

Department of Computer Science

Maynooth University,
Maynooth,
Co. Kildare,
Ireland



**Maynooth
University**
National University
of Ireland Maynooth

Departmental Research Graduate Handbook

The goal of the Maynooth University Department of Computer Science is the development of the field of Computer Science by:

- (i) the provision of world class degree programmes at both undergraduate and graduate level,
- (ii) pushing the boundaries of Computer Science knowledge through both basic and applied research, and,
- (iii) promotion of the discipline through engaging with the wider society via outreach activities, liaising with national and international bodies (e.g. the ICS, ACM, IEEE), etc.

The department's research postgraduate community has a central role to play in each of these activities primarily through their research, but also through involvement in wide spectrum of the department's activities. The strategic plans of both the department and the university prioritise the continuing development of the research postgraduate environment to provide an engine of learning at the core of our work.

The purpose of this handbook is to specify an environment where learning is maximised: both individually, through your own research, and as a group through participation in postgraduate workshop and related activities. Research postgraduates are unique in the student community in that their work has to regularly attain the highest international standards to merit publication, and it is vital that the department fosters an environment that facilitates this.

This handbook describes department-specific arrangements, and should be read in conjunction with the relevant Maynooth University policies and regulations, available from the [Graduate Studies Office webpage](#) and the [Academic Policies and Procedure Webpage](#).

0. Before you start

Successful completion of either an MSc or PhD is a significant undertaking that will require you to work closely with your supervisor typically over a period of two or four years (or more), respectively. Part-time students will take longer, as specified in the University regulations. This requires a significant level of commitment both from you and your supervisor. Hence it is essential that prospective students meet with potential supervisors prior to formally applying in order to ensure that (i) they are willing to take them on as a student, (ii) they are someone that they can work closely with over an extended period of time, and (iii) they are working in an area that the student wishes to carry out their research. A list of the current staff members in the department, along with details of their research interests is available from the department's web pages.

Once a member of staff has agreed to supervise you, you should work with them to agree the main points of your research programme; specifically:

- The title, objective, topic, and plan for your research
- If funding is available, and how this will be divided between fees, salary and travel expenses
- The duration of your research. The default is two years for an MSc and four years for a PhD; any extension to this must be explicitly agreed with your supervisor

1. Once you start

Structured Research Graduate Programmes: Since 2012 all research postgraduate students at Maynooth University must be registered on either the structured MSc or structured PhD programme. These structured programmes add to the student experience by offering subject specific modules to enhance the student's knowledge in their subject area, and by offering transferable skills modules that broaden the student's skill in areas such as research commercialisation, ethics, etc. Over the period of their studies students will be required to accrue a minimum number of ECTS by taking structured modules. The current minimum is 10 ECTS credits for an MSc or 30 ECTS credits for a PhD. In order to be permitted to submit their dissertation, students will first have to have attained the minimum ECTS requirement. Full details of the structured MSc and PhD programmes are available through the Maynooth University Graduate Studies Office website. The specific set of modules available from through Department of Computer Science research postgraduate programmes is listed on the university's [course website](#).

Availability: As a full-time student you are expected to be available during office hours on a Monday to Friday basis; any significant exceptions to this must be explicitly agreed with your supervisor. In return, your supervisor will provide a reasonable level of interaction and contact for the duration of your studies, and

will inform you in advance of any intended sabbaticals or changes to this arrangement.

If you are a part-time postgraduate student you should ensure that clear arrangements are made for regular contact with your supervisor, and that the agreed duration of your research reflects your part-time status.

Changes to programme duration or full-time registration status: Please note that you cannot unilaterally extend the agreed duration of your research, or switch from full-time to part-time mode, or vice-versa, without your supervisor's agreement. The department cannot guarantee continuing availability of facilities or supervision in the event of a unilateral change. However, the department is willing to accommodate unexpected changes in a student's circumstances and, in such cases, the student should alert their supervisor and John McDonald (John.McDonald@mu.ie), the Department Research Student Coordinator, as soon as possible.

2. Access to Facilities and Resources

Departmental Research Labs: All full-time research students will initially be allocated a desk and standard PC in one of the departmental research labs. With the agreement of your supervisor, you may alternatively or additionally be allocated space in one of the special-purpose labs, where relevant. You should note that occupying a desk in one of our labs constitutes acceptance of full-time status, and this implies a responsibility to attend department workshops, seminars and participate in research postgraduate related departmental activities.

Part-time postgraduate students and "continuing" full-time students (i.e. PhD registered beyond year 4 and MSc students registered beyond year 2) will not normally have the use of a dedicated desk in the research lab. Subject to availability, facilities in the research labs may be made available for such students at the discretion of the Head of Department. If this is not possible, arrangements will be made for access to shared computing facilities.

You are reminded to consult the Maynooth University and Department of Computer Science codes of conduct regarding the use of university equipment; details can be found in the Student Handbook, available on [the department's web-site](#).

The department reserves the right to reallocate desks within the research labs when necessary. Prior to reallocating a student's desk the postgraduate coordinator will contact the student via their mumail.ie email address requesting that they clear the space of personal items, equipment, etc. and giving them a reasonable timeframe within which to do so. In the event that the student fails to clear the space within the requested timeframe, the department reserves the right

to clear the space, and in exceptional circumstances, to dispose of equipment or other materials.

Departmental Email: The primary means of contact between members of the department and research students is via their University email address (i.e. the one ending in *@mumail.ie*). You may have other email addresses associated with other aspects of your work, but you should make sure to check your department email address regularly.

3. Departmental policy on the timing and mode of presentation of reports, reviews, seminars and examinations by which the student is assessed

Departmental Research Seminars: Departmental research seminars and the annual CS research postgraduate workshop are vital parts of the department's research activities. They provide you with an opportunity to present your own research and receive feedback, to learn from the research of others, and potentially to identify overlaps and synergies between researchers both at Maynooth and from further afield.

Attendance at departmental seminars, including seminars from postgraduate students, postdocs, staff and external speakers is expected from all full-time postgraduates. A student's level of attendance for the year may be taken into account by the departmental research student progress committee when considering their annual progress report.

Computer Science Research Postgraduate Workshop: Each year the department will hold a Computer Science Research Postgraduate Workshop; typically at the end academic year. The aim of the workshop is to provide a forum for research postgraduates to present their ongoing research activities, and to promote interaction between research postgraduates and the wider department.

The format of the workshop will be for all research postgraduate students in their 2nd or later year to give a 20 min presentation on their research. Each seminar should be on a topic relevant to the student's research and might include a review of related work by others, an overview of the student's progress to date, or a snapshot of their latest work. In all cases, the content of the student's seminar should be discussed in advance with their supervisor, who will be able to advise them on the most suitable content, focus and approach.

Students that are in their first year of study are not obliged to present at the workshop but are very welcome (and encouraged) to do so if they wish. For example presentations surveying their area of research and a summary of their proposed thesis would be very welcome.

The annual workshop provides an important element in the department assessment of the progress of research students. As such participation in the

workshop is mandatory. However, in circumstances where it is not possible to attend e.g. due to a student being registered part-time, or located off-campus, students may arrange with the department to give a seminar separate from the workshop.

4 Departmental policy on Progress Evaluation, including course requirements if applicable

Each postgraduate student is assigned a supervisor on initial registration, and this supervisor is the main point of contact for their studies. Co-supervision is possible in situations where the area of research overlaps the field of interest of the academics, and is the norm in cases where one supervisor is not on permanent contract. In all cases, students should be clear who the principal point of contact is for their research.

Department Research Student Progress Committee (DRSPC) The research postgraduate supervisory process in the department is coordinated by the department research student progress committee (DRSPC) composed of the head of department and at least three other full-time academics, including a designated research postgraduate coordinator (currently Prof. John McDonald). This committee is responsible for discharging the department's role in relation to postgraduate research, including preparing and revising the postgraduate handbook, setting postgraduate research policy, and assessing student progress on a yearly basis. Further details on the role and responsibilities of the DRSPC can be found on the Graduate Studies Office website.

DRSPC Members: the current members of the committee are:

- John McDonald (*Chair* - Research Postgraduate Coordinator)
- Ronan Farrell (Head of Department – ex officio)
- Tom Naughton
- Rozenn Dahyot (Chair of Department Research Committee)
- Rosemary Monahan

4.1 Annual Progress Assessment

Annual Report: Each postgraduate research student is required to complete an annual progress report to the DRSPC during April/May each year. Students will be reminded of this and provided with a deadline date by email by the Research Postgraduate Coordinator.

Students should complete the report in consultation with their supervisor. The report template is provide under the [GSF2 Annual Progress Report Form link on the Maynooth University Graduate Studies Webpage](#). Completing the report involves providing information, including:

- A summary of the overall aims of your research,
- Your progress during the year,
- Measureable research outputs during the year,
- Scholarship details (if relevant)
- An outline of the work to be completed by you between the date of the report and your expected submission date. This should include a timetable with clear, designated milestones and deliverables.
- Structured PhD modules completed to date, and to be completed in the coming year
- In addition, it also covers such topics as the amount of time spent on research and non-research activities, the level of contact and support from your supervisor and the quality of the postgraduate environment.

In addition to the above, the report will also require your supervisor(s) to provide comprehensive comments on your progress over the year, and their opinion on your plan for completion.

Review & Outcome: The annual reports will be reviewed by the DRSPC, along with other relevant details such as seminar attendance, workshop participation, and demonstrating duties. Full details of the review process, procedures and policy are providing in [Maynooth University Regulations for Postgraduate Research Degrees](#). The information below provides a summary of the pertinent points and department specific aspects.

The outcome of this review will be one of:

- Progress on PhD Track
- Progress
- Progress with Conditions
- Not Progress
- Transfer to a Masters by Research Degrees

Subsequent to the review by the DRSPC the Research Postgraduate Coordinator will inform each student and their supervisor of the result by email along with any comments that the committee may have.

In order for the University to permit a student's continuing registration they must have achieved a grade other than Not Progress from the DRSPC prior to the date of their next registration.

In situations where a student is returned a grade of No Progress the communication of the result will include details of the options available to the student. Furthermore both the student and their supervisor(s) will be invited to meet with the Research Postgraduate Coordinator to discuss their options.

Not excepting student specific options as determined by the DRSPC, the standard options that will be available to a student who wishes to continue their studies subsequent to a grade of No Progress will be to:

- (i) Transfer to the MSc register (if necessary i.e. in the case of a PhD student) and complete and submit an MSc thesis within the current academic year, or
- (ii) Appeal the decision by submitting a complete draft of an MSc level thesis to the DRSPC two weeks prior to the subsequent Departmental Autumn Exam Board. The submitted thesis must be accompanied by a report from the student's supervisor(s) clearly indicating whether they support the appeal, including the rationale for their position.

4.2 PhD Track Substantive Review

All PhD students initially enter their studies as PhD Track students. Progression to the PhD register is contingent on completing a substantive review thesis. The PhD substantive review process constitutes the substantive review by the department, as required under the University procedures. The thesis should demonstrate that the student:

- 1. has established a viable research topic
- 2. is familiar with related work in the field
- 3. has conducted some preliminary work in the area
- 4. has a clear plan for completing your PhD

Note that for point 3 above, it is **not** a prerequisite that a student has published their work at this point.

Substantive review committee: The assessment is carried out by a panel that includes your supervisor(s), your supervisor's nominee (member of faculty from CS), and a member of the Departmental Research Postgraduate Supervisory Committee (DRSPC) who chairs the committee.

To submit your substantive review thesis you should send it to the Postgrad Coordinator by email (John.McDonald@mu.ie – preferably in pdf format). Once submitted they will contact your supervisor to arrange your substantive review committee. The substantive review exam starts with a ~20min presentation summarising the content of substantive review thesis and addressing the above 4 points. This is followed by a Q&A session with the committee (~20-40mins). The committee then meet in private to make a decision on their recommendation which then communicate to you on the day.

Outcome: The chair of the substantive review committee is responsible for relaying the recommendation to the DRSPC. The report is reviewed by the DRSPC which can then make a final decision on progression to the PhD register.

The substantive review committee may inform you and your supervisor of their recommendation, which they will communicate to the DRSPC.

Timeline: Although you may decide to submit a substantive review thesis as early as you wish, the recommended point for submission is not be later than 17 months after your first registration. For example, for a student who registers in September of a given academic year, it is recommended that they aim to submit their substantive review thesis by the end of March in your second academic year. This will provide appropriate time for the substantive review committee to read the thesis, arrange and attend the presentation, and for the DRSPC to arrive at their final decision prior to the University June Progression Board. Note that students should communicate their intention to submit their substantive review thesis to the Dept. Postgraduate Coordinator at least 1 month in advance of the submission. This is to allow adequate time for the coordinator to arrange for a substantive review committee, etc.

If a student does not pass their substantive review they will be provided with comments from the DRSPC stating what aspects of the work need to be strengthened. The student will be entitled to (i) resubmit an updated substantive review thesis prior to the Autumn Progression Board, or, (ii) complete their studies as an MSc student. Only two substantive review to PhD submissions are permitted per student. This rule may be waived in exceptional circumstances by the Head of Department.

5 Departmental requirements regarding demonstration, teaching and tutorials by graduate students

Lab work is an important component of the department's undergraduate teaching, with many of our modules allocating equal hours to lecture and lab work. The department encourages all research postgraduate students to become involved in demonstrating in labs since this involves them further within the department's activities, improves their presentation and communication skills, and may even offer the opportunity of learning more about areas of computer science that they have not previously studied. Furthermore, as part of the structured MSc and PhD, students who demonstrate in labs are entitled to register and obtain credits for the activity (subject to also completing a short demonstrating course).

Typically the department recommends that you do not undertake more than six hours demonstrating per week, though your source of funding may impose additional constraints. Note that some funding organisations require that students seek permission prior to undertaking other duties (e.g. demonstrating, teaching, tutoring, etc.) It is the student and supervisor's responsibility to ensure that these requirements are met prior to taking up any such duties.

Many of our modules also provide for paid marking of assessments in addition to demonstrating. In all cases you should ensure that your workload does not interfere with your research agenda.

Various courses are made available at university level that may help improve your demonstrating experience, and you are encouraged to participate in these.

6 Departmental guidelines on good research practice and research conduct within their disciplines taking into account the definition as outlined in Ethical Review and Research Integrity: Misconduct in Research

All computer science research students should be aware (at least) of the

- NUIM [Ethical Review and Research Integrity Policies](https://www.maynoothuniversity.ie/university-policies/research-policies) (<https://www.maynoothuniversity.ie/university-policies/research-policies>)
- ACM [Code of Ethics](#)

Also, you should note that the Maynooth University plagiarism policy (described in the Maynooth University Calendar) makes specific reference to postgraduate students.

Your supervisor will be able to advise you on any other guidelines relevant to your specific field of research.

7 Departmental policy regarding inter library loans

The Inter Library Loan (ILL) allocation for postgraduate students is fixed at approximately 10 ILLs per year. In practice, the availability of electronic journals through the NUIM library and IReL (the Irish Research eLibrary) means that many postgraduates will not have to use ILLs. However, if you reach your ILL limit during the year you should discuss getting it extended with your supervisor.

8 Department policy on student costs for attendance at conferences

The department recognises that attendance at conferences, workshops and graduate schools is a fundamental part of your education in Computer Science. Since departmental funds are limited, prospective postgraduate students are required to discuss funding for such travel in advance with their potential supervisor; often this will be included as part of your funding.

The university (through the Graduate Studies Office) also provides some funding for conference travel, and you are encouraged to try this route before approaching the department for funding.

In the event of no other funding for travel being available, the department may be able to support some conference travel. The amount sought should be

commensurate with the level of publication involved and the importance of the publication to your research. Postgraduate students who require funding should ask their supervisor to discuss it with the Head of Department; supporting documentation, such as the reviewer's comments and the conference acceptance rate should also be supplied. It should be noted that departmental support is completely at the discretion of the department and as such supervisors should approach the Head of Department in advance of submitting to the conference to seek preliminary approval.

9 Departmental guidelines regarding thesis content and standards

Students should be aware of the formatting guidelines for theses and the submission procedure; details are available from the websites of the Graduate Studies Office and the Examinations Office. Students should note that MSc and PhD examination boards need to be approved by Faculty in advance of thesis submission, and should consult with their supervisor as regards the appropriate notification schedule.

10 International journals and conference publications and presentations

Publications in suitable conferences and journals provide evidence that your work has met international standards, is one of the principal benchmarks for the progress of a research student, and are often taken into account by external examiners in the assessment of MSc and PhD theses. You should note that not all conferences and journals have the same standards, and you should seek your supervisor's advice in selecting a suitable form of publication for your work.

Students registered with the department should state their affiliation as being either of the following:

1. Short Format.

Department of Computer Science, Maynooth University, Maynooth, Co Kildare, Ireland.

2. Long format.

Department of Computer Science, Maynooth University-National University of Ireland Maynooth, Maynooth, Co. Kildare, Ireland.

Your supervisor can recommend any additional authoring and funding credits. Section 6 and 7 of the Maynooth University Ethical Review and Research Integrity Policies deals with authorship of papers.

When noting the corresponding author on a paper, students should use their Maynooth University email address. It is also advisable to include your supervisor's email address in the contact section to ensure there is a point of contact for the paper within the department after your studies have completed.

11 University policy and guidelines on intellectual property

You should be aware that the university asserts certain intellectual property (IP) rights in relation to outputs from your research carried out within the University or that utilises University resources. Your funding sources may also have additional requirements. In some cases these requirements can include procedures that restrict or require authorisation for publication of research results.

In all cases, you should inform yourself of the relevant constraints and policies in advance of undertaking research.

MaynoothWorks – The Maynooth University Commercialisation Office is responsible for protecting and exploiting Maynooth University-generated intellectual property. The Maynooth University intellectual property and commercialisation policies are available from the Commercialisation Office web page.

12 Procedures by which the student or the supervisor may make representations as appropriate if significant difficulties arise (grievance procedures)

You are strongly encouraged to discuss any problems relating to your research with your supervisor as soon as possible - this should always be the first recourse in event of difficulty. If you cannot achieve a resolution through this route then you should discuss the issue with the postgraduate coordinator or with the Head of Department, indicating clearly if you do not wish the discussion to be relayed to your supervisor.

For advice on general issues that may arise from your relationship with the University, you can contact the Academic Advisory Office. This office also runs regular study skills seminars, covering topics such as time management and stress management that may be of interest.

You are encouraged to note any difficulties, particularly with department policy or conditions, in your annual report.

Postgraduate reps: Each year the research postgraduates will elect one representative to act as a focal point for discussions among postgraduates, and as a point of contact with the postgraduate coordinator. They also attend department staff-student meetings where they can raise general issues on behalf of the postgraduates community.

Change of supervisor: On rare occasions it may prove in the best interests of all involved for a student to change to a different supervisor. However, you should note that an alternative supervisor will most likely not have the same skills as the original supervisor and, in most cases to date, a change in supervisor has

resulted in the PhD project being re-started from scratch. Thus you are advised to only consider this course of action if all other possible strategies for resolution have failed.

In situations where the supervisor leaves the department, a replacement supervisor will be appointed by the Head of Department. This will be done in consultation with the original supervisor, who may continue to be involved in the project as circumstances permit.

13 Requirements for student training in health and safety issues

Students are advised to consult the safety statement for the department, available from the department's internal web-site.

14 Contact:

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Research Postgraduate Coordinator
Department of Computer Science
Email: John.McDonald@mu.ie
Phone: +35317084589.