of concern relating to underperformance;
- ensuring you receive appropriate feedback on your work (in accordance with agreed meeting plans and schedules);
- ensuring you meet the requirements of the University Academic Engagement policy (see Appendix E);
- ensuring you are aware of your responsibilities when working offsite (see Appendix F)
- managing requests for:
 - o additional learning support, in consultation with a Learning Support Officer;
 - adjustments to the pattern of study (including changes of mode (PT/FT) and changes to the research topic);
 - adjustments to the overall period of study (including interruptions of study: suspensions or extensions);
- ensuring, when you are nearing completion:
 - that you are aware of the academic standards required (including the expected thesis structure – see Appendix D);
 - that you are briefed appropriately on how to prepare and submit formally your thesis for assessment;
 - that appropriate examiners have been identified and recommended to the relevant Director of Research:
 - that you have all necessary ethical approval documentation which will be required as part of thesis hand-in.
- ensuring, where further work is required by the examiners, that you are provided with sufficient information and support to complete that work for re-assessment.

These duties, and associated responsibilities of the student, are outlined in Appendix A, which is designed to be issued to students as part of the supervisory agreement.

The levels of supervision are monitored on a periodic basis (usually annually) by the Progress Review Team.

5.2 Meetings with Supervisors

Programmes of supervised research do not fit a standard pattern or timetable. The nature and stage of the research, the supervision arrangements and the aptitude and experience of the student all affect what represents a reasonable frequency of progress meetings between all Supervisors and a research student. It is generally expected this will involve a face-to-face meeting (including through remote means) to engage in a dialogue about research progress and any impediments that

⁴ The Primary Supervisor retains responsibility for ensuring that all of the collective responsibilities are being carried out. He or she will pay due heed to the responsibilities delegated to other Supervisors (or other staff) to carry out on their behalf.

students are facing <u>at least once every four weeks</u> for a full-time student in line with the responsibilities outlined in Appendix A.

Arrangements for part-time students should be agreed clearly between you and your supervisor(s) in advance and will depend on the pace of the research and associated studies. Meetings should, however, take place at least once every eight weeks.

Students are required to complete a monthly meeting minutes record using a template which will be sent by the SAS Research Lead by email. If students meet with their supervisors more than once a month, they should summarise all of their discussions into one template for submission. These records should document your understanding of your interaction with your supervisor and any upcoming actions. This will provide a record for yourself and give your supervisor an indication of whether you fully understood the discussions.

The University has a Student Academic Engagement Policy, which all students are expected to adhere to (see appendix E).

At registration, your Supervisors should initiate discussions with you about the frequency of meetings and how these will be conducted (e.g. face-to-face or email, whether written reports from you are required at the meeting or in advance, who else will be involved etc.). It should also be established clearly who instigates or arranges the meetings, where they will take place, and who should be present. Both you and your Supervisors are also expected to outline how you may be contacted outside of these meetings, and general expectations about availability.

Topics that these regular meetings may cover include:

- agreed progress made on objectives or targets set at the last meeting;
- agreed actions towards current or future objectives or targets;
- any key feedback provided to you from the Supervisor;
- any concerns over the impact on agreed deadlines and/or milestones;
- points where you and your Supervisor have agreed to disagree;
- any health and safety concerns;
- · any training or development needs;
- · date of next regular meeting.

6 Progress Reviews

6.1 Progress Review meetings

The University conducts progress reviews for all of its research students to ensure that adequate academic progress is being made. These formal progress review meetings will occur throughout your registration. Three different types of progress review meetings are:

Review	Timing of review for all students regardless of mode of study	Primary purpose*
Initial	Not later than 4 months post-registration	To review induction and monitor plans for research methods training
Regular	Between 9 and 12 months post- registration Then, for each subsequent year: Not later than the anniversary date of their initial registration;	To review academic progress (including the implications of any break in research/study) and recommend either continuing research/study for the intended award or transfer to a lower award
Final	Not earlier than 6 months (no later than 2 months) prior to their expected end date of registration	To assess readiness for submission

^{*}Faculties may include other criteria and purposes in any review in line with reviewing academic progress

NOTE: The timing and process for reviews for students registered for a DBA is different to those stated above. DBA students are reviewed based on a series of seven deliverables. Full details can be found in the DBA Programme Handbook.

You must submit all regular and final review paperwork to your SAS Research Lead by the deadline provided to you (usually at least 5 working days prior to your review). Failure to do so will result in you being awarded an automatic 'Major Reservations' grading and an 'Additional review' will then be scheduled. Should you fail to submit the review paperwork for that additional review at by the deadline provided to you (usually at least 5 working days prior to the additional review), you will be automatically awarded an Unsatisfactory grading.

For your initial review you must submit the paperwork required to your SAS Research Lead by the deadline provided to you. Failure to do will result in a R grade being applied for the initial review.

Should you fail to attend a scheduled meeting without giving notice and a reason, the Progress Review Team will document the absence and a 'Major Reservations' outcome will be given, and therefore the 'Additional Review' process will then commence.

You are not permitted to make a recording of any of your review meetings (or their viva); a record of review meetings will be made only through the official minutes.

It is not usual for students to have observers present at Progress Review meetings, and may do so only with the prior consent of the Panel Chair. Any observer in a Progress Review may not contribute to the discussion, or make representation on the student's behalf.

6.2 Matters to be covered in progress reviews

6.2.1 Initial Review

The initial review must be completed between you and your supervisor(s) within 4 months of your official start date. Its primary purposes are to review whether you have received a proper induction and that plans are in place for your research project and any associated training or development.

The following topics should be covered in the initial review form, with the contents agreed between both you and your Supervisor(s) prior to submission:

- Approval of project title or research question (or a similar brief description of the programme of supervised research);
- An outline plan for the whole of the agreed period of registration (taking into account availability of facilities, location of study and mode of study);
- The likely availability of suitable resources for the foreseeable future, and contingency plans where appropriate;
- A risk assessment of the project (for both the research activity and outcomes and the likelihood of these being delivered);
- A health and safety assessment and an ethical review of the research;
- A statement of current training and development needs (including taught modules);
- Whether an appropriate induction has been provided and completed;
- That a data management plan for the project is required before data collection, highlighting data management training needs; and
- Whether there are any personal circumstances that may affect or impede future studies, and any
 actions that can be taken to support you. You may wish to raise these separately with the
 relevant Assistant Registrar in your Faculty and are free to do so without documenting this on
 the review paperwork.

Once completed the initial review form will be sent to the relevant Assistant Registrar in your Faculty, who will note where any issues have been raised in the initial review and pass these to the relevant Director of Research for any necessary action.

6.2.2 Regular Reviews

Subsequent to the initial review, all research students (regardless of mode of study) undertake a review between 9 and 12 months post-registration. A Regular Review is then held every subsequent year no later than the anniversary date of your initial registration. These reviews take place irrespective of any periods of interruptions of study. The primary purpose of the regular reviews is to evaluate your academic progress (including the implications of any interruption in research/study). As part of the process, your Progress Review Team should make a formal recommendation of whether you should continue as planned or otherwise transfer to a lower award. The Progress Review Team should also schedule a guide date for the next regular review, dependent on the overall grading given by them to you.

You will be expected to submit a completed 'Research Student Progress Review Student Report' 5 working days prior to your review (submitted to your Research SAS Lead). The specified form on which this must be completed covers key areas for which you must supply information to demonstrate academic progress within a specified word limit. The content of the report should be supported by the minutes of the monthly meetings with your Supervisor, and with any of the optional supplementary information (see tick boxes on 'Research Student Progress Review Student Report – available on the intranet).

In addition to the report, you will be expected to give a presentation of no longer than 10 minutes, using the PowerPoint template provided for research student reviews.⁵

The following topics should be covered by a Progress Review Team as part of the formal meeting:

- Review of the project title or research question (or a similar brief description of the programme of supervised research), and discussion if this has changed since the last review;
- A review of whether you are making academic progress, through the grading of the student review form and presentation, against set criteria. The panel will also review the submission of appropriate work, as specified on the progress review form;
- A review of the following, based on information provided by your/your Supervisor, as prompted on the review form;
 - whether University (and other) resources have been sufficient to enable you to conduct your research/studies within the previously-agreed plan;
 - The continuing availability (or otherwise) of suitable resources for the foreseeable future, and contingency plans where appropriate;
 - An outline plan for the remainder of your agreed period of registration (taking into account availability of facilities, location of study and mode of study), and whether a recommendation for an extension of registration should be supported;
 - That there is a risk assessment in place for the project (for both the research activity and outcomes and the likelihood of these being delivered);
 - The documentation related to your current and future training and development needs:
 - That a data management plan has been completed for the project;
- Whether there are any personal circumstances that may affect or impede your future studies, and any actions that can be taken to support you.

The outcomes of the meeting will be shared with you at the end of the meeting and you will be asked to sign the review form. Your supervisors will be sent the review form following the meeting and your supervisor(s) will have 10 working days to respond, with either a signature confirming they are satisfied with the outcome of the review or queries directed to the Progress Review Chair.

Should the outcome of the review be Major Reservations or Unsatisfactory, then the Progress Review Panel must meet with you and your Supervisor(s) to discuss their concerns and proposed actions.

6.2.3 Final review

Within 6 months of the expected end date of registration (and therefore date for the submission of your thesis), a final review of your progress will be undertaken by the Progress Review Team. Its primary purpose is to assess whether you will complete on time (or at most within three months of your projected end date). As part of the process, the Progress Review Team will make a formal recommendation as to whether you should continue as planned or otherwise transfer to a lower award. If serious concerns are identified, the Progress Review Team may choose to schedule a second Final Review.

All topics listed in section 6.2.2 are also applicable to the final review, however these additional matters should also be considered;

- Final confirmation of the thesis title and format of the thesis;
- A clear recommendation of whether you should proceed to thesis submission.

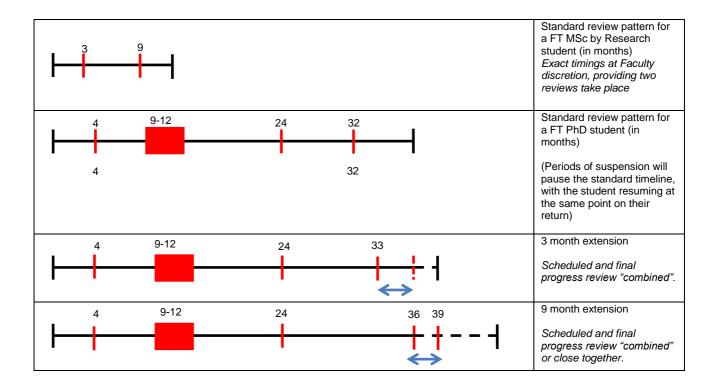
⁵ The report and presentation requirement is applicable to all reviews apart from the Initial Review.

The scheduling of this meeting should also prompt you and your Supervisor(s) to confirm the thesis title, consider whether any restrictions to access need to be applied to the thesis and begin the process for appointing examiners.

6.3 Scheduling of reviews

Every student⁶ (irrespective of pattern of study) has an initial progress review within 4 months of registration and subsequent progress reviews at least annually, with projected outputs set at each meeting for the next annual review.

Scheduled reviews will be adjusted to take account of periods of suspension. The review date should be adjusted in line with the period of suspension, therefore if a student suspends for a period of 6 months, for example, their review would also move by 6 months meaning that the student is in the same position upon their return to studies and the review schedule remain appropriate spaced. The table illustrates how the scheduling of progress reviews will work in practice:



6.4 Formal review outcomes

For each review, an overall judgement should be made against your general and academic progress based on 9 categories. This judgement includes:

- an indication of academic progress, in both quantity and quality of any research and subsequent analysis; and
- an assessment of the likelihood of you completing your programme of supervised research within the agreed registration period.

The progress review outcome is not a formal independent assessment of your work and you should be aware that any outcome is not an assurance that the examiners will or will not award a degree. The reviews are an assessment at a set point in your registration of your academic progress based on information provided and presented in the review. It is entirely separate from your oral viva

Exceptions may be applicable to students on CDTs that have cross-institution review arrangements and for the DBA qualification

examination. The review process should, however allow you and your supervisors to gain an indication of your progress and any concerns the panel may think you, with the support of your supervisor, need to address.

The assessment should take into consideration each of the 9 progress categories, as detailed below, as well as:

- your aptitude or commitment to studies;
- Prolonged illness or other extensive personal circumstances;
- Unexpected results, or major flaws in your original research question;
- Changes in Supervisors or other staff in the Supervision Team;
- Access (or lack of access) to appropriate facilities, equipment or other resources.

Each of the 9 progress categories are graded using the Qualitative Grading Criteria overleaf, with the gradings giving a final overall grade for the review.

You can only be awarded an overall Satisfactory grade if you achieve Satisfactory grades for each of the individual progress categories. Progress Review Panels may, however award an R, MR or U grade if they feel this is appropriate regardless of the spread of grades for the individual progress categories.

6.5 Additional reviews

Additional Reviews are held where a student has been awarded a Major Reservations or Unsatisfactory outcome from a review. Additional Reviews are held no more than 6 months after the previous review, and focus solely on the areas of concern raised at the last review (those progress categories given an individual Major Reservations or Unsatisfactory outcome as detailed in the Qualitative Grading Criteria).

A student who is required to undergo an additional review as a result of having received an outcome of Major Reservations or Unsatisfactory (either as an outcome of a review or from missing a review or the paperwork submission deadline) can only then receive a Satisfactory, Reservations or Unsatisfactory overall grade.

A student who receives an Unsatisfactory grade at an additional review (following either a Major Reservations outcome (awarded for whatever reason) or an unsatisfactory outcome) will have their registration with the University terminated. A lower award may be made to a student if appropriate.

6.6 Qualitative Grading Criteria

The outcome of your progress review will be judged against the University's Qualitative Grading Criteria for Research Students. Each of the 9 progress categories are graded using the Qualitative Grading Criteria, with those gradings giving a final overall grade for the review.

You may only be awarded an overall Satisfactory grade if you achieve Satisfactory grades for each of the individual progress categories. Progress Review Panels may, however award an R, MR or U grade if they feel this is appropriate regardless of the spread of grades for the individual progress categories.

	Satisfactory (S)	Reservations (R)	Major Reservations (MR)	Unsatisfactory (U)
Context	The candidate can clearly articulate the background to their work, focussing on the pertinent aspects and clearly state the targeted research gap	The candidate can describe the context, clearly identifying current findings but poorly describes the research gap.	The candidate can't describe the research gap. Background presented is too general and does not cover key current learning.	The context is poorly described and not directed to the topic of research. No research gap is identified.
Aim	The overall intellectual aim of the work is clearly stated	The aim is vague but does describe a scientific contribution to knowledge	The aim is vague and not focussed towards a contribution to knowledge (more outcome focussed)	No real aim is stated
Objectives	A set of clearly defined achievable discrete objectives are stated which when combined will clearly deliver against the overall aim.	The objectives are clearly defined but do not combine to deliver the overall aim.	The objectives are poorly defined and do not combine to deliver overall aim.	The text did not provide evidence of a clear set of objectives.
Methods (if appropriate)	The described method will clearly deliver against the stated objectives. The QA is appropriate and commensurate with the intended work.	The described methods are clear but a) they do not appear to completely meet the objectives or, b) The QA is not appropriate for the methods	The described methods a) will not deliver against the stated objectives to a level commensurate with the award, b) there is no QA	No convincing methods are described
Key Findings (if appropriate)	Results and their analysis to date are at an academic quality and quantity commensurate with the award	Sufficient results are presented but require additional analysis to be done	Significant improvement in the quality of data/analysis is required to be at the required standard	Insufficient results/analysis presented. The candidate is not producing work at a level commensurate with the award.
Discussion	The interpretation of the results is appropriate and at a level commensurate with the award.	Some additional interpretation is required to be at the appropriate level	Substantial additional interpretation is required	There is no interpretation of the data
Contribution to Knowledge	The candidate can clearly define the contribution to knowledge and/or intellectual advancement	The candidate has not clearly defined the contribution to knowledge but only requires minor amendments	The candidate has not been able to describe the contribution to knowledge at an appropriate level but has some basic ideas that are appropriate	No contribution to knowledge provided or articulated.
Impact	The candidate has clearly defined the impact of their work linking the scientific discovery to the stated outcome	The candidate has clearly defined the impact of their work but has not clearly linked it to scientific discovery	The candidate could not clearly define the potential impact of the work	No impact is stated
Delivery	The written work and presentation of data is at a standard commensurate with the award	Improvement is required with respect to the written work and/or presentation of date for the thesis to be at the appropriate standard	Substantial improvement is required in the quality of the written and/or the presentation of data	The written work and/or presentation of data is at an unacceptable standard.
Overall	The candidate is on course to submit on time with a Thesis of sufficient academic quality to be examined	The candidate requires an extension to thesis submission to enable submission of a Thesis of sufficient academic quality to be examined	a) An extension to registration is required to ensure sufficient research is completed to ensure a thesis of sufficient academic quality to be examined is submitted b) The standard of the Thesis is insufficient to be awarded the degree/revise and represent is anticipated	The candidate is unlikely to submit a Thesis of the required standard to be awarded the degree.

The following judgements will be applied in consideration of your overall grading:

	Description	Used when	Implications	Further notes
S	Satisfactory	 Progress is in line with agreed plans and timetables; and The quality of the research or its presentation appears to be of the required standard; and Regular meetings are being held between the Supervisors and student; and The student is highly likely to submit within 3 months of their end date. A Satisfactory Grade can only be given as an overall grade if all individual elements have been graded as satisfactory. 	The next review should be scheduled for the appropriate time	The student is on track
R	Reservations	 There is some slippage in plans and targets; and/or The quality of the research and/or its presentation requires attention; and/or There is evidence that meetings between the Supervisors and the student are either not taking place or not being effective; and/or There are circumstances beyond the student's control impeding progress, but which are likely to be resolved in the short term; and/or The candidate may require an extension to thesis submission to enable submission of a thesis of sufficient academic quality to be examined. 	The next review should be scheduled for the appropriate time	The student is likely to be successful in achieving their intended award, providing remedial action (by the student and/or the University) are undertaken rapidly To be used if the student is still likely to submit within 3 months or their end date
MR	Major Reservations	 The student fails to submit the required review paperwork at least 5 working days prior to the review; and/or The student fails to attend a review meeting without notice and a valid reason; and/or There is significant slippage in plans and targets; and/or The quality of the research and/or its presentation requires attention; and/or There is evidence that meetings between the Supervisors and the student are either not taking place or not being effective; and/or There are circumstances beyond the student's control impeding progress, but which are not likely to be resolved in the short term (which may include inadequate supervision); and/or An extension to registration is likely to be required to ensure sufficient research is completed and/or to ensure a thesis of sufficient academic quality to be examined is submitted; and/or The standard of the Thesis is insufficient to be awarded the degree/revise and represent is anticipated. 	An additional review should be scheduled within 6 months* to review whether any impediments to progress have been addressed; At that time, the risks should be reviewed to allow either a S, R or U judgement to be obtained. If, at that time an overall U grade is obtained, steps should be taken to terminate the student's registration**	The student is likely to be successful in achieving their intended award, but this will require a revised project plan The student is unlikely to complete on time and will need an extension to registration

U	Unsatisfactory	 There is little or no evidence of academic progress; and/or The quality of the research and/or its presentation requires significant attention; and/or There is evidence to support the view that the student is not engaging appropriately with their Supervisor; and/or Progress is not in line with agreed plans and timetables; and/or Regular meetings are not being held between the Supervisors and student; and/or The student is highly unlikely to submit within 3 months of their end date The candidate is unlikely to submit a Thesis of the required standard to be awarded the degree. 	An <u>additional</u> review must be scheduled within 6 months*, along with a clear and detailed written plan outlining steps needed to demonstrate academic progress and a warning of the consequences should this plan not be met; At that time, the risks should be reviewed to allow either a S, R or U judgement to be obtained If, at that time a second U is obtained, steps should be taken to terminate the student's registration**	This category should not be used if there are impediments to the student outside of their control It is highly likely the student will not be successful in achieving their intended award
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^{*} A part-time student may be given more time for their second review, at the discretion of the Progress Review Team

^{**} It is expected that if a lower award is suitable for a student that these discussions happen as early as possible, when progress begins to be of concern. However if not previously discussed, the option of a lower award should be considered at this point, prior to termination of registration.

7 Your Thesis

7.1 Thesis formats

There are two main formats for Cranfield students to present their research thesis, Paper Format and Monograph Format. The University's preferred format for research theses is Paper Format, as it provides students with the opportunity to gain experience in the writing of self-contained reports that convey their work in a concise format, which will aid with the student's professional and personal development.

Students studying for all Research degrees may, however, with the agreement of their Supervisor, submit their thesis in either format. Students registered for the DBA or Masters by Research will usually submit using the Mongraph Format. The University's Guidelines for the layout and submission of theses provides further guidance and links to thesis templates (Appendix D).

During the course of your research your Supervisors will provide a range of advice and guidance over the expected format of your thesis; this will depend in part of the nature of the research, local practices and conventions and subject-specific expectations. You should also be aware of other forms of advice, particularly those available from the Library, relating to:

- the "prescribed form" of the thesis;
- courses and other guidance on academic misconduct (including plagiarism);
- courses and other guidance on academic writing and referencing;
- examples of previous theses, held on CERES and EThOS.

Each research degree thesis is different, and therefore there is no prescribed word-limit for research theses at Cranfield. Research Committee has, however approved a recommend upper limit of 65,000 words as standard.

The University has placed an initial 6-month embargo on the publication of all theses, both to protect commercially sensitive work and to encourage publication of papers by students. An extension to the embargo can be made where a student is awaiting publication of their thesis. This embargo complies with the UKRI open access policy.

https://www.ukri.org/manage-your-award/publishing-your-research-findings/making-your-research-publications-open-access/

7.2 Help with your Thesis

As you start to complete your research, your Supervisors should engage more closely with you about the quality of your thesis and the timing of its submission. Your Supervisors are normally expected to read and review draft chapters or extracts of your thesis, to help guide you to the standards required for your intended award. Your Supervisors <u>cannot</u> extensively proof-read your thesis nor write the thesis on your behalf.

Your thesis must be your own work. You may not employ or engage someone else to write your thesis on your behalf, even if your first language is not English.

You may, however, seek editorial help from other students, friends or academic advisers to review your work and provide advice and guidance on its improvement. This advice and guidance should be limited to advice on:

- spelling, punctuation, grammar and syntax;
- formatting the document for consistency (e.g. numbering of footnotes, headings, references, page numbers; consistent font and text sizes; use of passive or active tenses);

- o pointing out where plagiarism might exist;
- o improving the layout of the thesis (e.g. moving tables and illustrations).

Advice and guidance should <u>not</u> include making or suggesting changes on your behalf in any of the following areas:

- o major structural changes to the thesis;
- o changes to the text that amend or edit ideas, arguments or discussion points;
- o removal of plagiarism, or the development of better academic referencing;
- translation of passages into English;
- o correction of information or data;
- o reductions to the length of the thesis to meet the prescribed form.

Where you do seek advice and support in the permissible areas outlined above, it is best practice to ask for such advice in notes or using "tracked changes" in documents. This will ensure that you retain responsibility for choosing what advice and guidance you accept and incorporate into your thesis.

You should retain all versions of your draft thesis, and notes and advice provided to you. These can then be used to demonstrate that the thesis is your own work, in the event you are accused of academic misconduct.

7.3 Submitting your Thesis

Prior to submission of your thesis you must have gained ethical approval for your research through the CURES system.

When you are ready to hand your thesis in you are required to submit the following:

- An electronic copy of your thesis to TurnItIn via the VLE (unless discussed otherwise, i.e. where there are restrictions on the thesis) and inform your supervisor.
- Completed Thesis Submission form signed by you and your supervisor. These can be found on the Intranet or VLE.
- Evidence of ethical approval.

Where theses contain restricted research, student should submit their thesis electronically as advised by their SAS Lead.

Please note, all submission times are based on the UK time zone.

Once received, Registry will issue a copy of your thesis to the appointed Internal and External Examiners and the Independent Chairman.

Once completed, and following any period of embargo, a final corrected (electronic) version of your thesis will be stored in the Library and made available on the CERES repository. It will also be available via the British Library EThOS service. Your Faculty will advise you on how and when this final electronic version should be submitted.

Should you fail to submit your thesis by the end of your registration period (or any agreed extension to writing up period) you will have forfeited your right to examination and therefore fail your intended award.

7.4 Extensions

You will usually submit your thesis at the end of your registration period. However, if further time is needed then a request for an extension should be discussed with your supervisor and/or SAS Lead.

An extension is not an automatic right, students will have to provide sufficient reasoning as to why an extension is needed and provide evidence to support this. An extension will be considered where the following factors have affected progress; lack of access to research resources and facilities, interruption of data collection and/or fieldwork, increased caring responsibilities, affected health and wellbeing, or other reasons. Each students' situation is unique and is considered on a case by case basis. There are two types of extensions that can be requested:

- 1. Extension to Registration This extension is for those who have further research work other than just writing up to complete, e.g. field work, experimental analysis. This type of extension does incur a monthly fee (or pro-rata for students who registered before 2015) based on your tuition fee and length of requested extension.
- 2. Extension to Thesis Submission (Writing-up period) This extension is for those who have completed their research and are only writing up.

Please note that any requests for changes to registration made after your current end date will normally not be considered.

7.4.1 Thesis submission

If an extension to the thesis handing in date is required (of up to three months), you should seek the permission of your Supervisor(s) to do this: your Supervisor(s) should confirm agreement in writing to you (and provide Registry with a copy of both their agreement and your extension request), prior to your submission date (or otherwise discuss other alternatives, including an extension to your registration). All extensions to registration require the approval of your Supervisor(s). If the date of submission is longer than three months after the end date of registration, your Supervisor(s) will need to seek formal permission using the Extension to Thesis Hand-in process through the Student Casework Team.

8 Research Student Examination

Once you have submitted your thesis it will be assessed by your examiners, who will conduct an oral examination (viva) of your work and ask you to defend your research thesis.

8.1 Your oral examination

At or near the point of your thesis submission, your Supervisor should explain the anticipated format of the oral examination, including providing information to you on:

- who will attend the oral examination, and why (including explaining the roles of the internal and external examiners and of the Independent Chair of Examiners);
- where the examination is likely to take place, and what you should bring with you;
- how long the examination is likely to be;
- what the possible outcomes of the examination will be (i.e. pass, corrections, revise and represent, or fail);
- the range of topics the examiners may cover.

The Independent Chair should request of you whether you are happy for a Supervisor (or another member of the Supervision Team) be able to attend the oral examination **strictly as an Observer**. You may accept or decline this request as you choose.

It is usual that your examiners will be physically present for the examination, however it is permitted for them to participate remotely; you will be notified of this in advance if that is the case.

It is the responsibility of your Research SAS Lead to arrange a date, time and location for your oral examination, and to ensure that all attendees are informed. Viva examinations may take place remotely - guidance on remote vivas is provided at Appendix H. The oral examination should be arranged between 3-12 weeks after the thesis has been submitted formally to the appropriate Registry. This is to allow sufficient time for the examiners to review your thesis. You are not permitted to make a recording of their viva meeting. Vivas should only be recorded through the official minutes.

MSc by Research students do not automatically require an oral examination; the thesis examiners will assess an MSc by Research thesis and determine if an oral examination is required within 20 working days of the thesis submission.

8.2 Who will examine you?

Your Director of Research will, on the recommendation of your Supervisor, appoint examiners, including at least one "internal examiner" and at least one "external examiner". Normally only one external examiner is appointed, apart from exceptional cases approved by the Director of Research where an additional external examiner may be appointed because of inter-disciplinary, funding or other requirements⁷.

Your Director of Research will also appoint an internal Independent Chair of Examiners who does not have any direct association with you or with your area of research. The Independent Chair is expected to exclude themself from your actual examination and focus instead on ensuring the conduct of the examination process is fair and appropriate.

Your internal examiner will have relevant subject knowledge and/or experience of your research area. Your external examiner will be appointed from outside of the University, and have relevant knowledge of your area of research. Your external examiner must be free of conflicts of interest, and therefore should not be:

⁷ Two External Examiners are required for EngD students and internal staff candidates.

- i) a member of the Council of Cranfield University or a current employee of Cranfield;
- ii) someone with a close professional, contractual or personal relationship with the student or Supervisor;
- someone who is, or knows they will be, in a position to influence significantly the future of the student being assessed;
- iv) someone involved in any recent or current substantive collaborative teaching or research activities at Cranfield related to the research of the student;
- v) a former member of staff or student of Cranfield (unless a period of five years has elapsed).

Any of the circumstances listed above may not necessary preclude or curtail an appointment, but it is important that these are registered, reviewed and considered in full by the relevant Director of Research before a formal appointment request is made. Your Supervisor is expected to make recommendations for both internal and external examiners at the same time, approximately three months before your intended date of thesis submission.

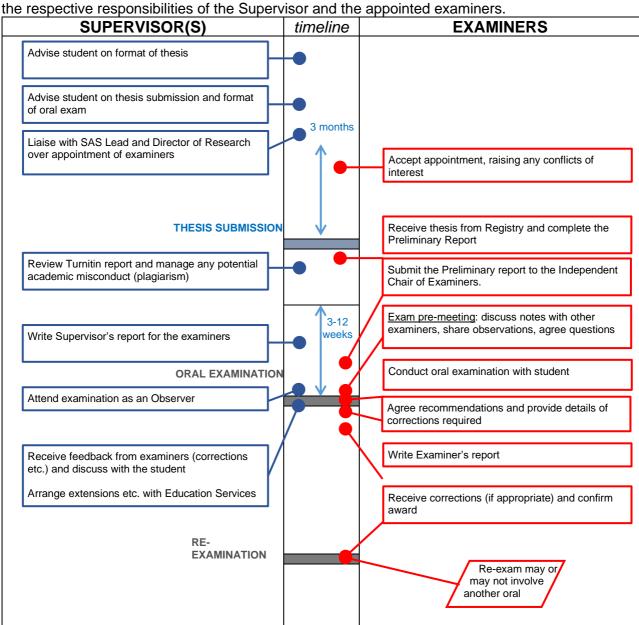
All examiners are required to attend your oral examination, and an independent chair must be present. Should any of the appointed persons become unable to attend your examination the following process will be followed:

- Where an external or internal examiner advises with less than 3 weeks notice prior to the date of the examination that they cannot attend the examination, the viva will be postponed.
- Where an external or internal examiner advises with more than 3 weeks notice before the
 date of the viva that they cannot attend, the SAS Lead, with the support of the relevant
 Director of Research/Deputy Director of Research will seek to find a suitable replacement.
 However, if a replacement cannot be secured, the viva will be postponed.
- Where the Viva Chair is unable to attend the examination, the SAS Lead with the support of the relevant Director of Research/Deputy Director of Research will look to find a replacement. In the event that a replacement cannot be found, the viva will be postponed.

You will be kept informed at the earliest opportunity of any changes to the members of your examination or to the examination date.

8.3 Overall examination timeline

The following chart outlines the process for the examination of an individual research student and



8.4 What to expect from your Supervisor(s)

8.4.1 Reviewing your thesis for academic misconduct

When you submit your thesis, it is normal for it to be reviewed through Turnitin, and the report reviewed by your Supervisor(s).⁸ This report may flag any potential academic misconduct or plagiarism. Full details can be found in section 11 on Academic Misconduct.

Supervisors may delegate any review of the Turnitin report to other staff, but retain responsibility for ensuring that the report has been reviewed.

Exceptional exclusions include where the thesis contains restricted or secret content, or where parts of the thesis are in a format which cannot be submitted to Turnitin. In these circumstances, the Supervisor(s) is/are expected to review the thesis for plagiarism through other means as outlined in the Handbook on Academic Misconduct.

8.4.2 The Supervisors report

Your Supervisors are required to provide to the examiners a brief statement that covers any major issues or difficulties you have faced in the conduct of your studies/research, including for example:

- any periods where appropriate facilities were substandard or unavailable, and the impact of these;
- any changes in the supervisory team and the impact of this;
- any formal interruptions in study (suspensions);
- any other prolonged periods of absence or illness or other exceptional circumstances.

The report should also include confirmation that the thesis has been reviewed for plagiarism (using Turinitin and/or other tools).

The examiners and Independent Chair receive the report before the formal examination, and usually after they have received and read the thesis and written their Preliminary report. The Supervisor's report is intended to provide them with contextual information to inform the format of the examination.

8.4.3 Attending the examination as an observer

It is considered good practice and helpful for members of the Supervision Team to be available to support you through the examination process. A Supervisor normally attends the examination, unless the student has specifically stated that they do not wish for them to attend. Supervisors should not participate actively in the examination (either through asking questions, or answering on behalf of the student) but may be called upon by the examiners to provide contextual information to supplement the Supervisor's report. Other staff may ask to be present as Observers, including other members of the Supervision Team or other academic staff (as part of their personal development), with the agreement of the student and independent chair.

It is also helpful for a Supervisor to be present if there are questions or ambiguities over any corrections to the thesis requested by the examiners, or if the final outcome is not clear. They may take notes, to aid their support to the research student in the event of further work being required.

EngD students may have additional people as observers at their examination (with their consent) such as up to 2 Supervisors from other institutions and an Industrial Sponsor.

It is not usual for students to have other observers present, and may do so only with the prior consent of the Viva Chair. Any observer in the viva examination may not contribute to the discussion, or make representation on the student's behalf.

8.4.4 Informing the candidate of any further work

Following an examination which has not resulted in a straight pass, the examiners will provide either:

- a written statement or a series of notes outlining (minor or significant) <u>corrections</u> required to the thesis; or
- a "statement of deficiencies", outlining further work required on your thesis, after which they will be re-examined; or
- a "statement of reasons for failure", outlining the reasons for a decision to award either a lower award or an outright fail.

Written statements of corrections will be provided by the examiners to you and your Supervisors. You will have a short time to provide the requested corrected thesis to the examiners, for them to sign off their recommended award.

Failure to submit the required corrections or thesis by the required deadline (without and agreed extension) will result in you failing your award.

Statements of deficiencies and statements of reasons for failure are communicated to the Registry Manager who will write formally to you with these: copies are also provided to the Supervisors.

In all cases, your Supervisors should meet with you to discuss the outcome, and help you to interpret what is now required to meet the appropriate standard of thesis for your intended award. You and your Supervisors should also agree necessary and suitable support during this phase of further work.

8.5 Potential outcomes of your examination

Following your examination your examiners will decide on the outcome. Examiners have the delegated authority of Senate to confer awards to students who have submitted and successfully defended a thesis following a programme of supervised research. This includes the intended award, or a lower award associated with the programme (i.e. a Master of Philosophy or Master of Research).

In coming to a decision after your oral examination, your examiners will choose either to:

- a) confer a relevant award (Doctorate, Masters); or
- b) defer a decision on the outcome of the assessment, requiring you to undertake further work to demonstrate you can meet the intended learning outcomes of the course; or
- c) fail you for your award.

8.5.1 Pass

If your examiners believe that you have meet the intended learning outcomes and expected standards of the award you have submitted your thesis for they will deem the outcome of the examination to be a pass. This may or may not require the submission of minor corrections to your thesis.

8.5.2 Conferring a lower award

For Doctoral students only, examiners may award a Master of Philosophy (MPhil) if they believe a student has met the required standard of study for that award, but that the work presented in the thesis does not meet doctoral standards (either in terms of absolute original output or in terms of volume of work).

This outcome is only used in circumstances where the examiners do not believe remedial work <u>on</u> the current research and thesis can result in a PhD being obtained. Examiners may request that you make minor corrections to the existing thesis before awarding the Master of Philosophy degree.

Although not considered an outright fail, the examiners should complete a "Statement of Reasons for Failure" (as students conferred with a lower award have still failed to attain their intended award).

8.5.3 Deferring a decision and requesting further work

Where a candidate has failed to achieve the required standard in their thesis, the examiners may decide to request further work on the thesis, choosing one of the following categories of outcome,

while specifying whether the candidate will continue to work towards their intended award or a lower award:

Outcome	Used when the examiners have concluded that
	The research, analysis and discussion meets the required standard for the relevant research degree;
Minor	There are superficial textual or presentational faults or errors in the thesis (including formatting errors or inconsistencies, missing or incomplete references, typographical errors, etc.);
corrections	Some work is required on the thesis but the examiners do not need to interview the student for a second time;
	 The required further work will require little or no input from the student's Supervisor(s), which would be limited to advice on how to interpret the written statement of corrections.
	The research, analysis and discussion meets the required standard for the relevant research degree;
	There are substantial revisions needed to the text or content of the thesis (including presentational faults or errors as outlined above as minor corrections), but also improvements needed in the structure of the thesis,
Significant corrections	and/or the re-writing of a number of specified sections or chapters, and/or the addition of a small amount of new material (e.g. additional references, supplementary analysis of findings);
	Some work is required on the thesis but the examiners do not need to interview the student for a second time;
	The required further work will require some input from the student's Supervisor(s), which would be limited largely to advice on how to improve the thesis in the context of the written statement of corrections.
	The research, analysis and/or discussion does not meet the required standard for the relevant research degrees, but the examiners have concluded from the thesis and oral examination that it has the potential to do so;
Revise	Substantial revision of one or more critical aspects of the research and/or the
and	way it is presented is needed;
represent	 The examiners will need to re-examine the revised thesis in its totality for a second time, once the further work has been completed;
	The required further work will require significant input or support from the student's Supervisor(s), which may involve a return to formal registration. I a deferred decision:

In all cases of a deferred decision:

- a clear statement of the corrections or deficiencies to be addressed should be compiled and provided to you and your Supervisor(s) by the examiners as soon as possible after the decision of the examiners:
- corrections or deficiencies to be addressed must be completed within the required timeframe in order for you to receive your award.
- the student should submit a corrected copy of the thesis to their SAS Lead along with a list
 detailing where they have made corrections in the thesis. Provided that the examiners are
 satisfied with the corrections they will confirm in writing the recommendation that the student be
 awarded the degree;
- you are deemed to still be registered with the University, and will have continued access to learning facilities (Library and IT);
- you do not have an automatic right to University accommodation (laboratory, office or domestic).
 Where such accommodation is deemed to be necessary by both the student and the University, additional tuition fees or other charges may be applied.

For a "revise and represent" outcome, it is expected that your Faculty will support you through to the re-submission of your thesis. University procedures relating to interruptions of study (i.e. suspension or early termination of registration) will continue to apply.

The following table outlines the differences between minor and significant corrections, and a required revision of the thesis:

MINOR CORRECTIONS SIGNIFICANT CORRECTIONS	REVISE AND REPRESENT
Research, analysis and discussion of appropriate standard	Research, analysis and discussion has not reached appropriate standard
Written statement of corrections produced	Statement of deficiencies outlined
Minimal guidance provided by Supervisor	Formal supervision to be continued
Continued access to learning facilities (remotely)	Continued access to learning facilities

8.5.4 Signing off corrections or conducting a re-examination

Where further work has been requested, it should be completed and re-examined by the examiners according to the following:

Outcome	Time period given for completion****	To be reviewed and deemed satisfactory by	Resulting in
Minor corrections	3 months	One internal examiner*	Pass Fail**
Significant corrections	6 months	One internal examiner	Pass Fail**
Revise and represent	12 months	All appointed examiners***	Pass Minor corrections Significant corrections Fail**

- * At the time of the initial examination, the examiners will identify one of the internal examiners to sign off the corrections on their behalf. The other internal or external examiners may request at that time to view and be involved in the approval of the corrected thesis.
- ** If a student does not complete the required corrections within the specified timescale, or does not complete them to the satisfaction of the examiner(s), the candidate should normally be failed. Exceptionally, the examiners may wish to consider awarding a lower award, but all examiners must agree to this revised recommendation in writing.
- *** Where a "revise and represent" outcome was determined, the candidate is subject to a full reexamination of their work, and the examiners are expected to conduct the examination as if for
 the first time, even if they consider that the thesis has not been revised to a sufficient standard.
 If the thesis clearly meets the required standards for the intended award (either by a
 straightforward pass, or with a requirement for minor corrections only), the examiners may
 dispense with a second formal oral examination of the student if they wish. A second formal oral
 examination must be held where the examiners believe a thesis requires significant corrections.
 - The outcome of a formal re-examination does <u>not</u> include a second opportunity to revise and represent the thesis but does include an opportunity for further minor or significant corrections to be completed on the thesis.
- **** The time period stated will automatically be applied for each student once Registry are informed of the Viva outcome. Students can submit corrections at any point within the specified time period.

Where a student is unable to submit their revised or corrected thesis within the specified time a request for an extension should be discussed with their supervisor and SAS Lead, and requested

through the Extension to Thesis Submission form (available on the intranet). An extension to the specified time period is not an automatic right, and will only be approved where students have provided sufficient reasoning (and evidence) as to why the revisions or corrections have not been completed on time.

Following submission of your corrected or revised thesis you should receive notification of the outcome within 6 weeks (providing a second viva is not required) or be informed of a revised timeline if necessary.

Failure to submit the required corrections or thesis by the required deadline (without and agreed extension) will result in you failing your award.

8.5.5 Conferring a fail

A result of a fail is most commonly issued when the volume and/or quality of the original research or analysis falls significantly short of the required standard, and where your examiners do not feel remedial work could bring the thesis to the required standard. Where the examiners recommend a fail, they will issue you with a "Statement of Reasons for Failure', which should outline the reasons that you have been failed in sufficient detail to explain the examiners' decision.

8.6 Communication of your outcomes and marks

Your examiners will complete and sign collectively a formal report form, which will include the formal outcome (where appropriate a statement of deficiencies or statement of failure). Registry will be informed of the final outcome and inform you of the decision. In cases where minor or significant corrections are required, the collected notes of the examiners are passed to your Supervisor(s), who will convey these notes and requirements to you. You will be provided with an electronic copy of the Examiners Report, regardless of the outcome of the viva.

Please note, should you be indebted to the University for your course of study (i.e. tuition fees), the decision of the examiners, and the conferral of any award, will be withheld until such debts have been cleared. In addition, students are not entitled to attend a formal graduation ceremony, or to have any distinction of the University conferred upon them until all debts relating to the course are discharged.

Your Examiners or Supervisors may provide informal confirmation of your results, however please note that this is not be recognised by the University as the final, official or formal record of the award.

9 Changes to your Registration

9.1 Voluntary suspension

The University recognises that sometimes life can change to such a degree that it is necessary to consider a temporary halt to your studies. There may be a number of potential causes, including:

- illness, either physical or mental (of you, or of close family or friends);
- financial concerns, such that you can't afford to maintain your living expenses while studying;
- personal relationships intruding upon your ability to study;
- other personal circumstances (e.g. a change to your living arrangements).

Wherever possible, your Supervisors will act to support you in continuing with your studies, and should advise you as appropriate of the support mechanisms available to all students, including the Counselling Services, Learning Support Officers, Student Wellbeing and Disability Support and the Cranfield Students' Association.

If you find yourself in a position where you believe your study is being affected, you should discuss this as soon as possible with your Supervisor and/or your Pastoral Adviser.

Possibilities that might be open to you to accommodate your personal circumstances may include:

- Reviewing your patterns of study to see if they can be adjusted, including the possibility of transferring from full-time to part-time study (or extending the period of part-time study);
- Taking into account personal circumstances at formal reviews of the Progress Review Team;
- Discussing with your Supervisors about taking time out from active study, either through a formal
 period of suspension of study (where you would normally remove yourself from the course for a
 short period of time), or through recognising that you will make little or no academic progress for
 a defined period of time in which case an extension would be recommended.

Where you and your Supervisors agree that it is sensible and appropriate to have a suspension from study, you will be asked to confirm this in writing to your Supervisor(s). You should also agree with your Supervisor a "return to study plan", so that everyone is clear on what will be expected on your re-engagement with the University. The "return to study plan" can be reviewed at any point, and further periods of suspension of study agreed. Please note it is extremely rare for students to be allowed a suspension of study for more than three years in total.

9.1.1 Concerns over personal welfare and academic progress

Occasionally, it may be the case that a Supervisor (or another concerned member of staff) believes it is appropriate to raise you the prospect of having to suspend your studies. Most commonly, this would be due to concerns about your personal welfare and the impact on your academic progression, or if you are reaching a point where you are at risk of failing, and it is felt that a suspension of study may be helpful to allow you time to resolve any personal issues, in order to then focus more successfully on your study.

Such a suspension of study is not intended as a penalty or punishment, but an attempt to ensure that you can undertake and complete your study in the most effective and positive way possible. Such suspensions are voluntarily agreed to by a student, however if you continue in your study and your progress continues to be insufficient, steps may be taken to terminate your registration instead.

9.2 Forced removal: requests by the University to suspend studies

There are a number of circumstances where a request for a forced suspension of study may occur:

- lack of attendance or contact with the Supervisor(s);
- inability to attend (possibly through no fault of the student) the specified location of study for the course; or
- concerns over whether the student is a risk to the health and safety of him- or herself, or of other students or members of the University.

Where a suspension is enforced on a student without their consent, the student retains a right to appeal against that decision: details of the appeals procedure are outlined in the Senate Handbook on Changes to Registration.

9.2.1 Lack of attendance or contact with the supervisory team

In these circumstances, the Academic Registrar may authorise the suspension of study of a student without their permission, if approached with such a request from the Supervision Team.

Students are expected, where they find themselves unable to engage in study effectively (e.g. illness), to inform the Supervisor(s) as soon as possible, so that they can consider how best to support any continuation of study. It is the student's responsibility to ensure the Supervisor is aware of any circumstances that are affecting their ability to study.

Where there has been no contact from a student, the Supervisor(s) (or other member of staff in the Faculty) should attempt to contact the student. If no reply or contact is made, Supervisors should contact Registry: at this point, the Registry Manager (or a member of their staff) will suspend the student for a period of up to two months and, during that time, make further attempts to re-establish contact. If no contact is made at that point, the Registry Manager will take steps to terminate the registration permanently, on the grounds that the student has withdrawn from the course without giving the University formal notification.

9.2.2 Inability to attend the specified location of study or research

There are some circumstances, which may not be the student's fault, where they cannot attend the specified location of study/research for the course. (The most common examples of this are: lack of an appropriate visa to study in the UK, and lack of site security clearance for the Defence Academy site at Shrivenham). In these circumstances, Supervisors should notify the relevant Registry, the Registry Manager (or a member of their staff will discuss with them and the student the likelihood of those issues being resolved and the likely timescales). Education Services may authorise a suspension of study, with or without the student's consent, based on their ability to attend classes or sessions in the foreseeable future. If it appears likely that the student will not be able to attend on a long-term basis, the Academic Registrar (or a member of their staff) may instead choose to terminate the registration on a permanent basis.

9.2.3 Concerns over health and safety of the student or others

Cranfield University is committed fully to promoting a safe and harmonious environment.

The Academic Registrar may be required to act if they have received evidence to indicate that a student's current or potential future actions may represent a risk to the health and safety to any member of the University: this includes circumstances where the student has committed, or threatened to commit, an act of violence, damage, criminality or serious abuse, or where it is suspected or confirmed the student has a serious mental health illness (as outlined in the Student Welfare Handbook). Wherever possible, the Academic Registrar will discuss this possibility with the student and the Supervisors and explain the reasons and evidence for this decision.

It must be noted, however, that the health and safety aspects will take precedence over the personal wishes of the student to continue their studies.

Such circumstances may in addition lead to a formal disciplinary investigation into the student's behaviour.

Where such a suspension of study is authorised, the Academic Register will discuss with the Supervisor(s) and the student any conditions which may apply in order for the student to return to study. This will be the result of a formal risk assessment of the potential return to study.

9.3 Forced removal: disciplinary investigations

Very rarely, suspensions may apply to a student if they have been alleged of committing a serious offence, or if they are the alleged victim of an offence and it is seen as appropriate to remove them from the University so that the circumstances around the allegation are not exacerbated. Any suspension of study will normally be limited to either the duration of the disciplinary investigation or, if it is a penalty as a result of a disciplinary investigation, a period deemed appropriate by the Head of Faculty: if this is longer than four weeks, there is a right of appeal (as outlined in the Senate Handbook on Disciplinary Procedures).

9.4 Returning to study

Students are not normally allowed to recommence their studies unless a "return to study plan" has been agreed between them and the Supervisor(s). Depending on the circumstances leading to the suspension of study, this may include a health and safety risk assessment and a requirement to put in place adjustments (by the University or by the student) to support such a return to study. The Academic Registrar retains the right to authorise a further suspension of study, or an early termination of registration, if such a plan cannot be devised and/or implemented in reasonable timescales.

Supervisor(s) are responsible for constructing a "return to study plan" in consultation with the student. It should include:

- a list of training or development courses the student should attend on his or her re-registration;
- preparatory reading or other work the student should undertake before returning;
- where relevant, the student having to produce a revised research project plan;
- where relevant, meeting with a Learning Support Officer to discuss the student's learning requirements;
- where relevant, meeting with a Student Advisor to discuss wellbeing services available to support their return to study,
- an indication of whether the student should provide a medical report or documentation on their fitness to study.

Once the "return to study plan" is complete this requires the approval of the relevant Director of Research (via the relevant SAS Research Lead), before being submitted to the Student Casework Team within Education Services.

All returning students must re-register with Registry, as well as with the Supervisor(s) in the Faculty.

If a student has entered the UK on a visa specifically to study, they will probably need a new visa and be advised to request a new Certificate of Acceptance of Studies (CAS) from Student Immigration and Funding Team.

9.5 Annual Leave

Not considered a suspension of study, and in addition to statutory Public Holidays (eight in total) and official University closure days (up to six), Research students are permitted to take annual leave from their studies.

- Full time research students may take up to 25 days of annual leave during each calendar year (1st January to 31st December) (pro-rated for part-time students).
- Holidays can be taken at any time, but must be agreed in advance with the supervisory team and bearing in mind a student's individual sponsor terms where appropriate.
- The Primary Supervisor must keep a record of students leave.
- Requests for annual leave for a period of more than two weeks shall not normally be approved.
- Requests for holiday cannot be made retrospectively.

Please note that:

- Students must ensure that they have a sufficient balance of holiday remaining for the calendar year before submitting a new holiday request.
- Students who commence their studies after 1 January will receive a pro rata allocation.
- Students cannot request more than 25 days holiday in any calendar year.
- Students should not make any bookings before the request for holiday has been approved.

To request Annual Leave you will need to complete the 'Research Student Annual Leave Request Form' (available on the intranet). Please complete this form at least 2 weeks prior to the start date of your requested holiday and return it to your Supervisor.

9.6 Sick Leave

From time to time students may be required to take time off from their studies due to illness. Any instances of absence relating to sickness should be reported to the Supervisor on the first day of absence. The student should keep their Supervisor updated on their recovery and inform them at the earliest opportunity of their proposed return to study date.

It should be noted that during periods of sickness the registration end date for study will not be extended unless a suspension is requested. Students holding a visa for study should contact Student Immigration for guidance before applying for a suspension.

Students are able to self-certify absence for up to 7 consecutive calendar days. Absences which last 8 or more consecutive days must be supported by a Doctor's Statement of Fitness for Work ('fit note') sent to your supervisor, Students who are in receipt of a UKRI stipend will continue to be paid for absences covered by a medical certificate for up to thirteen weeks within a rolling 12-month period. If the illness lasts for more than thirteen weeks You must suspend the Studentship for the period beyond the thirteen weeks.

9.7 Maternity and Paternity Leave

The University has a Maternity and Paternity Leave policy which sets out the rights and responsibilities of research students who;

- become pregnant during their studies
- · are about to become a father
- are the partner or someone who is pregnant and expects to be responsible for the child
- are becoming a parent (e.g. through adoption).

The full policy can be found on the <u>intranet</u>. The policy details rights to parental leave and health and safety requirements for expectant mothers.

9.8 Early termination of registration

There may be circumstances where a Supervisor wishes to take forward a recommendation of excluding a student from the University on the grounds that they are not making academic progress or engaging appropriately with his or her research.

The University has a Student Academic Engagement Policy (see Appendix E) which all students are expected to adhere to. Where a student does not meet the expectations of the Student Academic Engagement Policy they may be removed from their studies.

Students are expected, where they find themselves unable to engage in study effectively (e.g. illness), to inform the Supervisor(s) as soon as possible, so that they can consider how best to support any continuation of study. It is the student's responsibility to ensure the Supervisor is aware of any circumstances that are affecting his or her ability to study.

Wherever possible, students will be advised to withdraw from the University as an alternative to a forced termination taking place. When a student chooses to withdraw, Supervisors should review the student's eligibility to receive a lower award (i.e. if the student is registered for a PhD, they may have completed sufficient work to submit for an MPhil).

Any recommendation made by a Supervisor, or a Progress Review Team, for early termination of registration is considered by staff in Education Services. Any case must include:

- Evidence demonstrating either a lack of engagement, failure of academic progress or both;
- Evidence that the student has been warned about the likelihood of failure or exclusion, and has been given opportunities to redress any shortcomings;
- Evidence that, where a student has provided information about exceptional circumstances, these have been considered appropriately by the relevant staff.

This evidence may include (but not be limited to) notes of meetings with the student, email correspondence, assessment marks or feedback.

After the case is considered by staff in Education Services the outcome will be conveyed to the relevant Director of Research, the Supervisor(s) and the student in writing.

If the outcome is to terminate a student's registration, the student is given twenty working days in which to appeal to overturn the decision. Until this time has passed, the student is still registered.

9.9 Transfer to an alternate award

Research students may, during their studies, transfer to either a higher or lower award at their own request or be offered a lower exit award as an outcome of their formal thesis examination or progress review.

9.9.1 Transfer to a higher award

Research Students may, following discussions with their supervisor(s) request to transfer to a higher award (e.g. MSc by Research to PhD).

A student wishing to transfer to a higher research award will need the agreement of their supervisor and the relevant Director of Research within their Faculty. It is expected that a research student transferring from a lower research award (level 7 qualification) to a higher research award (level 8 qualification) will undergo an interview for the higher award as part of the process of supervisor/Director of Research agreement. Students will be required to pay the additional fees due for the PhD, unless they have an internal/external sponsor willing to cover the additional cost.

9.9.2 Transfer to a lower award

Research students may request a transfer to a lower award, usually as a result of changes to their personal circumstances. A student wishing to transfer to a lower research award will need the agreement of their current supervisor (and any new supervisor) and the relevant Director of Research within their Faculty. Students studying on a Tier 4 visa should contact the Student Immigration and Finance Team to check whether any changes will affect their study visa.

9.9.3 Lower exit awards (Research Students)

There are several possible outcomes to the examination of a research thesis, which are explained more clearly in the Research Students Handbook. Examiners may award doctoral students with a Master of Philosophy (MPhil) award if they believe the student meets the required standard of study (as outlined in Appendix A of the Research Student Handbook) but that the work presented in the thesis does not meet doctoral standards (either in terms of absolute original output or in terms of volume of work).

It is only used in circumstances where the examiners do not believe remedial work <u>on the current research and thesis</u> can result in a PhD being obtained. Examiners may request that the candidate makes minor corrections to the existing thesis before awarding the Master of Philosophy degree.

A research student's review panel can recommend exiting with a lower award as an outcome of a progress review (most commonly an 'Additional Review'). In such cases the panel will make the recommendation on the review form to then be considered by the Supervisor and relevant Director of Research.

9.9.4 Change of Research Topic

Any student who wishes to significantly alter their research topic (i.e. where the change would result in a transfer of Primary Supervisor, Centre Theme or Faculty) should discuss the matter initially with their current Supervisor. Any proposed change would require the support of the student's current Supervisor, any proposed new supervisor, the Head(s) of Centre concerned and be approved by the relevant Director of Research in the Faculty or Faculties in question.

10 Exceptional Circumstances

The University recognises that during your study an exceptional situation or issue may occur which impairs your ability to complete the requirements of your studies. Where appropriate, the University has mechanisms in place to allow students to request consideration of these.

Such circumstances may affect events including:

- Where you have been unable to submit your Review paperwork within five days of your Review
- Where you are unable to attend a review meeting or viva examination
- Where you are unable to complete their corrections on time

Students would not be expected to submit an Exceptional Circumstances request relating to the submission of their thesis (or a thesis following a revise and represent outcome) on time; this should be managed applied for proactively by students by applying for an extension to their submission deadline as per the process at section 7.4 of this Handbook.

10.1 Definition of exceptional circumstances

Exceptional circumstances are defined as those which are:

• Relevant: the circumstances directly affect the required work for or submission of the

required work (i.e. occur within the timeframe of the work in question), or directly

affect attendance at a Review or viva examination; and

• **Unexpected:** the circumstances were unforeseen prior to the request (i.e. the circumstances

should be submitted as soon as they are known); and

• External: the circumstances were outside of your control and that you could not have

reasonably been expected to take action to mitigate the impact of the

circumstances.

Exceptional Circumstances may be submitted to:

- · Request a delay in the submission of review documents
- Request a delay to a Review or Viva examination

Requests for an extension to the submission of a corrected thesis or a Revise and Represent thesis are completed through an Extension to Thesis Submission form, which is available on the intranet.

Acceptance of exceptional circumstances may result in an extension to paperwork submission, you being able to re-submit the work in question or being allowed to re-attend a review meeting or viva examination as a first attempt.

Third party corroborative evidence should be provided to support all exceptional circumstances requests. Acceptable exceptional circumstances include (but are not necessarily limited to):

- serious unexpected illness or injury (usually a short-term condition or accident);
- death or serious illness of a close relative or significant other person;
- long-term illness or health condition worsening;
- significant and unexpected adverse personal or family circumstances, including (but not limited to) being a victim of crime, or having to travel away from the University;
- unexpected travel disruption (e.g. road traffic/rail accident);
- for part-time students, significant and unexpected pressure from your employer;
- for review meetings/vivas, religious commitments or observances.

Examples of circumstances which would not be considered exceptional include (but are not limited to):

Aspects of the learning environment which you have reasonable control over (e.g. availability
of learning resources/research material, deadline conflicts, misreading or misunderstanding

- requirements/dates; personal computer/printer problems including loss of computer data, submitting the wrong work (or version of the work));
- Aspects of your personal life which are not short-term or unexpected (e.g. change of address
 or employment, personal holidays or travel plans, self-inflicted illnesses (e.g. from substance
 abuse or sleep deprivation), weddings or similar family events);
- Financial issues;
- Poor time management;
- Foreseeable travel disruption (e.g. short train delays, travel strikes, road-works etc.);
- Routine full- or part-time employment activities;
- Personal conditions that were not disclosed in time for learning support arrangements to be made, but could have been;
- Circumstances where it is more appropriate to consider a suspension from studies (e.g. long-term illness, maternity/ paternity leave, major changes in personal or financial circumstances).

Claims may not be accepted if:

- The circumstances described are not deemed exceptional as outlined above
- The evidence does not cover the relevant period
- The evidence is not supplied by an independent third party
- The evidence does not support the suggested impact of the circumstances
- The evidence does not support your claim.

10.2 Requirements and evidence

Requests to have exceptional circumstances taken into consideration should clearly state:

- which event the request relates to (progress review paperwork, review meeting, viva or corrections deadline). It is expected that exceptional circumstances will be short-term and as such the requests will only apply to the specified event. If future submissions are affected, a new request should be submitted.
- a description of the circumstances and (ideally) which category it fits into (see table below).
- evidence to support the circumstances you are describing (see table below). In all cases, evidence from a third party should normally be provided to support the exceptional circumstances described, taking into account where necessary the ability of the culture, systems and infrastructure in other countries to provide such evidence.

Requests will only be accepted if all three of the criteria for exceptional circumstances are met, as outlined above.

You may not submit exceptional circumstances on the grounds of poor performance. In attending a review meeting, viva examination or by submitting work you are declaring yourself fit to sit.

Some examples of exceptional circumstances, and the evidence required are:

Exceptional circumstance	Example of Evidence
Serious unexpected illness or injury (usually a short-term condition or accident)	Doctor or hospital note Police incident record University or company health and safety incident form
Death or serious illness of a close relative or significant other person	Death certificate Doctor or hospital note
Long-term illness or health condition worsening	Doctor or hospital note

Significant and unexpected adverse personal or family circumstances, including (but not limited to) being a victim of crime, or having to travel away from the University	Police incident record Letter of support from third party
Unexpected travel disruption (e.g. road traffic/ rail accident)	News report Police incident record
For part-time students, significant and unexpected pressure from your employer	Letter of support from current employer (where this cannot be provided, the contact details of the employer should be provided to enable the University to establish contact)
Religious commitments or observances	Letter of support from religious leader

All exceptional circumstances requests should be submitted by you as soon as practicably possible. You should not wait to gather your evidence in order to submit a request. The University will consider requests, and make decisions, subject to the evidence being provided at a later date. All evidence, including subsequently requested evidence, should be provided as soon as possible, and by no later than 20 working days after the submission of your exceptional circumstances request.

It is your responsibility to ensure that the evidence is provided as soon as possible: the University will not normally obtain evidence on your behalf.9

Evidence must be original.¹⁰ Electronic evidence will be accepted but the original must be available on request. Evidence must be in English. Where evidence is not in English it must be accompanied by a translation certified by a Public Notary, accredited translator (member of the Association of Translation Companies) or a member of Cranfield University Staff (as approved by the Student Casework Team or Registry Manager).

You may make retrospective exceptional circumstances requests but should be aware that the barrier for accepting circumstances after the assessment date is higher and you will be required to provide a full explanation as to why the circumstances were not raised before. Cases relating to poor time management will not be accepted. You are therefore encouraged to ensure that exceptional circumstances requests are made before the assessment date.

All requests should be submitted by you on the appropriate form, as provided by your SAS Lead or available on the intranet.

You should not assume that exceptional circumstances requests will be accepted. Non-submission or non-attendance is at your own risk.

Formal notification of the acceptance or rejection of requests will come from staff in Education Services, and may include recommendations for you in response to the decision.

Exceptionally, where employers will not provide evidence in writing, Education Services will contact the employer to obtain verbal confirmation of the circumstances described.

Submitting a false claim or fraudulent evidence is a serious matter and will be dealt with under the procedures in the Senate Handbook on Disciplinary Procedures.

10.3 Exceptional circumstances requests procedure

10.3.1 Requests made prior to review meeting, viva examination date or submission deadline

All requests prior to the event (corrections/paperwork submission, review meeting or viva date) must be submitted through your SAS Lead. Your SAS Lead will coordinate the consideration of requests with your Primary Supervisor. Once a decision has been made, your SAS Lead will liaise with Registry to ensure that the request and outcome are recorded.

Your SAS Lead in agreement with your Primary Supervisor will review the form and will:

- a) Allow non submission of review paperwork or non-attendance at a review.
- b) Allow non-attendance at a viva examination.
- c) Allow an extension to corrections/revise and represent.
- d) Return the form where the grounds for exceptional circumstances have not been met.

The appropriate staff in Education Services will be advised of the outcome, to ensure your student record is kept up to date. SAS Leads, in agreement with your Primary Supervisor, can at their discretion approve extension requests pending receipt of evidence and in all cases, your SAS Lead will check that evidence has been received and that it confirms the impact and timeliness of the circumstances on your studies. Decisions can be reversed if evidence is insufficient. Until such evidence is received, your record will reflect the fact that exceptional circumstances have not yet been approved. This evidence should be provided as soon as possible, and by no later than 20 working days after the submission of your exceptional circumstances request. If evidence has not been received at this point or is insufficient then the exceptional circumstances request will be rejected.

10.3.2 Requests made retrospectively (<u>after</u> a missed review meeting, viva examination date or submission deadline)

All requests should submitted by you to your SAS Lead and include in the subject heading: ExCircs and your name. Your SAS Lead will liaise with you and your Primary Supervisor in order for all documentation to be completed and submitted to the Compliance team.

Your Primary Supervisor will be asked to provide a statement (to support your request or otherwise). This will be provided to you.

Cases must be submitted with:

- third party corroborative evidence, as outlined above and provided by you;
- a clear and appropriate reason why the exceptional circumstances were not submitted prior to the event (corrections/paperwork submission, review meeting or viva date), provided by you.

Requests must be made within 20 working days of the event (corrections/paperwork submission, review meeting or viva date): later requests will not be considered, except in the case of serious long-term medical incapacity reported through the relevant Assistant Registrar in your Faculty. The decision to reject late requests should be considered the final decision of the University. You are therefore strongly advised to submit the request as soon as possible after the event to strengthen the case for consideration.

10.4 Appeals against the initial decision

Where requests are not agreed to, you will be provided with the reasons for the decision. You have the right to appeal to Senate's Research Committee against the initial decision but only under specific circumstances. These are limited to:

- A. that the evidence you provided was incomplete or inaccurate, to the extent where it is reasonable to conclude that the outcome may have been substantially different:
- B. that the person making the initial decision had summarily dismissed significant pieces of evidence in coming to his or her or their decision;
- C. that the criteria relating to the decision were not applied correctly by the person making the decision.

You may not appeal because you do not like the outcome, or because you disagree with the reasons you were given.

Appeals must be made within 20 working days of the date of the original decision, and should be sent in writing to appeals@cranfield.ac.uk, clearly marked in the subject header as "Exceptional circumstances appeal". You should include (or attach):

- the original decision with your appeal email;
- your statement, including clearly under which reason you are appealing (A, B or C); and
- evidence to support your statement.

Failure to provide all three items above may result in your appeal being rejected by the Secretary to Senate's Research Committee on its behalf.

The decision of Research Committee will be the final decision of the University: there is no further right of appeal (although students retain the right to complain to an external body as detailed in the Student Complaints procedures).

10.5 Confidentiality of exceptional circumstances requests

By submitting an exceptional circumstances form you are agreeing to the University holding this personal data for the purposes of processing your claim. The University holds this data in accordance with its notification under the General Data Protection Act.

You are not required to give detailed personal information unless you feel it is relevant to your claim. You do not for example need to provide detailed information about a medical condition and can ask your doctor to provide evidence that outlines the impact that the condition has on your ability to study rather than providing detail on the condition itself.

Your exceptional circumstances request will only be provided to a limited number of people to allow your claim to be processed.

For claims made before the assessment date or deadline these are:

- your Supervisor(s);
- your SAS Lead and other relevant staff in Education Services (in order to record the outcome);
- the relevant Director of Research (in an advisory capacity).

The following may also be consulted by the Primary Supervisor:

- an Assistant Registrar, or the Academic Registrar;
- third party evidence provider (to confirm authenticity).

In addition, claims after the assessment deadline or date will be considered by the Student and Academic Compliance Officers and the outcomes recorded by staff in Education Services.

Your exceptional circumstances form and evidence will be retained by the University for the duration of your period of registration to enable the outcome to be implemented. SAS Leads may retain a skeleton database of outcomes but will not retain personal details or information relating to the exceptional circumstances once a student's registration has ceased.

11 Academic Misconduct

Academic integrity is fundamental to the values promoted by the University. The University prides itself on, and works hard to ensure the academic integrity of all of its awards. Students are expected to take pride in their studies and uphold a high level of academic integrity throughout.

All assessed work must be your own work, except where exceptions are allowed and stated explicitly. Plagiarism (i.e. the use, without acknowledgement, of the intellectual work of other people, and the act of representing the ideas or discoveries of others as one's own in any work submitted for assessment or presented for publication) is a form of academic misconduct and is not acceptable, and will normally result in failure of the work by the examiners and disciplinary action. In addition, all work submitted as original must have been completed specifically for your intended award during your registration period. Any prior research, whether submitted for a previous academic award or published, may be referenced as a source material, but not form part of your 'original contribution to knowledge' for your intended award.

You are particularly advised at the outset of your studies to familiarise yourself with the Senate Handbook on Academic Misconduct, and take advantage of the courses and tools offered by the University to help you understand the definitions of academic misconduct and how to avoid it, including through proper referencing. Further details are available on the intranet (https://library.cranfield.ac.uk/knl/referencing).

When you submit your thesis, it is normal for it to be reviewed through Turnitin UK¹¹, a non-originality detection system. You should also be asked by your supervisor to submit at least one other piece of work prior to this to Turnitin UK, in order to familiarise yourself with the system.

When you submit your thesis through Turnitin UK you will receive a report that provides an Overall Similarity Index (OSI) and shows where similarities to other texts appear in the work. This report will be reviewed by your Supervisors. The OSI will indicate the similarity between your thesis and other published works (including other theses submitted through Turnitin UK), which will be assessed for any potential academic misconduct by your Supervisor. Supervisors may delegate any review of the Turnitin report to other staff, but retain responsibility for ensuring that the report has been reviewed prior to your oral examination.

If work is referenced correctly, and large chunks of material from other sources have not been used to construct your thesis, then it is unlikely that an allegation of academic misconduct will be made. Where there are any concerns about plagiarism, these will be brought to the attention of the relevant Director of Research, as outlined in the Senate Handbook on Academic Misconduct. The Director of Research will communicate the outcome of any formal review of academic misconduct to the examiners.

Prior Research

All work submitted for a research degree must be your own work, and have been produced specifically for your intended award. Where you have completed prior research and submitted this for any other academic distinction this may be referenced as a source material, but not form part of your 'original contribution to knowledge' for your intended award. This applies whether the work has been submitted for an award at Cranfield or at another institution.

Artificial Intelligence text generation

Cranfield University awards academic qualifications to individuals on the basis of their own academic achievements. Assessments are designed to assess an individual's knowledge, skills

¹¹ Exceptions may apply when the thesis contains restricted or secret content, or where parts of the thesis are in a format which cannot be submitted to Turnitin UK.

and abilities at a level appropriate to their award. Fundamentally, it is your responsibility to ensure that work submitted for assessment is your own.

The submission of the work of others without attribution is an attempt to deceive the examiner, is considered to be plagiarism, and will be investigated as a form of academic misconduct. In this context, the Senate Handbook on Academic Misconduct refers to unattributed material sourced from the internet and that generated by software used to "disguise the use of other's work as your own".

The attributed use of AI generated or modified text is permissible in principle. This means that you must acknowledge all use of AI tools, state what you have used them for, and acknowledge any AI-generated text. This should include an acknowledgement if you have made use of non-standard grammar-checking tools. If in doubt you should ask your supervisor for advice.

It is essential that you make yourself aware of the significant risks associated with the excessive and indiscriminate use of Al-generated text. Al generative text can contain errors. There are significant risks associated with the use of material generated by Al tools which may not have correctly drawn on, referenced, or attributed material that has been used.

It is essential that you take responsibility for the full and proper checking and referencing of original source data. In this context, the Senate Handbook on Academic Misconduct refers to improper or incomplete referencing as plagiarism.

Your thesis and interim progress reports in particular are the prime means of assessment. It is essential that you able to demonstrate within your own written work your own original contribution to your field of research.

In addition, students preparing manuscripts need to be aware of the risk in using Al-generated content in research publications. Increasing numbers of publishers are issuing guidelines specifying that:

- Al tools will not be accepted as a credited author on a research paper. Authorship attribution carries accountability for the work undertaken, and Al tools cannot take this responsibility.
- Researchers using AI tools should document this use in the methods or acknowledgements sections (or within the introduction or another appropriate section).

This information is correct as of the publication date of this Handbook, however further guidance on this topic may be issued throughout the year. More information can be found on the intranet here.

12 Responsible Innovation and Ethical Approval

Responsible Innovation seeks to promote creativity and opportunities for research and innovation that are socially acceptable and undertaken in the public interest. Innovation often raises questions and the potential impact can sometimes be unpredictable.

All members of the University are expected to conduct their work in an ethical and legal manner. Researchers should reflect on their personal and professional motivations for conducting their research and be able to anticipate, reflect and engage on the wider ethical and societal impacts, implications and value of their work by engaging with the public and other stakeholders where appropriate.

To ensure all of our research conforms with appropriate ethical principles and standards, all students undertaking research as part of their studies need to submit their research proposals for ethical approval through the University's online research ethics approval system (CURES) https://intranet.cranfield.ac.uk/researchethics/Pages/default.aspx. Your supervisor should discuss the ethical approval process with you during your induction.

The University's policy is that all research projects must get ethical approval before you start to collect data. It is important that you do this to make sure your proposed research conforms with ethical principles and standards. Any thesis or assignment submitted without ethical approval may not be examined. It is University Policy not to grant retrospective ethical approval.

Prior to submission of a CURES application, all students must complete the on-line Ethics and Integrity Module and pass the assessment. This can be found on your VLE pages.

13 Data Management Plans

The research data you create will be the evidence underpinning your findings and is therefore extremely valuable. It is important that you create, handle, store, and preserve it appropriately, in line with the FAIR Principles and Cranfield University's Management of Research Data Policy.

You must write a Data Management Plan (DMP) before you start data collection. A DMP is a document that sets out your approach to data handling throughout and after your project, to ensure the right procedures are in place and that you are well prepared for any challenges. The DMP is on the checklist for supervisor review meetings.

Supporting you with your DMP

Our Research Data Manager is based in the Library and supports staff and student researchers with all aspects of data management; email researchdata@cranfield.ac.uk for help.

Research data management (RDM) training is offered in three parts:

- RDM1: Introduction. You must complete this in your first six months.
- RDM2: Writing a DMP. You should complete this so that you can write and submit your DMP before you start your data collection.
- RDM3: Using CORD. CORD is Cranfield's data repository. This module is optional to help you familiarise yourself thoroughly with the system.

If it is not included in a formal induction week, all training is offered by workshop and webinar (sign up via DATES) as well as being available in online format via the VLE.

14 Intellectual Property and Copyright

The University has a formal policy on Copyright Intellectual Property (IP) and copyright, which can be found on the intranet.

Copyright

Cranfield requires students to assign ownership of the copyright of any student Thesis (taught or research) to the University. This is to ensure that the University has control of publication of a student Thesis because it might be necessary to impose a publication embargo for confidentiality or security requirements. Ownership of the copyright of a thesis does not apply to any invention described within it (see intellectual property below).

Intellectual Property

Students enrolled on Research Courses at Cranfield are required to enter into a Studentship Agreement at the outset of their course, which will clearly define terms regarding ownership of IP created within the course and the associated rights. Third Party sponsors of Research Courses often require ownership of and rights to IP arising during a project that they sponsor.

Where your work is the result of publicly-funded research, it is an expectation that the reports, publications or other outputs will be placed in the public domain.

You should also note that if and when you undertake work sponsored by a commercial partner or similar organisation, you will be required to observe all conditions of Cranfield's contract with the Sponsor, including confidentiality.

You may not use "Cranfield University" or its logos for private businesses or enterprises (including student societies) without written permission.

15 Doctoral Researchers Core Development Programme

The Cranfield Doctoral Researchers Core Development (DRCD) programme is based on the national <u>Vitae</u> researcher development framework. A range of opportunities are available for you to continue personal and professional research development. The Programme is not focussed on any specific technical area and each <u>Thematic Doctoral Community</u> will provide additional specific technical development opportunities and support.

The resources are linked to the typical key stages of your research journey. The skills you require depend upon the type and subject of your research and how you will disseminate the outcomes. These skills are increasingly valued by employers as they recognise that the high level skills can transfer readily into a wide range of sectors.

16 Health and Safety

The University recognises and accepts its responsibility to ensure the health and safety of its students whilst at the University, as well as its obligations to employees, contractors and visitors. The University's Health and Safety Policy Statement, along with procedures, guidance and forms are available on the Health and Safety Intranet site:

https://intranet.cranfield.ac.uk/safety/Pages/Default.aspx

Cranfield

A health and safety guide for all students studying at the Cranfield campus can be found here:

https://intranet.cranfield.ac.uk/safety/Health %20and%20Safety/Handbook2016V2.0CU-SHE-BPG-3.11.pdf

Some schools also have local health and safety intranet sites which you should be shown in your local inductions.

Shrivenham

A health and safety guide for all students studying at the Defence Academy can be found here: CDS H and S Handbook 2024.pdf (cranfield.ac.uk)

In addition to the general University Health and Safety policy and procedures, site specific arrangements are in place at the Defence Academy, which can be found on the Defence Academy intranet.

A risk assessment (and potentially a Control of substances hazardous to Health (CoSHH) assessment) is required for <u>all</u> research activity. The assessments must address issues that arise should the activity include the need for equipment to be:

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- Hard wired to the mains electrical supply
- compliant and require attaching to a 3-phase electrical supply;
- Connected to the mains gas or water supplies.

Where this is the case, the Student's Supervisor must ensure the appropriate Facilities Manager has been consulted, and where necessary, the Facilities Engineering Department have certified the interfaces as meeting all current safety requirements.

17 Student Support

In addition to your Pastoral Advisor as detailed in section 4, a number of other support systems are in place for you during your time at Cranfield.

17.1 Learning Support Officers

The University's Learning Support Officers (LSO) are based in Student Wellbeing and Disability Support at both Cranfield and Shrivenham and offer information, guidance and support to students with disabilities, physical and mobility impairments, specific learning difficulties and mental and physical health conditions.

Students who have shared their condition or support need on their application form or through EVE, will be contacted by the relevant LSO before registration to arrange a meeting to discuss the support available and any assistance required. If you believe you should have been contacted by an LSO but have not been, please make contact with Student Wellbeing and Disability Support as soon as possible via studentsupport@cranfield.ac.uk.

Students who require support but have omitted to share a disability or condition on their application form, or students who become disabled or are diagnosed with a condition during the course of their studies, must contact their LSO as soon as practicable to discuss their needs.

LSOs offer students one-to-one consultations, either in person, by phone or online via Zoom or Microsoft Teams, where you can discuss:

- how your disability is affecting your studies
- what adjustments may be made to enable you to get the most out of your studies
- any special examination arrangements that may be appropriate.

In order to receive Learning Support you will need to provide appropriate evidence. Evidence must be in English. Where evidence is not in English it must be accompanied by a translation certified by a Public Notary, accredited translator (member of the Association of Translation Companies) or a member of Cranfield University Staff (as approved by the Student Casework Team or the Head of Registry Services). This will usually be in the form of a medical or specialist report, or a diagnostic assessment report (the SO can help organise dyslexia screening tests and full diagnostic assessments where necessary).

Upon receipt of your evidence the LSO will create a Student Support Plan which will document any reasonable adjustments required for you to complete your course. This will then be sent to the relevant staff for the adjustments to be put into place. Academic and support staff will only be sent details of the reasonable adjustments required; details of your condition will not be shared. The Student Support Plan cannot be created without the necessary evidence (nor any adjustments put in place) so it is important that this is provided as soon as possible.

In addition, the LSO can provide general advice on dyslexia and other Specific Learning Difficulties (SpLDs). For UK students who are eligible for funding, the LSO can also assist with completing Disabled Students Allowance application forms. For Apprenticeship students, advice can be given on ESFA funded support.

To arrange an appointment with an LSO, contact Student Wellbeing and Disability Support by email (studentsupport@cranfield.ac.uk). Appointments are available in person, by phone or online via Zoom and Microsoft Teams. For further information, videos and FAQ's please see our Learning Support intranet page (https://intranet.cranfield.ac.uk/Students/Pages/LearningSupport.aspx)

17.2 Library Support

Library Services provides an induction programme for all research students based at the Cranfield and Shrivenham sites. During the induction programme, you will be given:

- one-to-one tailored support from your Research Support Librarian;
- guidance on how to access a comprehensive range of subject databases, full-text online journals, online books, reports, the print collection and an efficient document delivery service;
- access to previous theses through the Cranfield repository CERES and the UK's national thesis service EThOS;
- training on a range of research related topics, such as how to keep up-to-date in your research area, getting started with your systematic literature review, reference management software, referencing, avoidance of plagiarism and research data management.

A range of core study skills are provided via the Study Skills Hub and language support training courses.

The Research Support team are not only an important source of information and support, but also play a major role in helping to raise the visibility and impact of research undertaken at Cranfield. Via various channels such as the Doctoral Researchers' Core Development programme, regular Lunch+Learn webinars, and through 1-2-1 guidance, they are happy to provide advice and support on topics such as the best places to publish your research, research data management, use of ORCID and open access.

Library Services also works closely with the Doctoral Communities and with the Research and Innovation Office to provide additional training and research culture events. These sessions equip research students with skills that are not only vital for maximising success with their studies, but are also valued by employers, so developing these skills will benefit future career progression.

18 Student complaints and appeals

The University's aim is that you will successfully and satisfactorily complete your studies, and it is committed to supporting you in achieving this.

There may, however be occasions where you are not satisfied either with the final outcome of your research degree or with an aspect of the support you have received during your study.

The University has separate procedures for complaints (for issues around the support you have received) and appeals (where you believe that the final outcome on your degree has not been fair).

Where a student has a **Complaint** about the support they have received during their course (such as alleged inadequacy of supervision, lack of facilities or other arrangements during the period of study) they should raise these as soon as practically possible <u>during</u> their research programme. Full details of the process can be found in the Senate Handbook: Student Complaints.

A separate **Academic Appeals** procedure exists which may be used by students against decisions made by examiners or reviewers whose effect is that the University degree or other distinction sought cannot be awarded, and no opportunity is given for re-examination. An intention to appeal must be submitted in writing to the Academic Registrar within 20 working days of the notification giving rise to the appeal, and must meet specific criteria. Full details of the process can be found in the Senate Handbook: Academic Appeals (Research Students).

APPENDIX A: Research Student Charter - Mutual Expectations Framework

Enabling a positive and constructive supervisor and research student working partnership

Managing our Partnership	
As your supervisor, I will:	As your student, I will:
Be on time and be prepared for all meetings and arranged activities. Discuss with you and agree turnaround times for feedback on written work and how regular we will meet, but recognise there may be periods (e.g. annual leave) where times may vary. Meet the minimum requirement of meeting you at least once per month (every other month for part-time students), but recognising requirements may change as your research progresses. This will include visiting you at least once a month if/when you commence work in the laboratory/workshop. Respond to requests for meetings in a timely manner and will make you aware of periods of absence where I may not be easily contactable. I will try and nominate a suitable qualified colleague who can discuss your work with you or arrange an alternative mutually convenient time for us to meet at the next available opportunity. Additional meetings may take the form of individual meetings, tutorials, group meetings, or lab meetings. We will agree on the most suitable platform for communication types noting this may change.	Be on time and be prepared for all meetings and arranged activities. Take responsibility for organising monthly meetings with my supervisors. Let you know if I am unable to attend a meeting and arrange an alternative time that is mutually convenient. Minute our discussions and submit monthly meeting records in accordance with the Senate Handbook on Managing Research Students. I understand that it may not always be possible to meet with you and will discuss matters with my Associate Supervisor. Understand that your role is not to dictate, but to advise, guide and oversee my research.
Be honest and open to enable an effective and respectful working partnership. I am committed to the University's values (Ambition, Impact, Respect, and Community) and our commitment to equity, diversity and inclusion.	Be honest and open to enable an effective and respectful working partnership. I will familiarise myself with the University's values (What we value at Cranfield) including its commitment to equity, diversity and inclusion. I understand that if I have concerns about our partnership, I can raise my concerns with a SAS Research Lead.
Introduce you to other staff and students who will be involved in your supervision and wider research experience at Cranfield. I will make it clear what their role is and what support you can expect. Make you aware of the expectations of any partners involved in your research.	Work collaboratively and constructively with colleagues in my lab or office, upholding a professional standard of work regardless of the environment. Uphold professional standards when working and/or interacting with any partners involved in my research.

Ensure that any teaching or supervision that you undertake at Cranfield does not jeopardise your ability to complete your research or submit your thesis on time.	Understand I may be offered the opportunity to deliver teaching material or supervise apprenticeship level ** or masters students and help other colleagues in the lab or office at Cranfield. I understand that to undertake these tasks, I may be required to undergo training and may need Recognised Teacher Status (RTS) before undertaking these duties. I will discuss any additional opportunities outside of my core research programme with my supervisors before commencing activities.
Be open to constructive feedback and support your participation in shaping the quality of your experience through involvement in working groups, surveys e.g. Postgraduate Research Experience Survey (PRES) etc.	Actively feedback on my experiences and participate in the co- development of programme improvements through the engagement of different activities including working groups, feedback sessions, student experience surveys etc.
Be aware of the health and safety requirements for your area of study. Ensure that you receive adequate instruction and information about the risks and controls that apply to your work.	Take reasonable care of myself and others affected by my actions. I will cooperate on health and safety matters; follow procedures; attend training as advised; promptly report any related accident, hazard, or instance of ill health; and in general, behave responsibly.

As your supervisor, I will:	As your student, I will:
Work with you to develop an appropriate project plan that you can deliver on time with clear aims, objectives and a plan of work.	Work with you to understand what is required of me and take responsibility for my progress, working towards becoming an independent researcher. Take responsibility for the overall project management of my research and will raise concerns with you.
Ensure you have the appropriate space and resources necessary to carry out your research.	Review my working environment and access to resources, and alert you to any issues that may impact my ability to progress my research. I will maintain a safe, clean and tidy working environment.
Support you to identify and engage in the appropriate core research and technical skills training relevant to you and the successful completion of your research degree.	Take responsibility and engage in core technical and research skills training required to progress my research.
Ensure you receive an appropriate Induction covering Health and Safety in both the office environment and practical environments, relevant to your research. Work with you to actively review and amend your working practices as required and ensure that relevant training arrangements are in place.	Proactively engage and comply with the University's Health and Safety requirements, completion of health and safety online modules and appropriate risk assessments before any new research activity is undertaken. Maintain safe working partnerships with my colleagues and supervisor(s) and relevant technical and safety staff. Continue to review my risk assessment throughout the lifecycle of my research project to ensure it continues to reflect my research accurately.
Ensure you are aware of the University's Research Ethics and Research Integrity Policies and supporting processes, including details of the procedure for reporting and investigating allegations of academic misconduct. I will ensure you can undertake research integrity and ethics training relevant to your research, and that you actively review and amend your working practices as required.	Proactively engage and comply with the University's research integrity and ethics requirements, including completing training on research ethics and integrity and ensuring appropriate approvals are in place before commencing research activities. Continue to review my ethics application throughout the lifecycle of my research project to ensure my approval continues to reflect my research accurately. Where there are significant changes I will apply for new ethical approval.
Discuss with you in the context of your project, responsible research and innovation, reflecting on the purpose and motivations and potential implications of your research on the research community and wider society.	Proactively consider responsible research and innovation in the context of my research throughout the project, bringing any questions or concerns to you for discussion.
Provide you with guidance on how to access and critically review original literature and other sources of information, and help you develop your writing and presentation skills.	Read the key literature in my field, develop critical thinking skills, undertake training to develop my writing and presentation skills and take responsibility for writing my thesis.

Provide you with guidance on record keeping, including bibliographic and research data management and the use of research/laboratory notebooks as well as how to share your research outputs and data using the University's approved system, Current Research Information System (CRIS).	Understand that my final thesis is an accumulation of my research project and not that of my supervisors. Understand that the thesis must be all my work and that all quotations from other sources, whether published, unpublished or Al-generated, must be properly acknowledged. Compile and maintain a data management plan and keep accurate records and notes of my research, data and progress in line with the University's policies and procedures and raise questions and/or concerns with you.
Provide you with appropriate guidance about the nature of research and standards expected for each key milestone and help you plan your research so that you can submit your research on time. Full-time students should aim to work full-time (i.e. 37 hours per week), pro-rata for part-time students. However, there may be occasions where you may be required/need to work longer hours on your research. Provide you with timely and regular constructive feedback, supported by evidence (in accordance with agreed meeting plans and schedules) on research progress, oral presentations, written	Comply with the Cranfield Research Student Handbook and all relevant policies, processes and procedures. I will work at a pace that is sufficient for me to make good progress with my research and understand that where I have been advised that my work is unsatisfactory, I will need to take action to bring my work up to the required standard. Understand that the intensity of my workload and demands may vary throughout my period of registration. Actively seek guidance and feedback from you on my progress, including how and when I can expect to receive feedback. I will inform you if I am unclear on any feedback provided pertaining to the standard of my work.
Ensure you have a personal development plan that helps you to navigate the training and development opportunities available at the University in a way that helps you to achieve your research and career ambitions. Help you to plan development time for your research programme. Support you in identifying and engaging in opportunities to network with research users (for example, industry partners) and help you to develop the skills to identify challenges, and translate those into programs of research activities that deliver impact.	Work with you to identify opportunities available to me and take responsibility for my personal development plan. Uphold a professional standard of working in different environments at all times, engaging with opportunities to work with researcher partners and undertake training to develop my Knowledge Exchange skills.

Enabling Good Health and Wellbeing		
As your supervisor, I will:	As your student, I will:	
Encourage you to maintain a healthy work-life balance and good wellbeing. I will signpost appropriate resources and sources of support.	Maintain a healthy work-life balance. Be aware that I can access support outside of my Centre through the Student Wellbeing and Disability Support Services.	
Encourage you to take holiday when it is appropriate to do so. In accordance with the Senate Handbook on Managing Research Students (Senate Handbooks A-Z (cranfield.ac.uk)), Full-time Research students are entitled to up to 25 days holiday each year in addition to statutory Public Holidays and University closure days.	Take holiday leave, discussing requests for holiday with you in good time, and at a time which is appropriate for my research, noting that if I have a funder they may have specific requirements.	
Be supportive if there are times when you or members of your family may be unwell. During those times, I will make reasonable adjustments accordingly. I will signpost you to further help within the University to assist with your particular circumstances.	(Full-time students) Inform you if I am unable to undertake my research or University activities due to illness or other personal circumstances by the start of the typical working day (9am) and keep you informed of my progress and when I anticipate returning to normal study.	
Signpost you towards potential sources of support, such as the University Hardship Fund if you experience financial hardship.	Discuss with you any concerns, where I am comfortable in doing so, which relate to personal circumstances that may affect my academic progress. I understand if I am not comfortable sharing this information with you directly, I can speak to other members of the University including the SAS Research Lead or a Pastoral Advisor.	

Enabling Professional	Development
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As your supervisor, I will:	As your student, I will:	
Actively encourage you to engage with activities that support and develop a positive research culture, including training and development, activities offered through Thematic Doctoral Networks, the Cranfield Doctoral Network and the Core Researchers Development Programme. I will highlight opportunities for you to talk about your research with staff and students, and to practice oral presentations through seminars, workshops etc.	Take opportunities to engage and share the wider findings of my research with staff and students across the Cranfield research community (e.g. ECR network) and develop my own networks outside of my immediate research group.	
Encourage you to present at conferences and engage with internal and external opportunities where you can develop your own professional network.	Take the opportunity to share the findings of my research internally and externally, which can help me develop my own professional network. I understand that if I have a funder, they may set requirements to which I must adhere relating to the confidentiality of my research and what I can share. Understand I may need to apply for travel grants to enable me to attend conferences if other sources of funding are not available.	
Encourage you to publish your work where appropriate. I will ensure you are aware of the University's policies in relation to Authorship of Research Outputs and the University's commitment to open research as a signatory to DORA (Declaration of Research Assessment).	Normally be expected to write papers during the course of my research and adhere to the University's policies regarding the publication of my research.	
Provide guidance on the publication of your research where there may be security aspects that need to be considered.	Discuss with you areas of my research where there are or might be security aspects to consider.	
Ensure you are aware of the mandatory training you are required to complete.	Complete all mandatory training in a timely manner, and where required complete refresher training in line with the University's requirements.	

Appendix B: Research student induction checklist

In addition to the below, students should be view the Induction checklist on the intranet: https://intranet.cranfield.ac.uk/ResearchLearnTeach/EdSupp/CAAS/Pages/PhD%20Induction-stage.aspx

The following should be included in any induction of research students:

Responsibilities of students

- The expectation of Masters- or Doctoral-level provision, and particularly the focus on self-directed learning;
- The requirement of maintaining regular contact with the Supervisors, and proactively raising any concerns or impediments to study/research with them or other named persons;
- The requirement to use actively EVE and their @cranfield.ac.uk account, to monitor and manage University communications;
- The requirement to comply with the <u>Cranfield University Research Ethics Policy</u>
- Their contribution to good citizenship (including dignity at study, equality, health and safety);
- General and specific expectations relating to:
 - o regular meetings with the Supervisors;
 - submission of reports or notes on academic and research progress and potential academic penalties (including academic misconduct);
 - complying with University Laws and local Faculty guidance (including the formal student progress monitoring systems and personal development planning (PDP) guidance);
 - the implications of bringing the University into disrepute by their actions or inactions.
 - Additional work outside of a students' study (Appendix I)
- Research Student's Annual Leave.

Programme of supervised research

- The initial project definition and how it will be revised or reviewed;
- Initial priorities and objectives (including priority reading or courses to attend);
- Projected future milestones, including any research deliverables.

Learning support

- Where and how students can raise concerns about the quality of their supervision:
- The use and availability of facilities relating specifically to the programme of supervised research, including:
 - o specialist hardware and software (including the availability of licences);
 - o laboratories (including relevant health, safety and fire training);
 - o specialist research facilities, available to them on- or off-campus (including relevant health, safety and fire training).
- The range of information and supplementary courses available to students, including:
 - o Research data management plan (RDM) VLE modules
 - o plagiarism and other forms of academic misconduct, and the use of Turnitin;
 - o expected standards of academic writing and referencing;
 - o identifying appropriate sources of research material;
 - o careers information, advice and guidance;
 - personal development planning;
 - English language support;
 - the role of Learning Support Officers;
 - the role of Supervisors and other staff in supporting their learning and other matters;
 - o the role of student representatives, both for the Faculty and more widely from the CSA.
- The use and availability of facilities more widely available to all students:
 - the intranet, the VLE and EVE, and other IT services (including printing services and PC labs);
 - library services;
 - University-approved on-line survey tools;
 - o the CSA:
 - the counselling services and community support;
 - advice and guidance from the International Office for students on Tier 4 visas.

Appendix C: An explanation of the oral examination for students

As part of the examination of your thesis, you will have a face-to-face examination with your appointed examiners. The purposes of this "oral examination" are:

- a) To establish that the thesis you have submitted is your own work;
- b) To give you an opportunity to define or clarify the direction, structure and conclusions of your research: the examiners will make constructive criticisms of both your research and your presentation of it (your thesis), giving you the opportunity to respond and engage in debate;
- c) To explore with the examiners any particular issues that they feel require clarification or further development: this helps the examiners articulate if any further work may be needed;
- d) To test your eligibility for your intended award, against the standards defined by Cranfield University and in line with national expectations: the examiners test this by exploring your understanding of the concepts and knowledge underpinning your research, the extent to which your thesis outlines new or innovative knowledge or application of ideas, and how your research expands upon existing knowledge in your chosen field.

The examiners will be expected to assess whether or not you have demonstrated:

- a) The independent creation and/or interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline and possibly merit publication;
- b) The systematic acquisition and analysis of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice;
- c) The ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding, and to adjust the project design in the light of unforeseen outcomes, problems or ambiguities;
- d) The ability to evaluate, choose and justify appropriate techniques for research and advanced academic enquiry;
- e) Awareness of any ethical issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research.

There will normally be at least two examiners present, including at least one examiner who is independent of Cranfield University or your research. The Independent Chair of the Examiners is responsible for ensuring the examination process is conducted in a fair and appropriate manner and is not involved in your actual examination. One of your Supervisors is normally also present to support you as an observer: they may not answer questions on your behalf. You may request that a Supervisor is not present if you prefer.

There is no specific time set for an oral examination of your thesis and related research. For a PhD examination, the typical timescale is between 2 and 5 hours, depending on a number of factors including your subject discipline and the complexity of your research. The examination will last as long as it takes the examiners to satisfy themselves that you have received a fair and thorough examination. You should, however, feel able at any time to ask for a rest or comfort break, and ask how much longer the examiners feel the oral examination will take.

The format of an oral examination is not precisely defined, but is likely to include:

- a pre-meeting of the examiners (at which you will not be present, and where they will discuss the questions they will ask you)
- your formal examination, which may or may not include a presentation by you on your research. If a presentation is required, you will be informed of this well in advance of the examination date. If you have not been asked to prepare a presentation, you can assume you

- do not need to present one, but it will still be expected that you will outline in conversation a summary of your research.
- a post-meeting of the examiners (at which they will discuss your examination performance and determine whether you have been successful)
- a further meeting with you to inform you of the outcome of your examination, and to outline (if appropriate) further work or required revisions to your thesis.

During the pre- and post-meetings, you will likely have a quiet space to sit with your Supervisor(s).

In the formal examination, the examiners will focus their questions on a detailed consideration of your research, its methodology and findings. In some cases, the examiners may wish to focus on a discussion of the broader aspects of the research process or findings, the implications for further policy/research, and/or publication possibilities. You may be invited to highlight aspects or issues that appear most important or interesting, given your detailed knowledge of the subject area.

Oral examinations should be constructive and stimulating for both you and the examiners, and lively debate and discussion is encouraged. You should expect to be challenged on your ideas and your approach to your research, bearing in mind the intent is to explore your expertise. You are advised before the oral examination to re-familiarise yourself with your thesis, making your own assessment of its strengths and weaknesses, and anticipating issues or questions that are likely to be raised.

Appendix D: Research Thesis Formats

1 Thesis Formats: Paper Format and Monograph Format¹²

The front page of PhD theses at Cranfield contains the phrase - "Submitted in partial fulfilment of the requirement for the degree of Doctor of Philosophy". Having devoted three or four years of your life to your research project, your thesis is perhaps the most important, complete and longest document that you have written to date, and possibly that you will ever write. Elsewhere, you will find thesis templates and detailed descriptions of page layout, margins, font sizes, referencing styles. Here, the requirements in terms of content and overall style of the document that you need to submit for the degree of Doctor of Philosophy at Cranfield will be discussed.

Before considering the thesis structure, it is important to consider the aim of the thesis. The **Senate Handbook on Managing Research Students** states that "Conferment of a Doctoral degree at Cranfield University recognises a student's authoritative standing in his or her subject and the ability to conduct future research without supervision, as assessed by the appointed examiners and evidenced by the work submitted for assessment, and which is the result of a programme of research, design, development or management studies, and which contributes significant original knowledge or the application of existing knowledge to new situations." The thesis is the first part of the process of demonstrating that you have reached this standard, and is the part that is completely under your control. The second part of the process is the viva-voce examination, which is not under your complete control and is, undoubtedly, a daunting event, but which can be made less daunting by producing a high-quality thesis that satisfies the requirements stated above.

At the viva the examiners will assess whether or not you have demonstrated:

- a) The independent creation and/or interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline and **possibly merit publication in refereed journals**;
- b) The systematic acquisition and analysis of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice;
- c) The ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding, and to adjust the project design in the light of unforeseen outcomes, problems or ambiguities;
- d) The ability to evaluate, choose and justify appropriate techniques for research and advanced academic enquiry;
- e) Awareness of any ethical issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research.

Publication of refereed journal papers is seen as one of the core components in defining your reputation as a researcher. Journal papers present both the quality of the research conducted and the ability of you and your co-authors to effectively disseminate your research findings. As such publishing refereed journal papers during the course of your PhD provides many benefits including external peer review to validate your approach and research, demonstrates your quality as a researcher to the outside world including both the examiners and future employers as well as improving confidence. The skills developed when publishing papers are the same as those required for a thesis with the additional development of more advanced skills associated with concise and

¹² This guidance is applicable for Doctoral and Masters by Research level theses. The format of a student's thesis must be agreed between the student and Supervisor.

clear delivery. Such skills are extremely transferable and will be of considerable value to your subsequent employment in academia, industry, or public service.

2 Format Style

In conjunction with your supervisory team, you should make the decision over which thesis format is appropriate, ideally early in the period of registration. Throughout your time at the University, your Supervisor will provide a range of advice and guidance over the expected format of the thesis: this will depend in part on the nature of the research and subject-specific expectations. You should also note that other forms of advice are available from the Library, relating to:

- the "prescribed form" of the thesis, as stipulated by the Librarian;
- courses and other guidance on academic misconduct (including plagiarism);
- courses and other guidance on academic writing and referencing;
- examples of previous theses, held on CERES¹³ and EThOS¹⁴, particularly those that have won the University's Lords Kings Norton Prize;

The following sections describe typical structures for the two thesis formats.

2.1 Typical structure of a "Paper-format" thesis

The "paper-format" style of thesis delivers the intellectual contribution of the thesis through distinct chapters that describe the different packages of work undertaken. Accordingly, each chapter contains all aspects required to describe that specific package of work including an introduction, methodology, results and discussion (i.e. it is a self-contained description of all aspects of the work).

This style of thesis offers a number of advantages. You will gain experience in the writing of self-contained reports that convey your work in a concise format, a skill of considerable value to your subsequent employment in academia, industry, or public service. In developing your subsequent career in research, a track-record of publication in high quality journals will be an important component of your CV, and you will have a readymade bank of manuscripts for submission to peer reviewed journals.

The research and papers must have been undertaken and written during the period of registration - work undertaken and published prior to this is not eligible. Prior publication or acceptance for publication of the manuscripts is **NOT** a requirement but is encouraged. Indeed, publication or acceptance for publication of research results before presentation of the thesis (irrespective of format) does not supersede the University's evaluation and judgment of the work during the thesis examination process. This means that you can be asked to undertake corrections on sections that have been previously accepted for publication by a journal. The University does **NOT** specify the number of papers required for a PhD thesis, it depends on research area and amount of work represented by each article. Thus it is an academic judgement that you should reach in discussion with the supervisors. However, as a guide, most "paper-format" theses contain between 3-5 paper equivalent chapters.

Irrespective of format style the thesis will be examined as a unified, coherent document (i.e. "paper-format" and "monograph format"). In both cases the overall coherence of the research must be demonstrated describing a single programme of research. Thus it is important to

¹³ https://dspace.lib.cranfield.ac.uk/.

¹⁴ http://ethos.bl.uk/SearchResults.do,

demonstrate how the individual paper chapters connect together to produce a cohesive document. This can be achieved through a combination of components:

Introduction: including a description of how the different blocks of work fit together. This is commonly accompanied with a diagram to aid visualisation of the connection between the papers.

Aims and objectives: specify which paper chapters link to which objectives.

Discussion: link the findings from the different papers together to deliver the overall aim of the work.

Specific critical appraisal of the literature should be delivered within the individual paper chapters and as such there is **NO** specific requirement for a separate literature review. However, a separate literature review paper can be used as a chapter if it contributes to the overall delivery of the thesis (and then constitutes one of the paper chapters). In such cases the chapter should be formatted as a published literature review (not as in a monograph style thesis). Similarly, the requirements related to academic discussion should have been met in the individual papers. Accordingly, the discussion chapter should be focussed on the outcomes of the findings of the research in terms of the real world impact it will have. The specific aspects included in this chapter will depend on the nature of the work and should be discussed with your supervisors. Examples include: a business case for implementation, a new design or operating guide, a new policy guide or procedure, or a response to a number of industrial questions raised by your sponsors. In all cases the impact should be clearly linked to the scientific findings of your work. This chapter is not expected to be in the format of a paper (unless appropriate) and is expected to contain between 5-15 pages.

When writing a "Paper format" thesis, ensure that the format of the different chapters is consistent throughout. This may require you to reformat a chapter that has already been published in a journal. Avoid trying to shoehorn inappropriate elements associated with the monograph thesis style into the papers. For example, lengthy descriptions of methodology and well-understood background theory are not appropriate - the journal would be looking to publish original research, results analysis and theory that pushes the field forwards. This background information can be provided in the supplementary information (appendices) or in the introductory chapter. Referencing should be consistent throughout.

2.1.1. Expected content for a Paper-format thesis:

Abstract

Acknowledgements

Lists of Contents, Figures, Tables etc.

Glossary

Introduction (including a list of published/submitted work)

Aims and Objectives (which may be included in the introductory chapter)

Papers (typically 3-5 including a literature review)

Overall discussion: implementation of the work

Conclusions Further work Appendices

2.2 Typical structure of a "Monograph format" thesis

The monograph format of thesis delivers the contribution of the thesis through a series of chapters that describe the different components of the work as a whole: introduction, literature review, methodology, results and discussion. The nature of some research means that structuring your

findings into discrete packages (as in the paper-format) is not an effective delivery style. This is most common in some aspects of the social sciences where methodological development can be a critical component of the research and sits across the overall thesis.

The easiest way to assess if the monograph style is more suitable is to ask the question "how many results chapters do I expect to write?" If the answer is two or less then a monograph style may be worth considering. However, remember the requirements of a thesis are the same irrespective of format style and so selecting a monograph format thesis does not mean a lower overall quality of thesis is acceptable. In preparing your literature review and methodology chapters remember to question if they provide new insights in themselves. If this is the case they can be published and so can represent chapters within a paper-format style.

2.2.1. Expected content for a Monograph format thesis:

Abstract

Acknowledgements

Lists of Contents, Figures, Tables etc.

Glossarv

Introduction

Aims and Objectives (which may be included in the introductory chapter or as a separate section following the literature review)

Literature Review

Methodology

Results

Discussion

Conclusions

Further work and recommendations (which may be included in the concluding chapter)

Bibliography

Appendices

3 Structure

The thesis should be structured to ensure that it demonstrates clearly that these requirements have been met. Cranfield University allows theses to be submitted in two formats:

- The "paper format" where the thesis is structured according to a series of distinct chapters to
 cover the different packages of work conducted during the research (which need not have
 been submitted to journals) accompanied with a short introduction and overall discussion to
 demonstrate the coherence of the work.
- A "monograph format" where discrete chapters are included to cover the different components that are required (literature, methodology, results, discussion etc.) and cross referenced to ensure coherence.

In both cases, the aim of the thesis is identical, and this is to demonstrate to the examiners that you have made the grade and satisfied the requirements above. The expected content listed for each thesis format type is explained below:

Abstract

The abstract should be a concise description of the problem addressed, your methodology used to address it and your results / findings and conclusions. The abstract must be self-contained and generally should not contain any references. It is best to write the abstract once the rest of the thesis has been written, as at that point you will be in a position to provide a résumé of your thesis

Acknowledgments

It is customary to include a page of thanks to those who have provided support on scientific, technical and personal matters. If aspects of the work described in your thesis were collaborative, here is where you make it clear who did what and in which sections.

Introduction

What was the subject of the research and why was it important to study it? You should state the problem as simply as possible. How does it fit into the broader context of your discipline? What new knowledge does your approach add? Try to pitch the content at researchers who are working in the same general area, but not necessarily specialists in your particular topic. It is good practice to provide the reader with an overview of the contents of each chapter and of how the chapters fit together. The introduction is often the last chapter to be written, as the hindsight provided by having written the rest of the thesis can afford a clearer vision of how each element of your work fits into the bigger picture.

Literature review

Here you will provide a **critical** review of the literature (not just a summary of what people have previously done) underpinning your research, and highlight any weaknesses or gaps that the research will address. It might also be appropriate to discuss the theoretical framework. You should aim to identify the source of the problem, to tell the reader what is already known about the problem and what other methods have been used to solve it. This is very important, as you are demonstrating your understanding of the prior art and in the subsequent parts of the thesis will be using the information as a justification for your approach, and to benchmark\validate the outcomes of your research program.

You should have been keeping up-to-date with the literature throughout your registration period. The appropriate number of references is a matter of judgement, and depends upon the research field. Not all the papers, books etc. you read will ultimately be used as references such that a reasonable expectation is that you will have read around 3-4 times the amount of literature that you actually use as references within your thesis. Make sure that you have cited the key works, and bear in mind that it is highly likely that your examiners will published work relevant to your thesis, so ensure that this includes up-to-date citations, including those published during your registration period.

Aim and Objectives (hypothesis and/or research questions)

What is the overall aim of your work? What is the purpose of your investigation? What is your overall research question that you are trying to address?

Your aim (you should have only one main aim) statement should explain the answer to those questions and should be based around the intellectual contribution your work makes as a cohesive whole. In some cases you may also wish to include a number of sub aims to better describe the contribution of the work.

The subsequent objectives and/or research questions explain the different specific components of investigation that you have undertaken in order to deliver the overall aim. Objectives and/or research questions need to be specific, measurable, achievable, realistic and time constrained (i.e. SMART). In many research fields hypotheses statements are used in preference (and occasionally in conjunction with objectives). A hypothesis is a statement of what you think will be observed and must be testable and hence defines the research to be undertaken.

Methodology

The description of the methodology will be highly topic dependent. Here there may be requirements to describe relevant underpinning theory, to describe experimental techniques and/or to present

models or new theories based on your work. These descriptions may be detailed with titles such as *Theory and Methods*. In social science research greater emphasis is typically placed on discussing the research approach used and its appropriateness towards responding to the stated research question and objectives. This can include aspects of literature review and discussion as part of its delivery and so can differ in significance compared to thesis based on purely quantitative research. Methods for data collection, storage and analysis need to also be considered with clear emphasis on appropriateness of the approach and ethical considerations of the work.

Theory

When you are reviewing underpinning theoretical work from the literature, it is important to provide sufficient material to allow the reader to understand the arguments and their warrants. It is a judgement call as to what level of detail should be included, but, for example, you should not include pages of algebra or conceptual models from standard textbooks (especially standard derivations). It is important that you discuss the physical meaning of the theory and how it is related to your work. Ensure that the theory that you include is relevant to your work - the test for this is that if you do not refer to it/use it within the rest of your thesis then it should NOT be included. Discuss approximations made and limitations of the theory as well as the quality assurance of input data used in the theory. Clearly identify the source of all input data with appropriate references.

When reporting theory that you have developed you must include more detail, but consider placing lengthy derivations in the appendices.

Methods

The descriptions should be aimed at researchers who may want to repeat your study, or who may want to take the work further. The guide that you should apply here is that a competent researcher should be able to reproduce what you have done by following the description that you provide. That should give you an idea of the level of detail required.

Information should be included in relation to the basis of the design and implementation of the approach taken and the quality assurance procedures adopted (i.e. controls, replication, triangulation). Importantly this should include details of the selection and use of data analysis methods. Where statistical tests are used it is important to demonstrate suitability (i.e. testing that the data is normally distributed).

Results / findings

Describe your results / findings clearly and concisely being specific in your descriptions of key data. Results / findings do not need to be presented in the chronological order they were generated and should be sequenced for the ease of understanding of the reader. Not all data needs to be described. Only describe the aspects that are important in delivering the findings of your research. Importantly, focus on the key positive aspects of the data that link to your discussion rather than fixating on the outliers and the aspects that are inconsistent. Specific explanation of data trends and comparison to literature should be included but limited to aspects that link to the overall message you are trying to communicate. This should include where your data is consistent and contradictory to the existing literature to place your research within the appropriate context.

It is vital to describe the conditions under which each set of results / findings was obtained, indicating what was varied and what was constant - refer back to your methodology. Consider carefully how to present the results / findings - ensure that graphs, tables and / or models are clear and not cluttered, try to avoid large tables of data, as it can be difficult for the reader to interpret the information. With quantitative studies show measurement errors and standard errors on graphs and use appropriate statistical analyses and tests. Ensure that all graph axes have labels and titles (with

units) and that the font size is such that they are legible. Ensure that each data set is identified clearly.

Discussion

The discussion is the most important aspect of your thesis. The purpose of discussion is to interpret the significance of your findings within the context of what is already known (literature). It should clearly describe any new understanding or insights derived from your findings. The discussion must connect to your aim (research question) and objectives (hypotheses) and in doing so define your contribution to knowledge. A good thesis (with no or minimal corrections) includes strong, direct and concise discussion of findings presented within the result section. Do not waste space restating your results and do not introduce new results in the discussion.

In delivering a good discussion you must *discuss* the results, rather than just describing the graph/table/model. Make sure that you have addressed the following questions: What does that data mean? How do my results/findings fit into the existing body of knowledge? Are my results/findings consistent with current theories? Do they give new insights? What are the limitations? Evaluating your methodology and adapting your project to unforeseen circumstances are important aspects of demonstrating independence as a researcher.

The sequence of the discussion should not necessarily mirror that of the results. Instead it should follow a sequence that best communicates the importance of the findings. Importantly the discussion must show how the different aspects of your research fit together to deliver a coherent contribution to knowledge. Discussion should (where possible) include aspects related to both academic and the real world impact of your findings (with an implementation plan if appropriate).

Conclusions and Further Research

This is generally a short chapter, where you bring together the findings of your research, measured against the problem that was outlined in the *Introduction* and the previous work that was reviewed in the *Literature Review*. There will be some overlap with the abstract, but the discussion should have considerably more depth. Don't forget that you are trying to demonstrate a contribution to knowledge, so be upfront and identify the new findings and their significance. You should also provide some suggestions on how your research could be taken forward by others. Typically conclusions can be matched to the aims and objectives to demonstrate how you have met each one.

References

This is a list of the sources used in writing your thesis. A number of different referencing styles may be used. Details are available on the intranet

Correct referencing is vital, and it is important that you understand what is and is not acceptable to avoid committing plagiarism. Information on the University's policy on plagiarism is detailed on the same page.

Appendices

Items that are often included in appendices include: original computer programs, data files that are too large to be represented simply in the results chapters, or pictures or diagrams of results that are supplementary to items included in the main text. Large sets (10 or more pages) of computer code can be deferred to an electronic based appendix if required. It is common to include as an appendix a list of peer-reviewed journal and conference papers that you have published during your period of registration. Please note that publication or acceptance for publication of research results before presentation of the thesis does not supersede the University's evaluation and judgment of the work during the thesis examination process

Appendix E: Student Academic Engagement Policy

Engagement expectations

The University expects students to engage with their studies and to attend the various learning opportunities provided by their course. The University believes this is key to successful course completion. Any student may have their registration suspended or terminated because of concerns about academic progress, lack of attendance/engagement, or lack of contact with the course or research team.

In addition, the University has particular licence obligations with respect to students who hold a Tier 4/Student visa for monitoring, recording and reporting engagement.

According to the UKVI's Student sponsor guidance, Student sponsors should report to the UKVI any full or part-time student who stops academically engaging.

Academic Engagement

The University treats formal face-to-face interaction with an Academic member of staff as academic engagement. Face-to-face interactions are measured through defined contact points.

Cranfield University guidance on face-to-face meetings

The expectation is that supervisory meetings for research students, and taught students at the thesis stage, will normally be in person on University premises. If required, it is acceptable on occasion to conduct the meetings via skype (or similar), or telephone. Use of such media would not normally amount to more than 30% of expected contacts unless the student is located off campus. If the student is located off campus then the majority of meetings can be conducted via Skype (or similar) or telephone. In all cases, written evidence of the supervisor/student meeting should be passed to the SAS team to be stored the appropriate data storage area.

Audit

Periodically the Student Immigration and Funding team will run audit checks on the engagement of students studying on a Tier 4/Student visa.

Monitoring Procedure - Research Students

Contact Point

A meeting between the student and supervisor(s), documented by the student. These should take place at least once a month for full-time students and once every two months for part-time students.

Evidence / record keeping

The student provides a record of the meeting to the Supervisor and Student and Academic Support (SAS) Lead, via the Virtual Learning Environment. Meeting records are stored here and can be accessed by associated parties (student, supervisor, progress review team, SAS Lead, Director of Research) at any time.

Intervention

A supervisor is required to act if they have not received the record of the meeting from the student as early as possible. A supervisor is expected to act if (s)he has concerns about the student's engagement in study. If a student misses a number of consecutive supervisor/student meetings the supervisor works with the SAS Lead to investigate the reason(s) why meetings have been missed and take appropriate action. If the student is studying on a Tier 4/Student visa, the action below applies.

Students on a Tier 4/Student visa - Research

When the supervisor informs the SAS Lead of non-engagement they will notify the Student Immigration and Funding (SIF) team. Once SIF have been informed of the non-engagement of a student, they will contact the student requesting that they contact SIF within a defined time frame. If the student does not contact the SIF team, the withdrawal of the University's Tier 4/Student sponsorship of that student would commence. During this process the supervisor will be kept informed of any actions and outcomes.

Appendix F: Guidance for students working off-site

Cranfield University-registered students who undertake part or all of their studies off-site:

1. Introduction

The research performed at Cranfield is inherently multi-disciplinary, often undertaken in collaboration with industry and with other academic institutions, both within the UK and Internationally. During your studies you might be required to spend periods of time undertaking research off-site, which might involve fieldwork or a placement at the site of a collaborating institution or industrial partner, undertaking experimental and/or computational research using facilities that are perhaps not available at Cranfield

2. Placements

A placement would comprise a period of time spent at the site of a collaborating institution or industrial partner, embedded within the organisation undertaking experimental and/or computational research using facilities that are perhaps not available at Cranfield.

Please note that students who are employed by a company but are studying at Cranfield are excluded from this arrangement if they go back to their employer as part of their studies.

a. Prior to the Placement

Careful planning and a clear understanding of roles and responsibilities are essential to ensure that the placement produces the anticipated benefits for the student, for the University and for the placement provider. Please complete the Student Placement Approval Form that can be found at the end of this document and seek approval from the relevant Director of Research in your Faculty. A copy of the completed and approved from should be sent to your SAS administrator, ensuring that, if needed, the information on the placement is readily available. Note that placements of duration longer than 12 months should be reviewed annually.

i. Project Planning

All parties should be clear about the aims of the placement, its anticipated duration and the work that will be undertaken. This should be communicated as a document that includes a detailed research plan that integrates with the overall project plan. The document should also include a project risk assessment, considering mitigation plans. The research data management plan should also be updated. It is important to agree on the mode and frequency of supervision and to document the agreement. Consideration should be given to access to computing facilities at the University that may be subject to licensing issues that, for example, limit usage to only computers with a Cranfield IP address.

Consideration should be given to agreements the placement provider on intellectual property and on processes for the approval for publication of the research outcomes. There should be clarity on the financial arrangements for the placement, both contractually between the University and the placement provider, and with the student, in terms of eligible expenses.

ii. Health and Safety

The management of health and safety for student placements based within the UK or abroad is detailed in the <u>CU-SHE-BPG-5.13 Student and Staff Placements</u>. The Guide details a process that involves an assessment of placement provider and the pre-placement preparation of the student(s). **Placement providers must first be sent the Placement Letter of Expectation**, which is intended

to help ensure compliance by detailing the University's expectations for the management of health and safety and to clarify roles and responsibilities of the University, the provider and the student. Preparation includes considerations of likely work activities, generic risks in that the provider's industry/work activities, methods and safety of commuting to the placement/accommodation, gaining confirmation from their GP that any pre-existing medical conditions or disability will not be worsened by general or specific work placement activities or the locations they are working/living in e.g. cities with high pollution levels in summer and the effects on those with severe asthma.

1. Overseas Placements

The placement may be in a country where the security, general law and order and/or the health situation present actual or potential problems. The health and safety aspects of overseas travel are covered by CU-SHE-PROC-3.22 Overseas Working (including travel) documents, while generic guidance is provided in the Cranfield University Overseas working Guidance. These set out clearly the requirements for detailed planning for overseas travel and prompt the traveller and their line management/ supervisor to consider pertinent risks. Note that country-specific information must always be checked prior to departure. It is essential that pertinent issues should be addressed in the risk assessments and the must agree as suitable and sufficient by the person approving the risk assessment. People working abroad should be prepared to adapt to situations as they arise, and Cranfield University does not expect or require you to place yourself in danger at any time. The ultimate decision for your personal safety is yours.

Prior to overseas travel, an <u>Overseas Travel and Working Risk Control Checklist CU-SHE-FORM.3.22</u> should be completed, which logs details including destination, local address and contact, itinerary, purpose of trip, next of kin, and prompts consideration of advice from the Foreign and Commonwealth Office, requirements for visa and work permits, awareness of the location and safety, lone travel, insurance provision and health checks and vaccinations. This form also prompts the traveller to complete a risk assessment. For students, this information is lodged locally, with the supervisor or within their SHEL area (unless the risk assessment shows a high risk, in which case it is escalated to the Head of Faculty for approval). The traveller also has to complete a <u>Travel Insurance Notification Form</u>. Further information on travel and emergency medical insurance is available on the University's intranet. https://intranet.cranfield.ac.uk/insurance/Pages/default.aspx. The University's insurance policy provide medical emergency assistance called '<u>Zurich Travel Assistance</u>' and access to a number of helpline and on-line services, detailing insurance arrangements, local emergency service contact numbers, hospital and Embassy contact details.

2. During the Placement

The Student and Staff Placements Guide CU-SHE-BPG-5.13 requires that the placement provider provides a health and safety induction to the student, which ideally should occur during the first week of the placement. Those with a disability or with a student support plan may need earlier contact to ensure necessary workplace adjustments have been facilitated by the provider. Where the student will be working with specialised equipment, they must be trained in its use. If the student is to be prohibited from using dangerous equipment/substances, the provider must notify them. In the case of a student with a disability it is important that the provider confirms that the necessary workplace adjustments have been facilitated by the provider. The student supervisor should contact the student on placement at the end of the first week of the placement to ensure that their induction has been completed and that there are no serious health and safety shortfalls in the placement. Perceived or actual shortfalls must be discussed with the provider. The student and supervisor should remain in frequent contact as agreed prior to the placement. In addition to ensuring academic progress, sufficient contact should be maintained to ensure the health and safety of the individual and to ensure significant changes to the work activity are identified and suitably assessed. Where significant changes do take place e.g. a complete change of activity, use of undeclared dangerous equipment, etc., the supervisor should request that the placement provider provides a revised risk assessment. The student will, at all times, ensure that their conduct will follow the health and safety requirements of the placement provider.

3. Fieldwork

Fieldwork comprises work carried out by staff or students of the University for the purposes of teaching, research or study that involves either practical work or organised group activity, visits by individuals (as detailed below) off campus, in the UK or overseas. This definition will therefore include activities as diverse as undertaking social science interviews, as well as activities more traditionally associated with the term fieldwork such as survey/collection work. Much of the fieldwork defined above is carried out by individuals travelling and working alone. Fieldwork includes, for example: Practical work off campus e.g. geological or biological survey/collection work, archaeological digs, hydrological/edaphic/ecological/social survey and data collection, social science interviews with members of the public or individuals or groups undertaking hazardous activities e.g. mountain exploration, caving, work in a remote area.

The Fieldwork Health and Safety Procedure CU-HAS-PROC-3.22 sets out the responsibilities of the Fieldworker and the Fieldwork Leader, and covers issues of Health and Safety, accommodation, planning, consideration of provision of training etc. The document includes in the appendix a form that prompts an analysis of the rationale for the fieldwork and questionnaires on health and safety provision to be sent to the host. If the placement is overseas, there are a number of relevant policies and documents that deal with the travel aspects. Overseas travel is covered in the Cranfield University Overseas working Guidance. These set out clearly the requirements for detailed planning for overseas travel and prompt the traveller and their line management/ supervisor to consider many of the issues listed above. Prior to overseas travel, an Overseas Travel Safety and Security Checklist should be completed, which enables travelers to consider safety hazards and controls when planning overseas travel/work. This form also prompts the traveller to complete a risk assessment if required. For students, this information is lodged locally, with the supervisor or within their SHEL area (unless the risk assessment shows a high risk, in which case it is escalated to the PVCS for approval).

Student Placement Approval Form

Student Details

Student Name	Student Number	
Mobile telephone no.	Email address	
Faculty	Supervisors	
Title of PhD/MSc by	Key point of contact	
Research	during placement:	
	Email	
Sponsor for Placement	Telephone no.	

Placement Details

Recognised teacher	y/n
	ecognised teacher

Arrangements in Place

Student's address while	Supervision arrangements	
on the placement	Frequency of meetings	
	Mode (telephone, skype,	
	face-to-face)	
Telephone number		
Person to contact in case	Address	
of emergency		
	Telephone	
	Email	
	·	
What facilities will be		
provided by the host		
organisation?		
Does the student require any prior traini	ng? If so,	
provide details.		
	<u> </u>	

Medical considerations and precautions (los standing medical conditions, requirement for vaccinations.)		
Does the student have any learning support	or	
practical needs? If so, provide details.		
Details of financial agreement (provide the	contract	
number if appropriate)		
Details of agreement on	Insurance and liability	
expenses	details	

Are the Following in Place?	Y/N
(*denotes mandatory)	
Completed placement Letter of Expectation (appendix A of <u>CU-HAS-BPG-5.13 V2.0 Student and</u>	
Staff Placement Guidance)*	
Approved H&S Risk Assessment*	
Project Risk Assessment*	
Student Support Plan (where applicable)	
Project Gantt Chart*	
Ethical Approval*	
Insurance*	
Vaccinations (where applicable*)	

Signatures and Approval

	Name	Signature	Date	
Student				
Principal Supervisor				
Associate Supervisor				
Director of Research				

Please submit a copy of the signed form to your SAS Administrator.

Note: if the placement is of duration longer than 12 months, this form must be reviewed annually.

Appendix G: Guidance for Undertaking Vivas Remotely

Remote viva meetings

The University permits students to be examined remotely where circumstances dictate that this is the best option for the student, examiners or to allow the examination to take place. Such circumstances may include:

- Where the student or an examiner is based outside the UK
- Where public health or other issues prevent the viva taking place in person.

1 Arranging the viva

A remote viva does not require formal approval, however the decision to hold a viva remotely must be agreed by all parties and the relevant SAS Lead informed. Should a student or examiner wish to hold a viva remotely they should make the request to the Independent Chair or the SAS Lead.¹⁵

As with all viva examinations a student's Supervisor should be invited to attend a remote examination as an observer; the Independent Chair, or the SAS Lead on their behalf, should contact the student to determine if they wish that a supervisor attends the oral examination. There is no obligation for a student to allow a supervisor to attend an examination.

The Independent Chair, or the SAS Lead on their behalf, should book individual meetings for each element of the examination (any pre-meet, the examination itself, the examiners' discussion and communicating the result to the student). Due to the length of the viva examination being unknown the discussion and communication of results may take place via a separate video call (as opposed to in a pre-booked meeting) but should not take place on the same meeting link as the examination itself.

2 Before the examination commences

An invigilator is not required to be present with the student during the examination, however before the examination commences the Independent Chair is responsible for ensuring that the following checks are undertaken:

- The Examiners should be shown the entire room via the camera in order to show the candidate is alone (or with their Supervisor or other pre-agreed observer).
- The camera should be positioned so that the door to the room is visible for the duration of the examination.
- The student should be made aware that they must keep their video on at all times in order for the examination to take place.

Prior to the examination the Independent Chair should ensure that all parties have a suitable connection and make provision for a phone or audio connection in the event of any video-conferencing difficulties.

3 During the viva

The student's video connection must remain on at all times, although the Independent Chair or Examiners may switch off their own video connections when not speaking if necessary to aid with connectivity.

Should either the Independent Chair or any of the Examiners lose their internet connection or lose connection to the viva meeting, providing that at least one of the examiners or Independent Chair maintains their video connection to the student, the examination can continue. If the examiner or Independent Chair cannot re-establish their video connection, they should join the examination by phone or other audio means.

¹⁵ Individual examiners may attend a viva examination held in person remotely - see section 12.2.

Should a student lose their video connection the examination should be paused immediately, and only resumed if the student's video connection is re-established. Where a student's video connection is re-established the Independent Chair should re-perform the initial pre-examination checks listed above.

Should the examination be interrupted and reconnection of the student's video link not be possible within an acceptable timeframe, the viva may be resumed/completed on another day, as soon as is practically possible. Vivas may continue to completion if there are multiple, but short interruptions. This will be up to the discretion of the Examiners/Independent Chair.

Students are not permitted to make a recording of their viva meeting. Vivas should only be recorded through the official minutes.

4 After the Viva

At the end of the viva examination the Independent Chair must complete a Post-Viva Declaration form noting any disruptions (e.g. loss of signal, comfort breaks, etc.), confirming that all pre-checks were completed and that they are confident that the student conducted their viva examination alone. The completed declaration form must be sent to the relevant SAS Lead and this will be held on file with the completed viva report form.

Appendix H: Research Student Additional Work Guidance and Notification form for Students

As part of your research degree, your progress will be reviewed at set points during your registration period. If you need to undertake additional work for professional development or financial reasons, it is important that you discuss this with your Supervisor(s) to understand the potential impacts on the successful and timely completion of your research degree programme.

The University operates a maximum operational limit on the number of hours that can be worked in a week. Full-time research students including those studying on a Tier 4/Student visa should not work more than 18 hours in any one week (Monday-Sunday). It is important that you keep to agreed timetables and deadlines and maintain satisfactory progress within your programme of research as set out in the Senate Handbook for Research Students and therefore 18 hours is the maximum hours in total in any one week, including paid or unpaid work and for one or more organisations that you should work. This includes any work done for Cranfield University (CU) and outside and includes any requirements for scholarship students.

All full-time students may undertake paid work for the University while studying for their Research degree (this includes teaching, invigilating and additional research work) when this is compatible with their studies and provided that this is approved by their Supervisors. The total time spent should not interfere with the progress of the doctorate and the amount of time is at the student's and Supervisor's discretion, but this should be no more than six hours in any week. Students may also work up to 12 hours a week for Cranfield University's sister companies Cranfield Quality Services Ltd and Cranfield Conference Centre Ltd as such work is usually outside of standard university working hours.

You are advised to discuss, in advance, with your Supervisor(s) any additional work you are going to be undertaking by completing the form below. This will help your supervisory team and progress review team understand your commitments when reviewing your academic progress.

If you do not make satisfactory progress during your degree programme, the information supplied in the below form may be shared in confidence with the Chair of your progress review team.

As part of the discussion with your Supervisor(s), you should consider whether additional work commitments will require you to work out of normal hours on your research, and whether this is practical, (e.g. lab support might not be available out of hours).

Working more than the maximum 18 hours per week may affect your progress and contravenes the University's maximum operational limit. If you need to work for more than 18 hours per week, you should discuss this with your Supervisor(s) who can discuss your options, which may include changing your mode of study to part-time.

If you do not make your Supervisor(s) aware that you are undertaking work in addition to your studies, you may not be able to request an extension to registration at a later date whereby this work may have affected your academic progress.

Please note that an extension to your registration will incur a monthly fee.

To note:

- Additional work includes all work carried out in addition to the research project whether it is paid or not.
- Scholarship students might be required to undertake additional work as part of their

- scholarship. For example, in FBAM scholarship students are required to carry out 4 days (30 hours) of work per month for the FBAM this time is included in the 18 hours a week and each activity should be approved.
- Students within year 1 of their PhD might not be permitted to undertake teaching or assessment related activities for Cranfield
- Students are advised not to formally agree to any work until they have made their Supervisor(s) aware of the additional work
- If undertaking additional work means you will have to work out of hours on your research, please consider whether this is feasible and whether the facilities and support that you require will be available.

Research Student Additional Work Notification Form

Student name:				
Student No.:				
Name of Company/Organisation that the work is to be carried out for				
Type of work to be undertaken and location				
Number of hours work per week				
Date of commencement of work:				
End date of work:				
Student signature:				
Date:				
To be completed by the supervisory team				
Supervisors name:				
Supervisors signature:				
	I confirm that I have discussed the above with the student and any potential impact on progress.			
Date:				
Once this form has been signed by your supervisor you must return the signed form to your SAS Research Lead for recording purposes.				

We take your data privacy very seriously. The information provided will only be used for the purpose of understanding any additional work being undertaken during your degree programme and will only be shared with your Supervisor(s), SAS Research Leads and members of our review panel as required.

Appendix I: PhD by Portfolio Route

1 Introduction

The University offers a portfolio route for it's standard PhD awards, which allows individuals employed by Cranfield or by an employer working in a related industry to complete a PhD thesis using prior research completed as part of their professional practice.

The Managing Research Students Handbook and Research Students' Handbooks apply to all students following this route, aside from some differences in process set out below.

2 Eligibility criteria

Certain criteria must be met in order for a student to be offered a place to study for this route to a PhD award. Registration for this route is currently only open to individuals employed by Cranfield, employed by one of Cranfield's strategic partners¹⁶ or employed by another industry partner with whom the University works. All research data must have been collected solely during a prospective student's employment with that strategic partner.

In addition to the above, applicants will be required to demonstrate that they meet the standard entry requirements for a PhD degree. Exceptionally, this requirement may be waived where an individual can demonstrate relevant professional work experience of no less than five years. In such cases staff should be mindful of any development needs that the applicant may have, and take these into consideration when deciding to offer a place for a PhD following the portfolio route.

3 Fees

For individuals employed by Cranfield, the fee rate will be determined by their fee status eligibility. The standard fee for this route for individuals not employed by Cranfield University is set at the international PhD fee rate (https://www.cranfield.ac.uk/study/taught-degrees/fees-and-funding). As students following this route will already have collected all data prior to registration no additional fee element (AFE) will be applicable.

4 Application process

Before registering for a PhD by this route, candidates will be required to undergo a preliminary evaluation by the proposed supervision team, which will include a review of the research data and the research proposal. The supervision team will, following their review of the research outputs, make a recommendation to the Director of Research on whether to make an offer to the prospective student.

If the Director of Research approves, the supervision team will ask the candidate to submit an application for ethical approval (to be granted retrospectively) to ensure that ethical principles and practices were followed during the collection of the data. **No student may commence their studies on this route without ethical approval having been granted.**

Candidates will also be required to confirm the integrity of the data and acknowledge any individuals who have supported the research data collection.

¹⁶ The current list of strategic partners can be found on the University website: https://www.cranfield.ac.uk/business/choose-cranfield/who-we-work-with

5 Admission and registration

Candidates who pass the pre-assessment will be required to make a formal application for the PhD by portfolio route which must include a letter of support from the supervision team which confirms that the research already undertaken is suitable for a PhD by this route.

Candidates can choose to undertake a PhD by this route either full-time or part-time:

- The minimum period of registration for full-time study is 12 months
- The minimum period of registration for part-time study is 24 months

6 Academic support for students

Academic support, including supervision arrangements, Progress Review team arrangements and pastoral and administrative support are the same as for students following the traditional PhD route - See section 2 of this Handbook.

The responsibilities of students and supervisors are the same as for students following the traditional PhD route - See section 3 and Appendix B of this Handbook.

7 Induction of students

The induction arrangements are the same as for students following the traditional PhD route - See section 4 and Appendix B of this Handbook.

8 Monitoring academic progress

Expected contact arrangements between staff and students are the same as for students following the traditional PhD route - see section 5.1 of this Handbook for further details.

Students studying on a PhD by portfolio route undertake progress reviews, which operate in the same way as for the traditional PhD route, albeit with a different schedule of reviews as set out below:



Full details of the Review process are set out in section 5 of this Handbook which, aside from the above review schedule, apply in full to students studying for a PhD by this route.

9 Core development training

Students undertaking a PhD by this route should already possess core research data management skills, however, to ensure individuals are able to complete their degree as a well-rounded researcher, all such students should undertake some mandatory skills training. Students are required to undertake the following mandatory training:

- Health and Safety
- Research Ethics
- Research Integrity

eRAP Referencing and avoiding plagiarism.

Supervisors are responsible for ensuring that students have completed the necessary training, which will be monitored as part of the regular progress reviews.

Further specific training needs should be discussed as part of regular supervision meetings.

10 Thesis format

As with for students studying on a traditional PhD route, there are two main formats for a research Thesis to be presented, Paper Format and Monograph Format - there is guidance available covering thesis formats in appendix D of this Handbook. Early in their study students should discuss with their supervisor and agree on the thesis format to be used for their PhD. The University's preferred format for Research theses is Paper Format, as it provides students with the opportunity to gain experience in the writing of self-contained reports that convey their work in a concise format, which will aid with the student's professional and personal development, although students, with the agreement of their supervisor, may submit in Monograph format if they wish.

11 Thesis examination

The thesis examination process for students studying on this route is the same as for students studying on a traditional PhD route, as set out in Section B (appointment of examiners) and section C (assessment of research students) of this Handbook.

The outcomes for students studying on this route vary from a standard PhD route, with the examiners' recommendations limited to the following:

- that the award of the degree of PhD should be made; or
- that the candidate be allowed to resubmit the PhD with minor corrections by a specified date (normally within three months); or
- that the assessment falls short of the requirements for a PhD and that the degree should not be awarded.

When assessing a thesis submitted on this route, examiners will be asked to:

- evaluate the intellectual merit of the candidate's submitted research outputs;
- establish if a satisfactory case is made for coherence between the research outputs:
- assess the contribution to knowledge represented by the research outputs and made apparent in the contextual chapter;
- evaluate the rigour with which the candidate has contextualised and analysed their research outputs in the contextual chapter;
- evaluate the appropriateness of the methods employed in the research outputs and the correctness of their application;
- establish the candidate's appreciation of the state of historical and current knowledge within the candidate's research area.

12 Student registration changes

The policies and processes relating to interruptions of study as set out in sections 6 and 7 of this Handbook apply to all research students, which include voluntary and forced suspension, forced and voluntary withdrawal, returning to study, annual, sick and maternity and paternity leave, as well as changes to your course of study.

13 Student complaints and appeals

Section 9 of this Handbook refers students to the correct Handbooks should they wish to make a complaint or academic appeal. These Handbooks apply to all students.

14 Other appendices

The other appendices in this Handbook set out useful information for all students studying for a research degree, including those studying a PhD by this route.

Owner	Director of Research and Innovation
Department	Research and Innovation Office
Implementation date	September 2024
Approval by and date	Pro-Vice-Chancellor (Research and
	Innovation), September 2024
Version number and date of last review	Version 1.8, September 2024
Next review by	September 2025