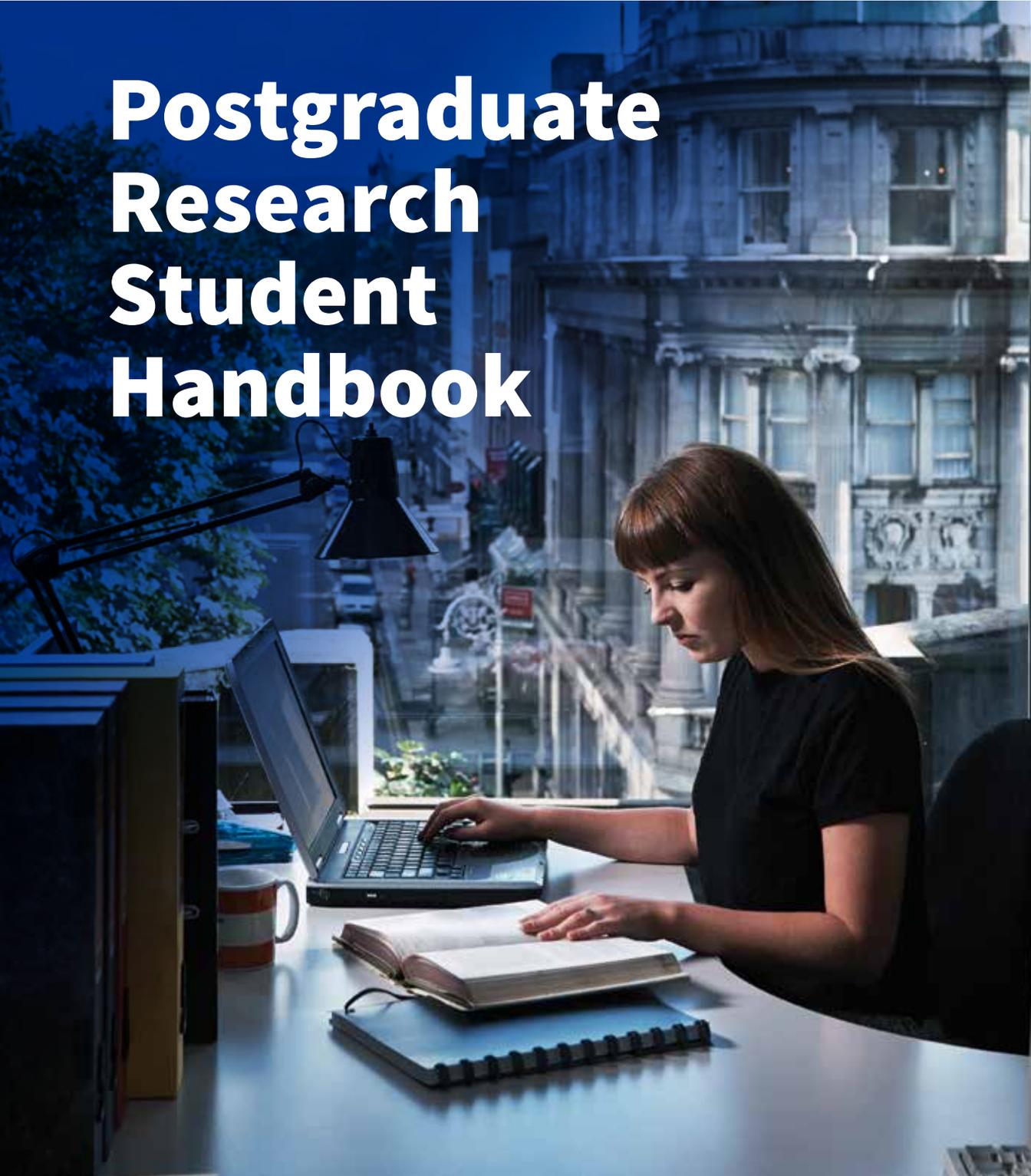




Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Postgraduate Research Student Handbook





Trinity College

Postgraduate Research Student Handbook

European universities have been awarding degrees since the 12th century, when ‘Doctor’ was the title given to people whose knowledge, increased by study and tested by practice, gave them the authority to teach others.

While there is no reason to stick to traditions just because they are time-honoured, ask yourself if there can be anything more fundamental than knowledge – the freedom to pursue it, the wisdom to use it – to individual and collective well-being.

Ask yourself if you are the kind of person who has an important question in mind, which no one has yet addressed or answered satisfactorily; who has the ability to explain what inspired it and why it matters; who will not be deterred from advancing that knowledge through genuine professional work.

That is original research.

That is what a PhD is about: making a difference.

Professor Anna Chahoud,
Chair of Latin, Trinity College Dublin

Alone of all mankind, the scholar is no stranger in foreign lands; he is a citizen in every state, and fearlessly despises the awkward chances of fortune; on the other hand, the person who thinks himself fortified and guarded by good fortune rather than by education, steps along slippery paths and struggles with a life unstable and insecure.

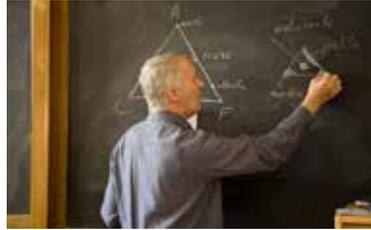
(Theophrastus, cited by Vitruvius, On Architecture, VI Praef. 2)

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Ireland's leading university, steeped in history with a reputation for excellence in education and research.



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Provost's Welcome

As Provost of Trinity College Dublin, it is my great pleasure to introduce the first edition of our handbook for postgraduate research students.

A warm welcome to all our students who have joined Trinity this year, and I wish you all every success in your research. I sincerely hope that your time as a postgraduate researcher in this great centre of learning is a fulfilling one, and one in which you follow the tradition of many who have preceded you in adding to the stock of human knowledge and thereby having an impact on Ireland and the wider world.

Trinity is truly proud of its culture and heritage of research. As we look to our past – a past of great discoveries, Nobel prize winners and innumerable people who have helped to shape the world – we rightly feel pride. But primarily we are a university that looks forward, a university operating on the global stage and seeking to have a lasting and positive impact on the world.

Our research is key to how we can have this impact and, most critically, by 'our research' I mean the research of the entire college community including, very importantly, our research postgraduates. The presence of each one of you within this research community is a cause of celebration and our hope for the future.

I wish you all the very best for your time in Trinity.



Dr Patrick Prendergast
Provost

01

Dean's Welcome

As Trinity College's Dean of Graduate Studies it is my great pleasure to welcome you both to this student handbook and, more importantly of course, to this 425 year old university in which you will spend the next years of your life engaged in the work which, we hope, will ultimately lead to you obtaining the degree for which you are registered.



Whether you are here studying for a PhD or for a Research Master's degree, it is my sincere hope that these years will be highly fulfilling for you in both academic and personal terms, as you become an indelible part of the history of this university which is ancient and steeped in history but which also constantly seeks to be forward-looking and innovative. Your story now becomes part of Trinity's story as we seek, as a community of students, faculty and alumni, to work to the betterment of national and global society in the pursuit of knowledge and truth.

I hope that this handbook is of use to you in the course of your studies. It contains useful information in relation to matters as diverse as the nature of the structured PhD, Trinity's sports facilities, the library and the various support services that operate, for you, throughout the university. It also contains perspectives on the nature of Postgraduate research and tips for maintaining a student/supervisor relationship from both staff and students.

In particular, I would really urge all students to study carefully the section on plagiarism. And I would encourage all PhD students to study the section on the structured PhD. Apart from giving insight into the mandatory taught elements of the PhD programme it provides useful information on the stages of the structured PhD and a useful 'Timelines and Targets' section. These will be invaluable to you in terms both of adhering to regulations and also of getting the most out of your 'Trinity experience'.

Beyond this, can I remind you that the full regulations governing your registration are contained in Part III of the college Calendar (www.tcd.ie/graduatestudies/higher-degrees/) and specific information relevant to your particular situation may be contained in school or discipline handbooks. Other useful information can be found on our website www.tcd.ie/graduatestudies. Lastly if you do have concerns at any stage during your course of study, please do liaise with people who can assist you – especially your supervisor, or the designated Director of Teaching and Learning (Postgraduate) within your school or discipline who has responsibility for research postgraduate students. Finally, my office is always available to deal with particular concerns and questions so please feel free to contact us if necessary.

All the very best to all of you as you start this very exciting journey!



Professor Neville Cox
Dean of Graduate Studies

Introducing the Graduate Studies Office

The Dean of Graduate Studies Office is situated nearby the Academic Registry in the Watts Building in Trinity. The Dean's office links closely with the Academic Registry in relation to all matters pertaining to the registration, progression, assessment and graduation of postgraduate students.

The Dean of Graduate Studies is the College Officer with responsibility (under the College Statutes and College Calendar) for graduate students. The current Dean, Neville Cox, is a Professor in the Law School. His email is dngstd@tcd.ie

The Administrative Officer in the Graduate Studies Office is Helen Thornbury. She has responsibility for advising and assisting the Dean on all matters related to Graduate Studies policy and she also provides invaluable advice and assistance to all members of the college community where issues pertaining to graduate students arise.

Her exceptional work for the university was recognised in 2016 when she was one of the winners of the Provost's Professional Staff Award. Her email is genadgso@tcd.ie

Catherine Allen is the **Executive Officer/Dean's Secretary** in the Graduate Studies Office. She has a large number of functions in ensuring the smooth running of the office. In particular, in so far as PhD students are concerned, she co-ordinates matters such as the travel grant scheme and the applications for the LERU Doctoral Summer School. Her email address is Dean.GradSecretary@tcd.ie

In addition, there are various communication points within the Academic Registry that may be useful to you during the course of your study.

If issues arise in relation to your studies that may mean that you need extensions for submission, time off books or some other concession, then you or more appropriately, your supervisor should contact the PG Cases team at pccases@tcd.ie

For issues in relation to registration or admission onto the PhD register you should contact research.admissions@tcd.ie

Finally, for issues in relation to the submission of your thesis (or indeed in relation to any matters when the thesis has been submitted, eg revisions) contact gsothese@tcd.ie



Postgraduate Research in Trinity College Dublin

Trinity College is proud of the fact that both historically and in the present, it is dedicated to and famous for the production of top quality and cutting edge research.

In this regard we fully recognise and acknowledge the remarkable work being undertaken by our Research Students in all disciplines and we are keenly aware of the extent to which our status as a research led university is dependent on and heightened by the research of our students. This plays out in a number of ways and, whereas, no doubt the capacity of our students to attract grant funding is one example, of far greater importance is the fruit of their research – in terms both of submitted dissertations, conference presentations and peer-reviewed published work. At its best, any university is a community dedicated to the enhancement of knowledge and understanding and for the betterment of humanity. It is a matter of celebration for us that you have joined our research community and we look forward to Trinity's reputation for research and your burgeoning reputation as scholars becoming interlinked.

In so far as the work of a Trinity College research student is concerned, the primary academic support and focus comes from within his or her school. At the heart of this is the student's supervisor(s) (see the section on supervision below) and, depending on the specific supervisor, perhaps his or her research group or lab, and, potentially, the postdoctoral students working there. All schools also have a Director of Teaching and Learning Postgraduate (DTLP) with responsibility for all graduate students in that school and whereas different schools may, for example, operate theses committees or other supervisory mechanisms, your supervisor and the DTLP (or, where appropriate the academic director of the Postgraduate Research Programme) are the two primary people to whom, in the first instance, you should turn for academic support.

The Hallmarks of Successful Postgraduate Research

On this basis, what are the hallmarks of a successful Trinity postgraduate thesis at either Masters or PhD level? Precise criteria in this regard are laid down in Part III of the college Calendar (<https://www.tcd.ie/calendar/graduate-studies-higher-degrees/>) and these should of course be consulted by you as you determine the standards which you must hit. The standards that are required of a PhD thesis are of course higher than those required of a Masters, but in principle all successful theses will have certain key characteristics.

They will demonstrate a deep and systematic understanding of the field of research and an awareness of existing scholarship in the area – in the context of which scholarship the submitted thesis will be situated.

They will demonstrate a clear and appropriate research methodology and, more generally, they will show evidence of rigorous, clear and effective research in the relevant area.

They will demonstrate significant skills of critical analysis and capacity to synthesise new and complex ideas.

They will represent an effective communication of the ideas contained in the thesis, which, especially at PhD level, must represent an appreciable contribution to knowledge through originality and innovation.

Very often the finished product will, either in whole or in part be accepted for peer-reviewed publication.



This is what you should be aiming for and it is our ambition that you will achieve this and our hope that we can help you to do so.

It will certainly galvanise research collaborations and the pursuit of best practice and it will heighten our already excellent reputation for research.

Trinity College – a Proud Member of the League of European Research Universities

It is a mark of Trinity’s international status as a Research-Led University that, in 2016 it was invited to join the 23 member League of European Research Universities (LERU). Membership of LERU, apart from being a recognition of our status, will generate any number of benefits for the research profile of Trinity.

From the perspective of Doctoral Students, however, there is also the potential and tangible benefit of participation in the annual LERU Doctoral Summer School. Details of how to apply to attend at this school will be circulated in the spring (and it is a highly competitive process which ultimately results in us sending perhaps only one student to the event).

In July 2018 **Carol O’Brien** attended at this school. Here is her account of what happened and how it benefited her work.



Last July I was fortunate enough to be chosen as the Trinity representative for the LERU doctoral summer school. This summer school is an annual event organised by the League of European Research Universities (LERU). Each year, the school is hosted by a different member of LERU, and focused on a different topic. This year's school was on the topic of 'Interdisciplinary Collaboration to Tackle Societal Challenges' and was hosted by KU Leuven in Belgium. It brought together 40 PhD students from diverse disciplines, studying in some of Europe's top universities, with the aim of addressing some of the most pressing challenges in our society today.

There were three main components to the school. Firstly, we had specialist lectures on the global challenges of health, migration and climate change from some excellent and engaging speakers. Secondly, we had personal development workshops on topics such as presentation skills, work-life balance and teamwork. Finally, we split into groups and took on a project aiming to tackle one of the global challenges. It was a week full of fascinating conversations, inspiring talks, and thoughtful discussions.

Of course, there were also plenty of social activities, including a guided tour of the beautiful city of Leuven, and a lively but informative night of Flemish food and Belgian beer tasting. The fact that Belgium were still in the World Cup was an unexpected bonus, so on the Tuesday of their semi-final encounter with France we all headed to the 'Oude Markt', where crowds had gathered to watch the match on large screens outside the dozens of pubs in the square. Sadly for the crowd, but much to the delight of the French students in our group, it was the French who were triumphant on this occasion.

A particular personal highlight for me was a trip into neighbouring Brussels where we met the person responsible for developing the EU's international climate change strategy, Jos Delbeke. His talk was fascinating, and gave us an insight into how the EU went about implementing the infamous Paris climate agreement.

Our final day was spent pitching our projects to the other groups, some professors from KU Leuven and even the Secretary General of LERU, Professor Deketelaere. Projects were delivered in the 'Pecha Kucha' style, with each presentation 20 slides long, and each slide lasting just 20 seconds. The result was an engaging and energetic style of presentation. Projects ranged from finding creative and artistic ways to communicate climate change, to tackling the violence that forces some to flee their home countries. Personally, I was involved in a project aiming to educate consumers about the carbon footprints of the products they buy in the supermarket. There was, of course, only so much we could do in one week, but the experience was invaluable and thought provoking nonetheless.

I left the school with a renewed sense of vigour for my research. I found it refreshing to take a step back from the minutiae of everyday life as a researcher in the genetics laboratory, and to instead explore how my specialist knowledge and skills could be adapted to help solve global challenges. It was a fantastic week and I am immensely grateful to both the Dean of Graduate Studies at Trinity, Professor Cox, and to LERU for making the experience possible. I would highly recommend the experience to any Trinity PhD student, so keep an eye out for applications to the next school!



Trinity's Structured PhD

All Trinity PhDs are now 'structured doctorates' irrespective of how they are funded. In essence this means that they are four-year full time or six year part time degrees (see the section on timelines and targets) where students are required to fulfil criteria at the end of each academic year.

This does not mean that students cannot submit their PhD theses before four or six years – they can, albeit that, for part-time students this may have additional fee implications. But our structured doctorates are set up as four-year degrees and we make provision for incremental stages along the journey during this four year time period.

Furthermore, as is discussed shortly, under our structured doctorate model, students are required to participate in taught modules and obtain between 10 and 30 ECTS in doing so during the lifespan of their PhD research. This is a University wide requirement, albeit that some schools may have specific and bespoke requirements as to how these credits are to be obtained and thus it is important that students familiarise themselves with the particular requirements within their schools – typically contained in school postgraduate handbooks.

Finally, please be aware that, as is discussed below, all incoming students from September 2018 must take part in a 5 credit module in Research Integrity and Impact in an Open Scholarship Era.

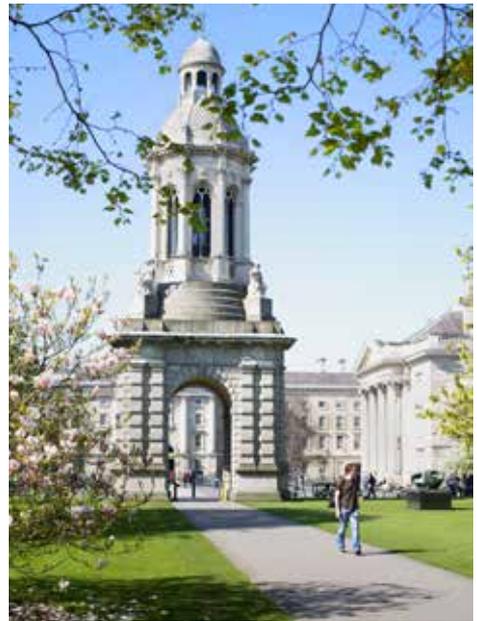
The Stages of the Structured PhD

In terms of the process for the structured PhD, the first requirement (following admission of a student to the PhD register) is that, in conjunction with his or her supervisor and the Director of Teaching and Learning (postgraduate) in the relevant school, [s]he will, at the end of his/her first year of study submit a progress report to the school. A student who does not submit this progress report will not be permitted to register for his or her second year. Moreover, it is perfectly possible for a school to refuse to allow a student to proceed to the second year on register if progress, as outlined in the report has not been satisfactory. Similarly a progress report must be submitted for all PhD students at the end of their third year (and again, registration for a fourth year is contingent upon submission of a complete and satisfactory progress report).

A particularly critical development for students occurs in their **second year** on the register and within 18 months of their initial registration namely the **confirmation process**. (Students who started on a research masters register but wish to convert to the PhD register will undertake what is termed a 'transfer process' identical in all respects to the confirmation process).

This is organised at school level and details of precisely what it entails will be given to you by the school DTLPG or his/her delegate though it will definitely include submission of a piece of work and an oral interview (viva). The procedure is aimed at ensuring that you are sufficiently on track and can, sufficiently, demonstrate that you are capable, ultimately of achieving the PhD, and that it is appropriate that your registration as a PhD student should be maintained. A student who fails his or her confirmation interview may (a) be discontinued on the register (b) granted permission to submit a thesis for a lower degree (M.Litt/MSc) or (c) be permitted to re-submit work for a second and final confirmation interview within roughly six weeks. Where a student fails the second confirmation interview, then [s]he cannot submit for a PhD but instead (depending on what the confirmation panel decides) may either be removed from the register or, alternatively may be given permission to write up and submit for a Master's degree. The confirmation interview, thus, is an extremely important part of the structured PhD, and it is by no means uncommon for students to fail to cross this hurdle.

In reality, however, the entire PhD process, from originally devising a research question right through to ultimate submission of the final thesis is a structured and incremental one. At all stages in the process it is vital that you, along with your supervisor and your school have a clear sense of the direction in which it is headed, and reasonable confidence that the project that you are undertaking is capable of hitting the standards required of a successful PhD thesis. Furthermore, at all stages it is important that you grow intellectually in and through your work. In other words, every stage of the structured PhD process (like every book you read, every dataset you analyse and every supervision meeting you arrange) represents a learning process, so that, following completion of the degree you will not merely be an expert in the field of study covered by your thesis, but you will also have grown intellectually, to doctoral level, in a broader sense.



Taught Elements within the Structured PhD

From the University's standpoint, students must study a minimum of taught components equating to 10 ECTS credits. Having said that you should be aware that your particular school may well have specific requirements either that students obtain more than 10 credits or indeed that you obtain them through studying specific modules. As such it is hugely important that you familiarise yourself with the specific requirements within your individual school. Students will be registered on SITS to the modules that they undertake (including the mandatory module on 'Research Integrity and Impact in an Open Scholarship Era').

For students who are not constrained by the approach in their school, there is a vast array of options available for students to fulfil the taught components of the structured PhD. All of these options are identified on our website at www.tcd.ie/graduatestudies. Rather than refer to them all, it would, perhaps be helpful to highlight some key points:

- (a) There is a range of generic skills modules which are offered by the Graduate Studies Office, the Library and (student development) all of which should provide students with invaluable skills that will both assist them in their PhD work but will also be useful generally. I urge you to look at these carefully and see if one looks ideal for you – especially if you are in your first year of study. Each of these modules is outlined briefly below. In particular, I would, again draw your attention to the fact that all incoming students from September 2018 onwards are required to take the 5 ECTS module in ‘Research Integrity and Impact in an Open Scholarship Era’.
- (b) Provided that the module lecturer and your supervisor/DTLP are in agreement (and provided that classroom size permits) students can fulfil their taught requirements by studying any of the thousands of modules on any of our level 9 taught master’s courses.
- (c) As is discussed below, students can study for the Graduate Certificate in Innovation and Entrepreneurship through the Trinity Innovation Academy. If students complete all of the 30 ECTS of modules and take the certificate award, then this cannot count towards their structured PhD (as this would mean that the same modules would count towards two different university qualifications). On the other hand, students who do not obtain the certificate can use credits obtained from having successfully completed particular modules within the IA course towards their structured PhD requirements.
- (d) Similarly, many PhD students register for our Postgraduate Certificate in Statistics to help them develop the skills required to analyse their data. Information on this course is available at <https://www.scss.tcd.ie/postgraduate/pgcertstats/>. Again as this is a separate 30 ECTS course with its own award, where students successfully complete the certificate and are issued with the award, credits obtained in the process cannot count towards their structured PhD, but if students do not complete the certificate, then modules undertaken can count towards the structured PhD taught credit requirement.
- (e) Registered Ph.D. students on particular named thematic programmes can avail of modules delivered in any of our partner universities in Ireland under an inter-institutional agreement that is in place. Your supervisor will be able to advise if you can avail of this.

I would urge you to think carefully about the modules that you choose for ECTS credit purposes and to study the options that are available to make the best possible choice for yourselves. Even though the idea of a research student taking taught modules may seem odd or unnecessary at first glance, we have countless examples of students who say that the classes that they attended as part of the structured PhD – whether discipline led, generic, or a taught masters module – were profoundly enriching and meant that the entire PhD journey was an intellectually satisfying one. We are profoundly aware that, for many of you, the PhD is both an end in itself but also a means to another end – a career either inside or outside the academy. We genuinely believe that the skills developed through the taught components of the structured PhD will stand to you both in the course of your PhD studies and beyond them.

Finally be aware that it is not possible for a student to be examined in relation to his or her PhD thesis unless his or her DTLP indicates on the relevant form that the student has fulfilled the requirements of the structured PhD. Indeed more generally, a student cannot be invited to register for the next year of his/her studies unless and until his/her school confirms that [s]he has fulfilled all the structured PhD requirements of the previous year. In other words, it is vital that you do complete the taught modules and other structured components that are required.



GENERIC STRUCTURED PhD MODULES

Research Integrity and Impact in an Open Scholarship Era – Mandatory Module

This module aims to introduce participants from a diverse range of backgrounds to the existing and emerging challenges and opportunities connected with researching, presenting and publishing in an open scholarship era. The concept of open scholarship has radically altered the way in which academic research operates in Europe, providing both opportunities and challenges for research students. All of the major funders in Europe and in Ireland now require compliance with open research mandates as a condition of funding. In addition, funders are increasingly demanding that researchers, including research students, must, as a pre-requisite to securing grant funding, have undertaken some training in research ethics. Finally, there are increasing pressures on students, as they conduct research, to be aware of and comply with obligations under intellectual property and data protection law and indeed to ensure the proper management of their research data. This course seeks to provide all Trinity PhD students with the tools necessary to navigate these issues as they proceed with their research.

The module is run collaboratively by the Graduate Studies Office and the College Library. All of the module's teaching staff are internal to Trinity and have research interests and skills in the relevant areas. Students will be required to undertake a research integrity course provided by Epigeum as a licensed ready-made package. Integrated with this, and delivered alongside it via Blackboard, are the bespoke elements of the course which will be provided by Ms Niamh Brennan (College Library), Dr Geoff Bradley (IT Services) and Professor Eoin O'Dell (Law School).

All incoming PhD students are required to undertake this module prior to being confirmed on the PhD register as part of the official confirmation process. Research masters students who wish to transfer to the PhD register must also complete the module as a pre-requisite to any such transfer. In both these cases the student takes the module for credit and as part of the taught components of the structured PhD. In addition, however, other research masters students can apply to take the module though not for credit.

The course is delivered online and may be taken at any stage prior to a student undertaking his or her confirmation/transfer process. The course accounts for 5 ETCS (100 student effort hours). In order to accrue the 5 ECTS, participants will be expected to complete the various online components of the course and the prescribed assessments.

A suite of workshops will comprise the course, focusing on the challenges and opportunities referenced above. Alongside the Epigeum component on Research Integrity, students will undertake TCD-developed online workshops on:

- Research Ethics;
- Intellectual Property and Data Protection;
- Research Data Management and the Construction and Application of Data Management Plans;
- Research Communication and Impact in an Open Scholarship era.

On successful completion of this module, students should be able to:

1. Apply the highest standards of ethical integrity in their research.
2. Understand the basic principles of intellectual property law as they apply to their research.
3. Appreciate the application of Data Protection law in the context of postgraduate research

4. Apply best practice standards in research data management and develop an effective Data Management Plan for their research.
5. Demonstrate awareness of the opportunities that open scholarship provides for them to ensure that their research has maximum impact.

Students' performance on the module is evaluated on the basis of undertaking the workshops and a successful pass on the assigned assessments. Participation and successful completion of assignments are compulsory. The module will be assessed on a pass or fail standard. The pass standard is 40%. Candidates who fail or fail to complete must re-take the module.

Planning and Managing your Research and your Career (PMRC)

This innovative 5-credit ECTS module will equip you, the PhD student, with the skills necessary to successfully plan and manage your research and career, and thereby ensure full contribution of your knowledge and skills to wider society. You will have the opportunity to develop specific research, career management and employability skills and the chance to interact with other PhD students from across the College to share your experiences and strategies.

The PMRC module is designed to maximise flexibility and enable you to tailor the learning to your own personal and professional development needs, by allowing you to choose from a variety of accredited experiential workshops which are provided by Student Learning Development, the Careers Service and other associated services in College (IT Services and the Library).

Research

In this module:

- You will be equipped with strategies and tools to manage your approach to the research process effectively (e.g. planning and creating a thesis template, developing critical writing skills, viva and oral defence preparation)
- You will receive guidance on planning and time management, including dealing with procrastination, balancing demands and managing stress
- You will learn how to effectively communicate your research knowledge through posters, oral presentations, curriculum vitae and at interview.

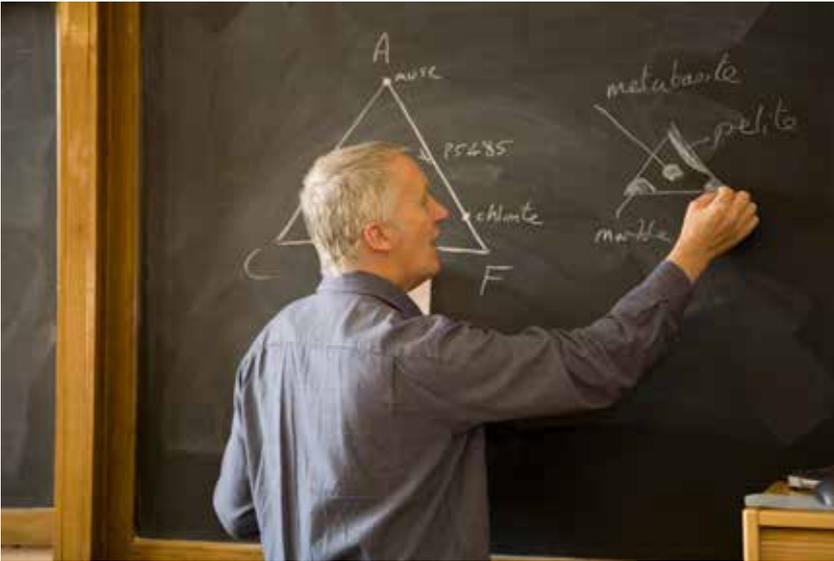
Career

In this module:

- You will reflect on the skills you have to offer, improve your application and interview skills and develop a career action plan going forward, considering both academic and non-academic careers
- You will gain knowledge of how to source relevant opportunities and undertake strategies for taking a creative approach to job-seeking including networking. You will also identify factors that impact on teams and reflect on the strengths and weaknesses of your own personal team working style.

The PMRC module is assessed through evidence of the practical application of employability, self-management and research skills, including submission of a personal plan for individual research and career building strategies, creation of a conference poster and/or delivering a presentation and submission of a CV and cover letter tailored to a particular academic or non-academic position.

For further information, please contact the Module Co-ordinators: [Dr. Tamara O' Connor, Student Learning Development \(toconnor@tcd.ie\)](mailto:Dr.Tamara.O'Connor@tcd.ie) or [Fiona Hayes, Careers Service \(fiona.hayes@tcd.ie\)](mailto:Fiona.Hayes@tcd.ie).



Teaching and Supporting Learning as a Graduate Teaching Assistant

This module is a 5ECTS module run by Academic Practice & eLearning. The programme provides an opportunity for postgraduate tutors, demonstrators and graduate teaching assistants from across the disciplines to come together to critically reflect on their role as a Teaching Assistants. It is of invaluable assistance for those PhD students who will also work as teaching assistants or demonstrators and indeed for students who have ambitions towards a career as lecturers.

Drawing on the Scholarship of Teaching and Learning (SofTL) model, the module exposes postgraduates to the educational discourses on teaching and learning at university level. Participants develop an individual teaching philosophy and use theory and reflection to explore the praxis of their teaching. This takes place within a supportive peer group who share practice, insight, and pedagogical concerns to develop a scholarly approach to teaching, assessment and evaluation, using evidence and critical reflection.

Upon successful completion of this module, you should be able to:

- Reflect on the tasks and responsibilities associated with your role;
- Practice some appropriate communication and coping strategies;
- Select and apply some relevant theories of learning to your teaching;
- Design a teaching session plan;
- Use technology to enhance your students' learning;
- Support assessment of, for and as learning;
- Reflect on your own learning as a teaching assistant.

This module is designed for blended or online delivery; it covers 7 topics presented in Blackboard Learn as blocks.

- Role of the Graduate Teaching Assistant
- Communications and Coping Strategies
- How Students Learn
- Session Planning
- Designing an Online Activity
- Assessment and Feedback
- Reflecting on and Evaluating your Teaching

The Trinity Innovation Academy

Why not consider the possibility of fulfilling the taught components of your PhD within the Trinity Innovation Academy?

The Trinity Innovation Academy is an exciting intellectual space where PhD students interact in multi-disciplinary groups with faculty, entrepreneurs and industry mentors from public and private sector organisations. The Academy was established in 2010 to develop a new kind of PhD graduate, expert in their discipline, but with a thorough understanding of how innovation can convert knowledge into products, services and policies for economic, social and cultural benefit.

The Academy offers a Graduate Certificate in Innovation and Entrepreneurship (30ECTS) to PhD Students from Trinity and Queens University Belfast. This unique inter-institutional cohort encompasses a variety of disciplinary domains from both universities. Innovation is considered in the broadest sense of exploiting new ideas in a competitive world; it is not restricted to science, engineering, technology and business, but encompasses creativity, leadership, cultural and policy innovation in the arts and humanities. Such diversity in the student body sets this initiative apart as particularly innovative in its own right.

The Graduate Certificate aims to provide skills in innovation and entrepreneurship currently lacking in many Irish PhD programmes and will set graduates apart as having this uniquely transferrable skillset. In the course of the programme, students are encouraged to uncover and exploit potential within their thesis research. To achieve this, students collaborate with industry partners on a variety of projects, gaining invaluable experience. This experience enables students to explore and develop their research in new and innovative ways. The course is modular in structure, incorporating modules on creative thinking and innovation, opportunity generation and recognition, intellectual property, venture planning and finance. Our PhD candidates can take modules to fulfil the taught components of their structured PhD or can take the whole Certificate in Innovation and Entrepreneurship as a separate qualification (in which case the modules taken do not count towards the structured PhD ECTS requirement).

Information on how to apply is available through the front page of the Office of the Dean of Graduate Studies website at www.tcd.ie/graduatestudies or from the team in the Innovation Academy at info@innovationacademy.ie



Targets and Timelines for the Structured PhD

All PhDs (and all PhD students) are different and therefore it is probably impossible to suggest a definitive timeline for your work that will work for all students. The suggested timelines and targets below are, therefore, indicative.

These will tend to be agreed between the supervisor and the student and there will be certain things (eg seeking ethics approval, risk assessment of field-based activities and even data collection) which will be more likely to apply in science rather than arts research. In other words, do not feel constrained by these timelines – they are intended merely for guidance.



Times & Tasks

Before commencement of doctoral study

- Statement of research subject
- Assignment of supervisor and approval of application by School and Dean of Graduate Studies
- Ensuring that funding is in place
- PG Students orientation events
- Relax and have fun

During the first months of doctoral study

- Work with supervisor(s) to ensure a clear understanding of your research question.
- Familiarise yourself with what is expected of you in so far as the taught element of the structured PhD is concerned.
- Ensure that there is a clear agreement between you and your supervisors in terms of what is expected of you and how your supervision relationship will proceed.
- Ensure that you have a suitable data management plan in place, and more generally, that you are aware of College rules pertaining to use, ownership and management of data.
- Ensure that you are aware of any requirement to obtain ethical approval for any element of your work.
- Relax and have fun

During the first semester of doctoral study

- Development of thesis research schedule (specified for first year, comprehensive outline for subsequent years)
- Try to ensure that you have completed a sufficient body of work (whether in the form of data collection or writing) that you have confidence proceeding to the next semester
- Consider whether to apply to be an exam invigilator
- Relax and have fun

During the first year of doctoral study

- Attendance of any formal modules or programme requirements as laid down by the School in so far as the structured PhD is concerned
- Specification of research plan for second year
- Take stock to ensure that you are 'on track' in so far as your initial plans are concerned
- Preparation for confirmation process
- Submission of progress report by student and supervisor
- Relax and Have fun

During the second year of study

- Completion of confirmation process (including submission of confirmation report and attendance at confirmation interview)
- Specification of detailed research plan for remaining year(s)
- Ensure that your research has really started to take shape and that you are not falling behind in so far as the timelines that you and your supervisor have set are concerned.
- Relax and Have fun

During the third/fourth year of study

- Completion of research
- Final write-up of thesis
- Submission of thesis
- Nomination of examiners
- Viva Voce exam

Note:

Timelines for these activities may in part be discipline dependent.

Finally, there may be various other issues that will arise in the course of particular research projects. Amongst these, the following tend to be prominent.

Agreement of schedule for and preparation of progress reports to funders

Agreement on approaches for ensuring appropriate data security and record keeping

Career planning and job search activities

Commencement of fieldwork

Ethical review/Ethical approval (as and if required)

Field trip planning

Health & Safety instructions/ certifications

Negotiation of access to field sites/ samples

Pilot study

Preparation of conference papers

Preparation of journal submissions

Pre-test of instruments/ experimental manipulations etc.

Professional registration and formal clearances (e.g., Garda clearance if research is planned with children or vulnerable adults; etc.)

Submission and Examination

The final piece of the jigsaw for research postgraduate students relates to submission and examination (and this may well seem a very long way off to those of you entering into your first year!) But it is a critical final piece and so it is worth focusing on in some detail.

All theses (PhD or Research Masters) are submitted in the first instance, to academic registry, in soft copy (two copies to be submitted). As you will read in the Calendar, there is a maximum word count (100,000 for a PhD, 60,000 for a Masters which includes appendices but not footnotes). Theses that exceed this word count will be returned to the student for resubmission. Part III of the College Calendar includes details of what must be included with the thesis (e.g. declaration, abstract and so on) as well as details of requirements in terms of spacing, font size etc. Finally in the 'library' section of this handbook, you will find details of our open access policy and the fact that students must now submit their final approved theses electronically (and also the rules on when a 'stay' may be sought on the availability of thesis in the library – typically when there is a need for it to remain confidential for a period of time).

Theses must be submitted by the end of the month preceding that on which you registered (i.e. if your registration was in September then you must submit by end of August). On the other hand, there is a convention that students are entitled to **Dean's Grace** which is, in effect, an additional month to submit. (So in reality someone who registers in September will, some years later, submit by end of September). In exceptional circumstances and on the application of his or her supervisor a student may be granted an extended Dean's grace.

On receipt of your thesis, your school will be sent an 'examiner nomination form'. In many cases supervisors discuss potential examiners with students and then the school DTLP will nominate an examiner who is appointed by the Dean (and bear in mind that this does not mean that a student has any right to be involved in the appointment of his or her examiners). The thesis is then sent out for examination, with the process, ideally to be concluded within eight weeks.

For a research master's thesis, the examiners may award the degree as it stands, or with minor corrections, may return it for major revisions and re-examination (with no guarantee that the revised thesis will be

awarded the degree) or may fail it. If either of the latter two options are envisaged by the examiners, the examiners must schedule a **viva voce** (oral exam) giving the student an opportunity to defend the thesis.

For a PhD thesis, there is always a **viva voce** exam, a rigorous and robust oral defence of the thesis by its author. Thereafter the examiners may award the degree as it stands, or with minor corrections, may return it for major revisions and re-examination (with no guarantee that the revised thesis will be awarded the degree) may award a lower degree (that is, a masters) or may fail it. In the case of both a master's degree and a PhD where the thesis is referred for major revisions and re-examination, there is no second viva voce exam but both examiners must submit new

examination reports. Students are encouraged to work with supervisors in preparation for their viva exams and, should their thesis be referred for revision and re-examination, must work with their supervisor/s in relation to the revision process.¹

In either case, when the degree is eventually awarded the student must submit the thesis electronically and also in hard copy (see the section below in relation to open access). Thereafter, the award of the degree is approved by the Higher Degrees Sub Committee of University Board and Council and the student may proceed to graduation.



¹ Details in relation to the fee implications of a thesis being referred for revision and re-examination are available from the Academic Registry at <http://www.tcd.ie/academicregistry/fees-payments/>

Supervision and the Student/Supervisor Relationship

At the heart of a really fulfilling PhD experience is the concept of quality supervision. In Trinity we are committed to ensuring that all PhD students are supervised effectively. On the other hand, it is recognised that there is no such thing as a ‘one size fits all’ approach to supervision.

Rather the definition of quality supervision in any context depends on the student (and his or her needs), the supervisor and the project. Thus some of you will be jointly supervised by two or even a panel of supervisors whereas others will have a single supervisor. Some of you will meet your supervisors every week whereas others will meet less frequently. Some supervisors will provide more detailed comments on thesis drafts than will others. But the point is that it is not the case that one model is better than another. Rather what is important is that the model that applies in your case is one that works for you and your supervisor and, ultimately, that leads to your final thesis as well as your overall ‘PhD journey’ being as fulfilling as possible.

It is important, however, to remember that ultimate responsibility for your thesis rests with you. Your supervisor, who will, of course, quite possibly have several PhD students and a number of postdoctoral researchers, is there to guide you, to help you to develop your ideas and to review your draft chapters so that their quality can be improved, but [s]he is not there to write your thesis, to be the innovative force behind it or indeed to improve the standard of written English in it! Occasionally we have had situations where students who have, for example, failed their PhDs, subsequently seek to blame their supervisors for this and inevitably the response is that it is the student and only the student who takes responsibility for the final submission (thus under our rules, no complaints against supervisors can be entertained following submission of the thesis).

Having said that and even though there is no singular model for ‘good supervision’, it is important that you do receive effective supervision (and this is a two way street with input from both you and your supervisor). If you feel that the supervision you are receiving is of poor quality or that, for whatever reason, there is some breakdown in the supervision relationship between you and your supervisor (and even if there is no breakdown in your personal relationship), it is vital that this is dealt with as soon as possible by communicating either with the DTLP in your school or, in unusual cases, with the Dean of Graduate Studies.

On the other hand, such breakdowns in relationship happen very, very rarely! So for most of you what is important is not to maintain a problematic relationship but getting the most out of an already effective one. That being the case, what follows are the views of an experienced supervisor and a student with tips for how to get the most out of a supervision relationship.

Tips on developing and maintaining a constructive working relationship with your supervisor (from a supervisor's perspective)

Martin Fellenz,
Trinity Business School

Over the years I have been blessed with the opportunity to work with many talented and highly motivated doctoral students. In fact, when I think of my best experiences working with doctoral students, the task of writing down tips on how to develop and maintain good working relationships appears unnecessary. However, relationships don't always work out well, and there is both effort and goodwill required from both sides to avoid and/or overcome problems that may - and often do - arise.

For any doctoral student², your supervisor will be the most important person in your progress through the PhD programme. And while good interpersonal relationships are helpful and do often develop, supervisor-student relationships are first and foremost working relationships designed to support the students in their research as well as in their learning and development.

In my view these are two related but separate goals. The only good Ph.D. thesis is a completed one, so the focus on research progress in the relationship is paramount. However, if you come out of your doctoral studies with a successfully defended thesis and nothing else, you have missed a lot of important opportunities. Developing research skills and research-related knowledge is crucial, but developing yourself as a person and preparing for your further career by developing a broader skillset is also a priority. The quality of supervision, and the nature of the student-supervisor relationship is central for all these outcomes to be fully achieved. And while it ultimately takes two to make this work, there are many ways in which you as the student can facilitate a good working relationships.

The short version of what I will talk about could be summarised with two points: To develop and maintain a constructive working relationship between research student and supervisor it is crucial to (a) make your mutual expectations clear to each other, and (b) base your interactions on mutual respect. I will discuss some relevant thoughts under these two general headings below.

Clarifying mutual expectations and responsibilities

To many the idea of clarifying mutual expectations will seem obvious, and to others it will appear unnecessary. However, I am often amazed with what remains unspoken and even unknown about the respective expectations and responsibilities of supervisor and research student. Many of the formal responsibilities for both are clarified in official rules and regulations (see for example the College Calendar and the published "Best Practice Guidelines on Research Supervision"), but in every student-supervisor relationship some aspects benefit from discussion and clarification. They include:

² For stylistic reasons I will talk about individual supervisors only but all points made also apply to students with co-supervisors.

— RESEARCH TOPIC AND APPROACH

In some disciplines students know exactly what their research topic, and possibly even what their research questions and methodology are when they register for their Ph.D. In other areas the initial topic choice is simply a point of departure that leads to often substantial change and development of the topic. It is imperative that both parties are clear about what level of commitment they have to the initial topic and proposal, and how they will work on the development of the topic (if any) and how unforeseen problems will be resolved (if they arise).

— PUBLICATIONS, AUTHORSHIP, COLLABORATIONS WITH OTHERS

If you are just starting out as a research student, you may not be thinking about publications just yet, but there is no better time to discuss both your plans and potentially thorny issues such as authorship and potential collaborations with researchers other than your supervisor at the beginning of your work together.

For most academics authorship and the personal and professional recognition that goes with it are very important. Decisions about such issues can quickly become emotional and even conflictual, and it is much easier to agree on a joint approach before there are actual decisions to be made. Explicit discussion and an agreement that is formally recorded (even if just in an email to confirm what was discussed and agreed in a meeting) can prevent such problems from arising later.

Different disciplines have different approaches to authorship, so whatever you agree should reflect values and customs in your discipline(s). In many areas in the social sciences, for example, it would be seen as unethical for anyone but the student to be first author on publications arising out of the thesis research (with some rare exceptions). Similarly, providing research funding, access for data collection, or any form of hierarchical relationship would not provide acceptable grounds for recognition through authorship. In any case, the respective roles and the resulting authorship arrangement

of any collaborative research should be discussed as early as possible – this is the best way to avoid later difficulties.

Collaborative research with third parties should also be discussed with your supervisor. If they are compatible with your workload they may offer great learning, publication and networking opportunities, but it is something you should bring up, discuss and mutually agree.

— COMMUNICATION, MEETINGS AND DOCUMENTATION OF AGREEMENTS

The formal College regulations and guidelines specify minimum requirements here, but it is useful to agree on how you want to work together. How often, where and when do you meet; how do you communicate with each other; when are drafts submitted; when, in what format, and how often is feedback provided; and similar aspects should be discussed and agreed. And any agreements (as well as other aspects of such meetings) should be documented to provide clarity for both parties. An easy way to do this is by keeping minutes of the meetings. That can be quite informal, and I often send a quick email with notes, agreements and next steps/expectations to my students (or ask them to prepare them and send them to me). This creates clarity and any misunderstandings can be clarified before they turn into something bigger.

— SCHEDULES, WORK PROGRESS, DEADLINES

Some supervisors insist on specific and detailed plans with exact deadlines and deliverables, others are less concerned about this. But at any stage both student and supervisor should know what the next step(s) are, and have at the very least a rough idea and agreement on when these steps should be completed. This is useful for students because of the direction and structure such work plans provide, and for supervisors because they can best support the student's work and evaluate the progress made which helps to alert them to any potential problems early.

Given the multitude of demands and responsibilities most supervisors are dealing with, adherence to agreed deadlines and submission dates is crucial to enable them to provide timely feedback. In case of delays it is always useful to alert the supervisor as early as possible and to consider a renegotiation of the relevant deadlines. If this becomes a repeated or even regular occurrence, however, there may be an underlying problem that needs to be addressed. Both parties are better off if overly ambitious schedules, unforeseen problems with data collection or other research elements, or inefficient work approaches are identified and jointly resolved.

— MENTORING, NETWORKING AND CAREER DEVELOPMENT

Different supervisors will have different approaches to this, but for me an active interest in and support for the career plans of my students is an integral part of the working relationship. This includes discussions of what and how much teaching may be useful for developing a teaching portfolio and skills; which conferences may offer the best opportunities for professional networking; and similar aspects that help students prepare for their intended career. For students, having the chance to start building their own professional network, and for potentially leveraging the professional contacts of their supervisor is immensely valuable. This is a privilege that many supervisors will not necessarily extend automatically, so it is good to understand if and under what conditions supervisors will offer such opportunities.



Exercising mutual respect

Compared to many other institutions - especially foreign ones - the Trinity approach provides little formal authority to the supervisors. In other academic institutions and traditions supervisors often have a central part in the examination of the doctoral thesis, or must sign off on the thesis before it can be submitted for examination. The only similar power that supervisors here in Trinity have is their ability to comment on their students' progress in the annual progress report, or possibly to comment on their students' performance as part of the process of confirmation on the doctoral register. Nevertheless, by its very nature the supervisor-student relationship is unequal.

How this unequal relationship is enacted, however, depends very much on the people involved. To make this work, mutual respect between student and supervisor is crucial. This includes the recognition that, ultimately, students must be active and self-responsible decision makers - in fact, the Trinity approach to doctoral education requires that students must develop the ability to decide themselves if their work is of acceptable standard for a doctorate.

To facilitate mutual respect, some of the most important ingredients are courtesy and appropriate interpersonal conduct (including active listening; appropriate body language; etc.) which helps to elicit reciprocal behaviour from the supervisor. While this sounds easy in theory, the nature of the work often makes this harder. One of the central roles of supervisors is to evaluate and comment on student work and progress to provide both *formative* (aimed at identifying strengths and weakness in students' performance to aid their learning and development) and *summative* (aimed at comparative assessment of students' performance to enable them to develop relevant quality evaluation skills) feedback to students. And even the most constructive and learning-oriented students will find it often hard to receive feedback that paints their efforts in a less favourable light than they may expect (or hope). Many supervisors inadvertently or deliberately gloss over the

difficulty this creates for students, and many students find it difficult not to take negative feedback personal.

In a strong, respectful and explicitly developmental relationship such difficulties can usually be openly acknowledged and discussed, but due to the lack of awareness, lack of motivation, lack of skill, or for a variety of other reasons this is sometimes not the case. In such circumstances it is important for students to control their emotional reaction and remain focused on maintaining a positive and open mind and a courteous and appropriate interpersonal style of interaction (of course it is just as important for supervisors to maintain a supportive and respectful demeanour). One of the most useful approaches to achieve this is to adopt an explicit focus on learning and improvement. Negative summative feedback is most acceptable if it is offered as an improvement tool. If supervisors do not offer feedback in this format (“... here is how this could be further improved; ... here is what is missing to reach the required standard; ... here are some options for how this problem can be addressed ...”), students can ask deliberately for feedback in this format. Not all supervisors are willing or able to provide it, but even asking for feedback in this format can help student feel more in control and help buffer the negative impact of such feedback.

Balanced with courtesy and mutual respect an appropriate dose of assertiveness is also useful. Assertiveness is about recognising and addressing both one's own and the other's objectives, needs and interests in the relationship or interaction. If supervisors do not treat students with respect, if they do not adhere to mutual agreements, or if they do not deliver on their formal responsibilities, students should take note and consider how to address these issues. If they are rare or isolated instances it may be an option to tolerate them, but if they occur more often it is better to address them before such patterns become established and form the bedrock of the student-supervisor relationship.

I am sure that there are many other useful and important tips that could be of help to you. . Talk to other experienced doctoral students and academic staff, to learn from their experiences and to explore how you may be able to further improve your relationship with your supervisor. Also, note the assistance and supports offered by College that you may be able to draw on to address any difficulties that you might experience. And lastly: Best of luck with your studies!

Tips for Maintaining the Student Supervisor Relationship – the Student's Perspective

Lisanne Peters,
GSU EMS faculty officer, PhD candidate,
Centre for Research on Adaptive
Nanostructures and Nanodevices (CRANN)

The relationship between a PhD supervisor and PhD student is essential to the successful completion of a PhD. The supervisor must supply a supportive and stimulating academic environment in which communication and mutual respect are the key. Developing a constructive relationship and maintaining it over the duration of a PhD is a key component of the PhD process and potentially can lead to future collaborations, projects and publications for the student, supervisor and Trinity.

Especially the first days/weeks of a PhD can be very confusing for the student. All the paperwork that needs to be filled out, new colleagues, lab/tool trainings, settling in... Therefore it is important if a supervisor can give some guidance through this period. This does not always have to be personal, but can also be a to-do list for all the administration and immigration details or a fellow PhD student or post-doc assigned to this job. Given that this will not interfere with their own work.

After the first period communication remains important and keeping tabs on the students work, by regular meetings and/or monthly reports can be an enormous help for both student and supervisor. These reports can indicate problems and issues with the research in an early stage and are at the same time a method to improve the communication skills of the student. To improve the communication skills presenting and discussing the work at meetings with other members of the group is advisable. Discussion will teach the student to defend his work, but can also lead to new insights from other angles which can only improve the quality of the work.

A last point of advice is to create a nice functioning team spirit in a research group. On short term competition between different students might seem preferable as to stimulate students to work harder but on long term cooperation between researchers/students will result in more progress. A friendly environment makes it easier for a student to work with and can prevent issues such as burn-outs.



Plagiarism

The concept of research integrity is a multi-faceted one that will mean different things for different students as they work on different projects. Some of you may need to obtain ethical approval for your work.

In many cases it will be necessary for you to construct a detailed Data Management plan and to fulfil obligations in relation to data ownership and data curation. Indeed the critical nature of these obligations is the reason why we required all structured PhD students to undertake the Taught Module in Research Integrity and Impact in an Open Scholarship Era. For the purposes of this handbook, however, and while recognising that there is an obligation on all students as they conduct research and write their thesis, to behave ethically and with integrity in all that they do, it is appropriate to focus on one particular aspect of research integrity, namely the rules in relation to **plagiarism**.

Plagiarism

From the University's perspective, plagiarism is one of the most serious of all disciplinary offences that can be committed by a postgraduate research student both because it very seriously strikes at the concept of research integrity and also because, in many cases, it implies that there are deficiencies in the research practice of the relevant student. Inevitably where plagiarism is suspected the process that follows is a deeply unpleasant one for the relevant student – and not least because, in Trinity any plagiarism, however unintentional, when committed by a postgraduate research student is deemed to constitute 'level four plagiarism' and hence cannot be dealt with locally within a school, but rather must be dealt with by the Junior Dean – the University's disciplinary officer. So for all of these reasons it is vital that students familiarise themselves with the college rules in relation to plagiarism and ensure that they do not commit the offence.

The rules for plagiarism in so far as Postgraduate Research Students are concerned, are laid down in Part III of the College Calendar and it is hugely important that you familiarise yourself with these rules. In addition, very helpful information about these rules and also the mandatory plagiarism tutorial that all students are required to take (ready, steady, write) is contained at <http://tcd-ie.libguides.com/plagiarism>. Again I urge you in the strongest possible terms to familiarise yourself with what is contained in this guide. All of the rules in relation to plagiarism are very important, but the following points are especially worth noting.

All of the rules in relation to plagiarism are very important, but the following points are especially worth noting.

(a) Plagiarism does not necessarily involve deliberate cheating. Very often it can occur as a result of sloppy research methodology where a student uses someone else's ideas without properly identifying the author of these ideas. It can also arise where a student directly quotes the words of an original author but does not make it clear that the author is actually being directly quoted. In other words it is very important that your research methodology including your referencing style is precise and effective.

(b) Plagiarism can arise not merely when a student uses the work of an established author but also, for example, when [s]he has been working as part of a project or in collaboration with his or her supervisor or a fellow student, includes the results of that study in his or her thesis but does not identify the part of the study for which [s]he is responsible or the fact that it represented a joint collaboration.

(c) Plagiarism can arise where a student submits work for a degree having already submitted the same work or any part thereof for an award in any academic institution. On the other hand, it is not plagiarism for a student to include, as part of his or her thesis, work that has previously been published.

(d) Plagiarism can also occur where students avail of any kind of professional copy-editing or proof reading service for their work.

Finally, as with so many matters connected with the business of being a research student, if you have any doubts about whether there may be plagiarism issues connected with your work, please liaise with your supervisor in respect of this.



The Trinity Library and Open Access Theses

Niamh Brennan from the Trinity Library describes the new and very exciting developments in relation to the electronic submission of Theses and the consequent ‘open access’ nature of PG research theses from now on.

The system is designed to benefit the student by automating, streamlining and accelerating many aspects of the thesis deposit process. It benefits the Library by eliminating duplication, improving data quality and saving time, and it benefits the student and the University by maximising the scholarly, reputational and societal impact of the students’ work. The initiative complements the Library’s recent highly successful theses digitisation programme which made over 3,000 TCD theses available online.

Access All Areas: Trinity’s eThesis Submission System Is Live!

The traditional printed thesis has been described as the single most under-utilised research output. If that was ever true in Trinity, it is certainly no longer the case. College’s new Electronic Thesis (eThesis) Submission System is a system for all research students whose theses have been examined and approved for the award of a PhD or a Masters by research degree. Trinity’s electronic theses will be available on Open Access by default, but can have restricted access if necessary. Eligible students will upload the electronic version of their theses which will be archived and made available via TARA (Trinity’s Access to Research Archive) and they will print the required hardbound copies from that electronic version. The process integrates up to five College systems including the RSS, TARA and SITS and is the result of a collaborative effort between the Library and Enovation Solutions, the Office of the Dean of Graduate Studies, Academic Registry and IT Services.

‘As open as possible, as restricted as necessary’.

Open Access to research theses ensures their increased visibility and recognition along with that of the thesis author. When theses’ are made available on open access, their use increases exponentially. Trinity’s eTheses will be automatically harvested by search engines, included in national and international portals (such as the DART-Europe eTheses Portal and the European Commission’s Zenodo portal), indexed by databases and listed at the top of Google search pages. The likelihood of other scholars citing these increases as a result of this visibility. Thesis citations can be tracked in Google Scholar and the Web of Science plans to add thesis citations to its coverage.

Open Access eTheses are available to everybody, including policy-makers, professional practitioners, cultural leaders and citizen scientists and can add to the societal and reputational impact of their authors and of the University. Of course, access to eTheses can also be restricted via the Application for a Stay process (with the approval of the Dean of Graduate Studies) and this option is built in to the process.

How to submit your eThesis

Postgraduate students who have submitted their thesis for examination will receive a letter informing them of their results and of the next steps they must take. The letter will include information on the process and it will provide links and contact details for support. After all changes have been approved, and as a 'last step' before the degree can be awarded, it is necessary to submit your thesis both electronically and in hard copy. You will be told this when you are informed that your thesis has been approved for the degree!

One important thing to remember is that the eThesis has to be deposited first and the hardbound copies must be printed from that deposited eThesis. This is to ensure that all of the additional information created by the system is printed along with the Thesis.

Instructions and files for printing are sent directly to The Thesis Centre from the eThesis Submission System – or the files can be downloaded and/or emailed to the printer of choice. Full information on eThesis submission is available on the Library's webpages via this link: <https://www.tcd.ie/library/support/submitting-theses.php> There you'll find a video describing the process from beginning to end along with a printable step-by-step guide and instructions on how to apply for a stay (should this be required).

For more information and support please contact Niamh Brennan (niamh.brennan@tcd.ie) or Ashling Hayes (hayesas@tcd.ie).

Thanks

The eThesis System would not have been possible without the support of Professor Neville Cox, Dean of Graduate Studies and of previous Deans of Graduate Studies, of Shane Collins and the TCD Graduate Students Union plus past GSU presidents and vice presidents, Helen Thornbury of the Office of the Dean of Graduate Studies and the Graduate Studies Committee. The system and process was developed by the Library's Research Informatics team: Niamh Brennan, Ashling Hayes and Kevin Kiely with Enovation Solutions, in liaison with Academic Registry and IT Services. Thanks also to TCD Library Collection Management and Trevor Peare, former Keeper of Reader Services.



Extra-Curricular Life and the Research Postgraduate Student

Trinity College is home to a very large number of student societies and other activities dedicated to ensuring that students have not merely an academically fulfilling time in College, but also enjoy themselves!

There is, I think, something of a tendency to regard these societies as the possession of undergraduates (such that when one operates at a postgraduate research level – especially, perhaps, at a PhD level – one should be ‘beyond’ such frivolities!).

In fact nothing could be further from the case! In the first place these societies and facilities are fully available for graduate students. In the second, given the often very specific fields of study upon which many of you will be working, it is vitally important to maintain other interests! Finally, there is no context in which life within a university is not a ‘learning process’ and a journey of self-discovery, and your extra-curricular activities can be a vital component part of this process.

What follows is a brief introduction to three important contexts in which the ‘non-academic’ interests of Postgraduate Students are enhanced, namely through the work of the **Graduate Students union, Student Societies** and the **University’s sports facilities**.



The Graduate Students' Union

Trinity's Graduate Students' Union (GSU) established in 1973 is the representative body for all postgraduate students in Trinity. The two sabbatical officers of the GSU work full-time and represent postgraduate students on all major college committees. The Union's executive committee which includes representatives from all faculties convene on a monthly basis and more often when required. The objective of the Union is to effectively represent postgraduate students within the University, advocate on behalf of Union members on issues that impact your education internally and nationally; and to protect the interests of our union members during their studies.

Activities of the Union include: providing social and recreational facilities for postgraduate students; monitoring and developing the study and recreational facilities of the 1937 Postgraduate Reading Room; providing a Graduate common room for postgraduate students (located in house 7) and providing and managing lockers for students in the 1937 Reading Room.

The GSU produces an academic and peer reviewed journal on an annual basis, the Trinity Postgraduate Review (<http://trinitypostgradrev.wixsite.com/tcd-ie>), and a literary magazine, College Green (www.collegegreenmagazine.com/). It also produces a postgraduate handbook for students with information on supports and services available to postgraduate students. The GSU President works in the area of policy and strategy. The GSU Vice-President acts as the Welfare and Education Officer for postgraduates in TCD and provides confidential one-to-one advice, advocacy and support in areas such as student supervisor relationships and financial hardship.

The GSU Communications Officer informs you on a weekly basis of information, postgrad events and updates from the university and the wider metropolitan community through the medium of a digital newsletter titled Postgrad News.

The GSU Research Student Officer (phd@tcdgsu.ie) is a dedicated position to work in areas of pertinence to PhD students. These include assisting students with stipend, TA and other HR related queries; driving the Unions research outputs and ensuring the views of the research student community are consistently factored into executive committee decisions.

The GSU website www.tcdgsu.ie provides the latest updates from the Union, information on elections, campaigns and connections to the Union's social media platforms. Students can arrange meetings with the sabbatical officers by emailing either the GSU President Oisín Vince Coulter at president@tcdgsu.ie or the GSU Vice-President Gogoal Falia at vicepresident@tcdgsu.ie or by contacting the office landline at (01) 896 1169.

Student Societies in TCD

As you begin your studies or research at Trinity, your initial thoughts may be focussed around the practicalities of this work. However, aside from academics, the campus has a vibrant and diverse society culture, with over 120 active groups in which staff and students alike can participate. The variety of societies on offer means there is truly something for everyone.

If you are interested in pursuing your chosen discipline in a social setting, societies like Werner Chemical, DU History, or Joly Geographical are veritable melting pots. Staff, postgraduates and undergraduates alike, connected to the discipline academically or otherwise, engage in a wide range of discipline-specific talks, debates, trips, quizzes and social events. These societies are numerous, covering almost all disciplines in the College.

If enjoying world class speakers from politics and popular culture, or developing your debating skills is more your thing, Trinity's oldest societies, the Hist and Phil have much to offer.

You can also learn or practice languages with our litany of language and cultural societies, help out at Vincent de Paul's 'Soup Run' or with the Voluntary Tuition Programme. If all of this leaves you in need of some down-time, you can try de-stressing at KnitSoc's celebrated 'Stitch and Bitch', or have a coffee with a book in LitSoc's Attic library. These are just some of the litany of events occurring across campus each week.

The Central Societies Committee (CSC) is the student-led governing body tasked with representing, supporting and funding student societies on campus. You can find out more about all of our societies at our website, trinitysocieties.ie, or by picking up a copy of the **Societies Guide**, available around campus. If your chosen interest isn't represented, you can develop your own and present it to the CSC which has the power to grant recognition to new societies fulfilling its criteria.

How to get involved

A Freshers' Fair is held during the undergraduate Freshers' Week. You'll notice societies taking over Front Square as they set up stall to sign-up members for the coming year. Pop down and grab some freebies, learn about the variety of activities on offer, and join your favourites for just a few euro. Once you're a member, you'll receive weekly emails from your chosen societies outlining the events planned for the week ahead. You can also keep in the loop by perusing trinityevents.ie, a fantastic new resource which ensures you're always in the know about student-led activity on campus.

If you miss the opportunity to join up in Freshers' Week, **Fourth Week**, which takes place in said week of Michaelmas Term, is an exciting open-door festival where societies showcase what they have to offer. Grab a copy of the Fourth Week timetable and pop along to free events open to all: you won't be disappointed, and may even find new interests, hobbies and friends.

Getting involved in societies not only allows you to experience another side of College, but can also teach you many useful skills which are sure to benefit you in your chosen field. What are you waiting for?

Trinity College Sports Facilities

Trinity Sport is the name for all things sporting within Trinity and we hope to see lots of you pay us a visit during your time here.

The main hub is based in the Sports Centre, at the Westland Row end of campus. The centre comprises gym, swimming pool, virtual spin, functional training zone, wellness room and climbing wall.

The sports centre is also where the majority of our fitness classes – incorporating everything from Box Fit to Boot Camp – take place. Up to 65 classes are delivered in the Sports Centre each week, ensuring all levels of fitness and physical activity are catered for.

All registered postgrads are automatic members of the centre's facilities although there is an additional charge for classes. To get started you just need to activate your student card each September on your first visit to the Sports Centre. As a member, don't forget you can also avail of preferential rates for all sports services, bookings and programmes.

That's not all though because Trinity Sport offers a comprehensive range of other activities – competitive sport, social sport, wellness courses and health initiatives.

Become a student club officer or volunteer and get involved in helping to organise Trinity Sport events or join one of the 50 student sports clubs, which offer activities in everything from fencing to sub-aqua and practically everything in between.

We also run a range of activities for children. Our Bravehearts kids' club runs during mind-term, Easter, summer and Halloween. These multi-sport camps are suitable for those aged 4-15.

The Trinity Sport team takes pride in providing you with the very best university sporting experience. Our dedicated, passionate, expert and friendly team looks forward to welcoming you!

Contact details

Website: www.tcd.ie/sport
Email: sport@tcd.ie
Phone: 01 896 1812
Twitter: @tcdsports
Facebook: Trinity Sport Dublin

Sports Centre opening hours

Mon-Thurs: 7am-10.30pm
Mon-Fri: 7am-9.30pm
Sat-Sun: 9am-6pm

Additional on-campus facilities

Synthetic tennis courts
Futsal pitch
Natural grass floodlit rugby pitch
Natural grass croquet lawn
Cricket
Outdoor athletics track (April-October)

Additional off-campus facilities

Santry Sports Grounds
Iveagh Sports Grounds
Dartry Hall
Islandbridge Boat House

Michelle Tanner,
Head of Sport and Recreation



Support Services for Postgraduate Research Students

In some cases, students come on to the postgraduate research register and, a few years later, complete their research and graduate, with the whole process being a smooth one and the pressures that are faced being ‘normal’ and bearable!

In others, however, the process is a rocky one and students face very significant difficulties – academic, personal, health based, financial and so on. Trinity, rightly, has a reputation for being profoundly interested in the well-being of all students and for seeking to assist students in difficulties. There is, of course, a humanitarian underpinning to this (in that we are genuinely interested in the dignity of every single student who comes through our gates). But in addition we believe in you and in the work you are doing – and the more that we can help students to overcome difficulties the more likely it is that they will produce the quality scholarship of which they are capable and which will enhance the scholarship of our academic community!

That being the case there is a range of **support services** that are available for postgraduate research students. Some are generic to all students whereas others, like the **Postgraduate Advisory Service** are specific for postgraduate students. The **Disability Service** provides invaluable support for students with any kind of physical or mental disability who might need some accommodation in order to ensure that their studies proceed effectively. The **Careers Service** provides important advice in relation to the ‘next step’ for our students. **CAPSL** provides many courses which are of huge benefit to graduate students – and especially those working as teaching assistants and demonstrators. The Graduate Studies Office operates a **Travel Grant** Scheme for those students seeking to go abroad for research purposes. These services are outlined now.

Student Services in Trinity College

There are a number of useful services which are available for postgraduate students in Trinity where what might broadly be termed 'personal issues' may represent an impediment to their studies. Trinity seeks, wherever possible to assist with these issues. The following are some of the principal ways in which it does so.

Student Counselling Services (SCS)

The student counselling service aims to provide a free, compassionate, inclusive and student-centred mental health service, embedding high quality counselling, problem prevention, and online services, in line with the University strategy. The SCS offers workshops on coping with the challenges of university, online self-help programmes, and 1-to-1 & group counselling. Student Counselling is available to all registered students of the university. These services are free, professional, and confidential.

Email: student-counselling@tcd.ie
(appointments cannot be booked by email).
Phone: (01) 8961407
Website: www.tcd.ie/student-counselling
Location: 3rd floor of 7-9 South Leinster Street

College Health Service

We take a holistic, multi-disciplinary approach to Student Health, working closely with the other Student Services, in the knowledge that Health matters can have a significant impact on a the Academic progress of students.

The Doctors and Nurses see patients in one-to-one, face-to-face consultations. Currently, there is no charge for Consultations although a small fee is payable for some additional procedures.

Phone: (01) 896 1591
Website: <https://www.tcd.ie/collegehealth/>
Or Pre- booked appointments are available from: 9.00 - 16.30 and an Emergency (Sit and Wait) clinic is provided twice a day, at 9.30 and 14.00
Location: Trinity Campus in House 47, a residential block adjacent to the rugby pitch.

Nursery

The TCD Day nursery provides full time care for children aged 3 months up to 4.5 years of age. Children who attend the nursery and meet the criteria as set out by Department of Children and Youth Affairs, are eligible to apply for the following childcare grants

- The Early Childhood Care and Education programme (ECCE)
- The Community Childcare Subvention programme (CCS)
- The Community Childcare Subvention Plus programme (CCSP)
- The Training and Employment Childcare programme (TEC)
- The Affordable Childcare Scheme (ACS).
- Further information on childcare funding can be found on www.dcy.gov.ie
- The Day Nursery can be accessed by staff and students of TCD

The application for the waiting list is available on the Day Nursery webpage. If one parent is a staff member and their partner is a student the application may be placed on the student waiting list but will be charged the staff member rate.

Phone: (01) 896 2277
Website: <https://www.tcd.ie/about/services/daynursery/>
Location: College Day Nursery
House No. 49/50 Trinity College



Student Learning Development (SLD)

SLD is available for all registered students. We offer a range of services to help you improve your learning and academic study skills. You can attend workshops on writing skills, time management, procrastination, study skills, critical thinking, thesis writing, presentation skills and many more.

You can have a one-to-one appointment or a drop-in session with a learning advisor to discuss your individual concerns.

Our Blackboard module has extensive learning resources which you can access 24/7.

We can also help you if you are not on campus, through Webinars, Skype and email support.

Visit our website for more information on our services, upcoming workshops, how to make an appointment and how to enrol on the Blackboard module:

www.student-learning.tcd.ie or phone us at 01 8961407.

Location: 7-9 South Leinster Street

Email: student.learning@tcd.ie

Phone: (01) 896 1407

Website: www.student-learning.tcd.ie



Student 2 Student (S2S)

If anything is on your mind and you'd like to share it with a good listener then a Peer Supporter would love to help. Peer Supporters are available for any student in the College and are there for anything you might want to talk through with them. You don't need to be in distress or crisis to talk to a Peer Supporter, but they can help with the larger problems as well as the smaller things. Our volunteers are highly trained, confidential and professional, but they're also fellow students who can offer some genuine empathy and a friendly ear. You can email us directly at student2student@tcd.ie or request a one-to-one meet-up with a Peer Supporter by calling 01 896 2438 or filling out an online form at student2student.tcd.ie/peer-support/PSrequest.php You can also call into the S2S Office on the 3rd Floor of 7-9 South Leinster Street any Tuesday lunchtime (1-2pm) during the first term to meet directly.

Phone: (01) 896 2438

Website: student2student.tcd.ie

(to request a one-to-one meet-up with a Peer Supporter)

Location: 3rd floor of 7-9 South Leinster Street, Dublin 2.

The Postgraduate Advisory Service

The Postgraduate Advisory Service, commonly referred to as PAS, is the frontline support for postgraduate students at Trinity. PAS is coordinated by the Postgraduate Student Support Officer, Martin McAndrew, who acts as a first point of contact for any postgraduate student needing support or guidance.

How we can help

We are here to provide support on any matter that may impact upon your time as a postgraduate at Trinity.

Some of the most common issues students come to PAS to discuss include: study-related stress or worry; concerns about academic progress; supervisor-relationship concerns; extensions and going off-books; queries regarding regulations and academic appeals; bullying; plagiarism and disciplinary cases and financial hardship.

We support students by:

- Providing frontline confidential and free support, information, and referral via the Postgraduate Student Support Officer
- Providing, on referral, named academics to provide advice, advocacy, and assistance via a panel of Postgraduate Advisors
- Providing a suite of complementary supports including informal mediation, workshops and training to postgraduates
- Administering the Postgraduate Student Assistance Fund and other financial assistance to postgraduate students.

PAS also provides representation for postgraduates in the event of disciplinary and/or academic appeals

PAS is located on the ground floor of House 27. We're open from 9am to 5pm, Monday to Friday. Appointments are available from 10am to 3pm. If in doubt get in touch!

Financial Assistance

The Postgraduate Advisory Service administers the Postgraduate Student Assistance Fund.

This fund is intended to tackle disadvantage by providing small amounts of financial assistance to students requiring additional support to enable them to fully benefit from their third-level studies. It is co-funded by the Irish Government and the European Social Fund as part of the ESF Programme for Employability, Inclusion and Learning 2014-2020.

For more information see here: <https://www.tcd.ie/seniortutor/students/postgraduate/financial-assistance/>

Contact info:

+353 896 1417

pgsupp@tcd.ie

<https://www.tcd.ie/seniortutor/students/postgraduate/>

Disability Service

The Disability Service provides confidential, professional supports for postgraduate students with disabilities in Trinity and the university is committed to a policy of equal opportunity in education and to ensuring that students with a disability have as complete and equitable access to all facets of College life as can reasonably be provided.

Disabilities can be visible or invisible, but regardless of the nature of yours, the Disability Service is here to help you identify and support your needs during your postgraduate study. These supports are tailored and may differ in form or scope from those at undergraduate level.

Working within the service are a team of professionals with expertise in the field of disability, including disability officers, occupational therapists and an assistive technology officer. As a student registered with the service, a number resources and supports are available to you that will assist you throughout your research and study. Students requiring disability supports at PG research level are required to register for disability supports, see <http://www.tcd.ie/disability/current/registration.php>

After registering for disability support, students will be invited to meet with a member of the Disability Service team (Disability Officer/ Occupational Therapist) on a one-to-one basis to discuss additional disability supports. The student decides on the level of support that they require. Disability supports available are linked here <http://www.tcd.ie/disability/current/services-supports.php>

Additionally, postgraduates can avail of individual sessions with an occupational therapist who will assist you to develop practical skills and strategies to help you manage your university student life (including balancing wellbeing, research load, and the supervisor-relationship).

If you have a disability and need additional support in Trinity, please contact the Disability Service by:

Email: askds@tcd.ie
Phone: 01-8963111
Website: www.tcd.ie/disability

Declan Treanor, Disability Service



Trinity Trust Travel Grants

For many of you, the process of completing a PhD will not be simply a matter of working in a library or laboratory and producing a document that will only be reviewed by examiners! Rather it will involve travel abroad possibly for fieldwork, or to study in a venue that has particular resonance for your research and, in many cases, it will involve travel to participate in and ideally present at significant international conferences. It goes without saying that this can be a huge driver for and enhancement of your research and the university strongly encourages this.

That being the case, The Graduate Studies Office is able, thanks to the very significant generosity of the Trinity Trust, to operate a Travel Grant scheme for PhD students. Details of how to apply for a travel grant (as well as important regulations in relation to application dates and so on) are available at www.tcd.ie/graduatestudies/students/funding/travel-grants/. Please note that, if you wish to apply for a grant, it is necessary both to obtain a recommendation from your Head of School, and also that the School agrees to fund 20% of the costs of the trip. Please note also, that, whereas the travel grant scheme covers costs such as transport/conference registration and attendance costs, it does not cover subsistence/food etc.

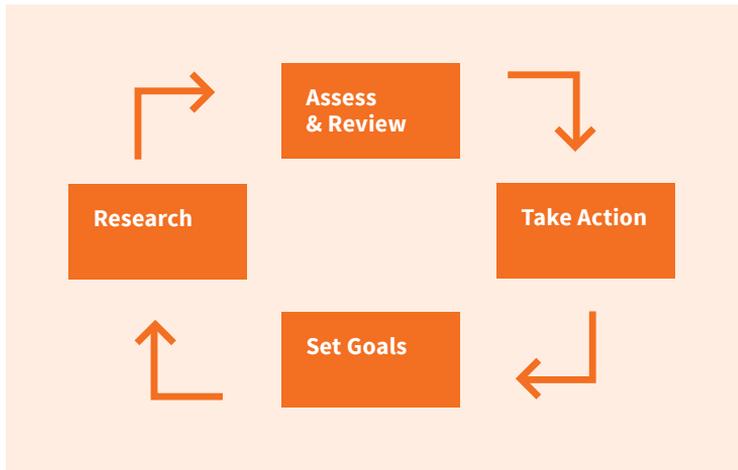
Careers Support for Postgraduate Students

The nature of work is changing and it is important to prepare yourself for the jobs of the future. Two important trends in Ireland, but also globally, are shaping how work is done and jobs are created. The first is that as a country we have emerged from recession and in some areas, particularly those which are STEM related, there are skills shortages. Secondly, technology has changed how routine transaction work is done whether checking in at the airport or withdrawing cash from an ATM and, as a result, some jobs have disappeared.

The fastest growing type of work and one which has been largely unaffected by automation is interaction work – work which requires extensive face to face interaction with others. This type of work requires a higher level of skill and often postgraduate qualifications. The College, though, is well placed to help with your preparation for entry into this changed and competitive landscape. In the 2017 QS Graduate Employability Rankings, Trinity scored in the 70-75% range for Partnerships with Employers, Graduate Employment Rates and Alumni Outcomes.

Whether you are completing a taught programme or embarking on a PhD it is never too early to consider the future. The following career management model may help to structure your thinking and the Careers Advisory Service (CAS) can provide specific help at each stage:





Assess and Review

At this stage it will be important to think about the skills you have developed, the kind of person that you are and what is important to you. The Planning Your Career section of the CAS website will help with this activity.

Research

Whether you are considering a complete change of career direction, continuing a research career or just changing the way you will use your skills, it will be important to research jobs thoroughly. In addition to looking at CAS resources, don't forget to tap into the knowledge and experience of Trinity alumni.

Set Goals

The process of getting a job remains highly competitive but setting goals helps to make it more achievable, particularly if you are considering a total change in direction.

Take Action

Register with MyCareer to make an appointment to discuss your plans with your careers consultant and also to set your job search preferences so that you are only getting notification of relevant activities and events from the Careers Service. Attend CV/LinkedIn clinics to get feedback on your applications. Please read the details on the module Planning and Managing your Research and your Career (5 ECTS) which is jointly delivered by the Careers Service and Student Learning and Development and that is described earlier in this handbook.

You won't necessarily have to move sequentially from stage to stage. There may be a job you are particularly interested in and it will make sense to go directly from Research to Taking Action.

However the more aware you are of your skills, then the easier it becomes to articulate them through your CV/LinkedIn profile and at interview. Most importantly, however, is to stop postponing and to start exploring career options.

And in Conclusion...

What then should one be seeking to achieve as a research student in a university like Trinity (apart from simply the degree for which you are registered)? No doubt there are as many answers to this question as there are research students! But some answers to this are contained in the reflections below.

Professor Richard Reilly,
Professor of Neural Engineering
in the School of Engineering.

Carrying out a PhD is about passion, curiosity and commitment. You need to have a passion for the theme of the PhD and be excited by the potential outcomes. This is fundamental. At the initial stages, a PhD can often involve considerable reading trying to understand but also review the research topic. This is why passion and curiosity are so important. Your supervisor may have a number of key articles or publications for you to start reading but then expect you to expand around the topic. As your critical analytical skills improve a series of research questions will emerge about an unexplored or underdeveloped area. These questions are the core of your PhD and around which a set of hypotheses and experiments can be developed. You will refine these questions many times throughout the years of dedicated research. A PhD is all about the research questions.

You need to make a commitment to these research questions in terms of time and energy. The depth of thinking requires a commitment to self-discipline. There will be times when all is clear and going at pace, but equally there will be times when nothing seems to make sense and progress slows. This is where the self-discipline is important: to review the questions again, refine the hypotheses, approach analysis of the experimental results in different ways etc. Also important in terms of commitment is reading of the scientific literature. If there is one universal piece of advice to offer: read more to stay on top of the subject matter! Read as many articles as you can and make notes. All the online reference systems allow you to do this. Reading without synthesising what you are reading is not going to result in making progress. Keep your notes ordered in a specific format, a format that works for you. Some use online notepads but I recommend hardback notebooks (I have filled 100's).

Besides reading and addressing your research questions, you will need to communicate your ideas to others. This will be in the form of weekly lab meetings, journal clubs or research seminars. It may also involve symposia and conferences here in Ireland but also internationally. Being able to articulate your ideas and your thoughts is just as important as defining and addressing the research questions. Being able to present clearly and concisely to a group of peers takes practice. Learn this skill. Similarly, being able to communicate clearly and concisely in written form is also crucial. Writing well still matters in an age of instant communication! There are numerous excellent style guides to scientific writing. Learn this skill also.

Attending symposia and conferences is an excellent way to network with other researchers in your area. They will have similar questions and may even have better answers! Building a network of colleagues working in your area is important not just to share ideas and concepts but also to provide critique on your work. Join the international society in your topic. The society will typically be hosting the annual international conference. Student membership is often at a reduced rate and sometime can be free. You will receive monthly news and it will keep you up to date on the wider field. Science tends to be a very open and sharing community. You will make friends, many of whom will be friends for life. All labs have webpages, many have blogs and also tweet regularly. Follow them, keep in touch and be part of the community.

As you progress with your research you will notice how quickly the time is passing. You need to keep in your mind some idea of where you are going in your career. What will do you afterwards? Will you be seeking a postdoctoral position in another university, a position in a company or starting your own? Your network of colleagues, and those who you have met at conferences, will be important here to help plan your next position. Follow also the large national and international funding agencies. Who is receiving grant funding? They will often be seeking to hire postdoctoral and other researchers.

Your supervisor is there to advise and provide mentorship. They will know your research interests, get to know your skills and talents and help shape your future career thoughts. They will also be able to offer advice, support and restore confidence when things get confusing (which invariably happens at some time or another for most students).

Carrying out a PhD is about passion, curiosity and commitment. Together with depth of thinking and excellent communication skills you will make an impact in your topic. Do the work and learn some lifelong skills.

Carrying out a PhD is also a luxury. You may not often have the time to dedicate to one defined topic in your career. So make this one count and enjoy it.



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin