



Handbook for Research Students (PhD and MLitt)

Quantitative and Computational Social Science
2022/23

Introduction

Welcome to the Quantitative and Computational Social Science (QCSS) PhD program! We are delighted to meet you and look forward to working with you over the next years.

Most of the information you will need for your studies at UCD is in the latest version of the [Graduate Research Student Handbook](#).

This brief document points out items and additional information specific to the QCSS PhD program, which is a thematic PhD under the SPIRe remit.

While studying at UCD, you will notice that there are PhD students in a large variety of different specializations within SPIRe, as well as on specialized thematic PhDs that cross disciplines. Within SPIRe, we have students working on British-Irish studies, European studies, political theory, human rights, development studies, nationalism and ethnic conflict, et cetera. The thematic PhD programs that fall under the SPIRe remit are: Quantitative Social Science, European Law and Governance, and Quantitative and Computational Social Science. The course requirements for these students differ, but there is some overlap with those in the PhD Politics and International Relations.

If after reading this handbook you have any further questions, please do not hesitate to contact us or anyone listed under contact details below.

Stefan Müller (QCSS PhD Program Director)

Dara Gannon (SPIRe School Manager and PhD Administrator)

Program Structure

The QCSS PhD program spans four years for full-time students (it is allowed, but not typically feasible, to finish within three years). For part-time students, the course is five to seven years.

All UCD PhD programs have **two stages** of training:

Stage 1 comprises the first 12-18 months (for full-time students) within which the PhD student defines the research plan, develops specific research skills through a program of recommended modules and specialized training and initiates original research work for the doctorate degree.

Stage 2 comprising the remaining months, is primarily dedicated to continuing the original doctoral research but may also include some advanced education and training.

The [PhD Lifecycle on the Graduate Studies website](#) provides more information on the process.

The QCSS PhD Program incorporates a range of recommended taught modules, typically completed in Stage I, followed by a program of original research leading to the award of Doctoral degree by research at the end of Stage II. QCSS students may also participate in short, external internships during the four-year programme.

Stage 1

	September start	
task	full time	part time
initial RSP meeting	trimester 1	trimester 1
first RSP progress assessment	by end of trimester 2	by end of trimester 3
second RSP progress assessment	by the end of trimester 4	by the end of trimester 6
course work (totalling at least 35 credits)	by end of trimester 4	by end of trimester 6
research integrity training	before end of year 2	before end of year 2
STA	beginning of trimester 5	beginning of trimester 7

Stage 2

	September start	
task	full time	part time
regular RSP meetings (at least 2 per year)	at least 2 per year	at least 2 per year

RSP = Research Studies Panel

STA = Stage Transfer Assessment

Programme Structure

As set out by the requirements of UCD Graduate Studies, QCSS students are required to complete a minimum of **35 credits** of course work in Stage 1, followed by a programme of original research leading to the award of Doctoral degree by research. More information can be found [here](#).

Modules

All students must take the following module:

- [POL50220 Social Science Methodology \(Core\)](#)

All students take at least one of the following three modules:

- [SOC40640 Social Simulation: Methods and Models](#)
- [POL42050 Quantitative Text Analysis](#)
- [ECON50580 PhD Econometrics](#)

In addition, all students take at least three modules, totalling to at least 15 credits.

Students with a technical background (computer science, engineering, statistics) take these modules from relevant offerings in the social sciences, while students with a social science background (incl. business and law) take these modules from relevant offerings in computer science, mathematics, and/or statistics.

- [ACM40290 Numerical Algorithms](#)
- [COMP40730 High Performance Computing](#)
- [PLAN40220 Geographical Information Systems](#)

- [POL42340 Programming for Soc Scientists](#)
- [SOC40640 Social Simulation: Methods and Models](#)
- [STAT40400 Monte Carlo Inference](#)
- [STAT40680 Stochastic Models](#)
- [COMP47670 Data Science in Python](#)
- [COMP40610 Information Visualisation](#)
- [COMP41680 Data Science in Python](#)
- [COMP47470 Big Data Programming](#)
- [POL50050 Quantitative Methods II](#)
- [SOC40690 Demographic Analytics: T & A](#)
- [SOC41030 Sciences, Technologies & Societies](#)
- [STAT30270 Statistical Machine Learning](#)
- [STAT40150 Multivariate Analysis](#)
- [SOC41070 SocThinking in the Digital Age](#)
- [SOC41130 AI and Society](#)
- [SOC30380 Social Dynamics and Networks](#)

The range of modules is subject to change.

The students may register for other modules depending on their research theme with permission from their Supervisor and the Module Coordinator.

The College of Social Sciences and Law schools also make a range of modules available to graduate research students outside their school each year. For a sample of such modules, [click here](#).

Maths/Coding camps

As part of the TCD/UCD collaboration, TCD runs a Math and Coding camp each year for incoming students. For 2022/23 there is a coding camp only and this takes place on the week of 5th September.

Collaboration with Trinity College Dublin

SPIRe collaborates with the Department of Political Science in Trinity College Dublin (TCD). We currently share modules on quantitative and qualitative research methods. In

addition, TCD operates the Maths and Coding camp for incoming students, as a preparatory course for Quants I.

For the academic year 2022-23, Quants I will be in TCD in the first trimester for both UCD and TCD doctoral candidates and Quants II will be held on campus at UCD in the second trimester.

Additionally, SPIRe PhD students can take one substantive module at the Department of Political Science in TCD over the course of their degree. Available modules will be communicated by email before the start of the academic year.

Research Integrity Training

Research Integrity Training is a compulsory element of all research degree programmes for students admitted after August 2019. For more information, follow the link [here](#).

Research Ethics

Research ethics applies to all members of the UCD community who conduct research that involves human and/or animal subjects. Prospective researchers must read the policies and guidelines on the research ethics website <https://ucd.ie/researchethics>.

It is the responsibility of every PhD researcher to ensure appropriate ethical approval or an exemption thereof before engaging in any relevant research activities.

Research Studies Panel (RSP)

One of the first tasks on starting your PhD is to select suitable people for your RSP.

The function of your RSP is twofold: First and foremost, it is an advisory panel that will provide you with feedback on different aspects of your project. Secondly, during Stage 1 it also is an assessment panel charged with evaluating whether you make sufficient progress on your project (see below: Progress assessment).

In addition to the requirements set out in the [Graduate Studies Handbook](#), please note the following CSCS-specific regulations:

Membership of RSP

The panel comprises of the principal supervisor/co-supervisor and at least two (but normally no more than four) advisers, one of whom must be a UCD faculty member. The RSP will appoint a chair independent of the supervisor/co-supervisor. Research Studies Panel Advisers may include faculty, adjunct, visiting or research staff or relevant professional staff of the University or external to the University.

Establishing your RSP

You should engage with your supervisor within the first few weeks of your first trimester to establish the full membership of your RSP. When you know the makeup of your RSP, you should email the PhD Administrator so that the details can be entered on your record.

Meeting frequency

RSPs should meet at least twice per academic year throughout the entire PhD process. During stage 1 there should be at least the following three meetings:

Initial meeting

You should meet your RSP by the middle of the first trimester to become acquainted with them and to give you access to the additional expertise to support your work.

First progress assessment meeting

The purpose of this meeting is to ensure that students have a viable proposal and viable research timetable. If a student is to complete within three-four years, then it is essential to ensure the project is defined at an early stage. By the relevant deadline in the above table, students must submit:

- A detailed research proposal (approximately 2500 words);
- A detailed work schedule;
- A piece of substantive work, for example a literature review or methodology section (up to 5000 words).

- The panel must report its assessment of the student's progress in the RPDP for this meeting.

Second progress assessment meeting

The second progress meeting should take place by the end of trimester 4 for full time students and by the end of trimester 6 for part time students. The RSP must have received and reviewed one chapter of the student's thesis before this meeting.

The panel must report its assessment of the student's progress in the RPDP for this meeting.

STA preparation meeting

The RSP should meet roughly two months before the STA application to provide feedback as well as prepare the RPDP that is submitted as part of the STA application. (See below for details).

The panel must state whether or not they support the student's progression into stage 2 in the RPDP for this meeting.

Meeting reports

For each RSP meeting a [Research and Professional Development Plan \(RPDP\)](#) should be developed and uploaded to the student record on SisWeb by the student. A copy with all signatures should also be forwarded to the PhD Administrator.

Transfer from Stage I to Stage II in the QCSS Program

In order to progress from Stage I to Stage II of the QCSS PhD Programme, a formal assessment of the student's progress takes place at the end of Stage I. The formal assessment is conducted by the QCSS Stage Transfer Assessment panel, which usually

comprises members of the QCSS Board of Studies. The Principal Supervisor, and any co-supervisors, are not normally members of the panel. For this transfer assessment the PhD candidate must have completed **35 credits of coursework**, including all core modules, with a minimum of B grade on average

The QCSS Transfer Assessment Panel base their judgement on the following materials:

- A written statement of progress from the Principal Supervisor;
- A written statement of progress and future research by the student, including an updated research proposal outlining the overall structure of the thesis;
- One completed chapter or research paper;
- An overview of grades obtained on the program to date;
- A copy of the latest RPDP. Please ensure that an RSP meeting is held at least two months prior to your transfer assessment,

Description of QCSS Stage II

A PhD student is required to complete a thesis based on original research, which will form the basis of the final *Viva Voce* examination. The thesis concludes a programme of research under which the student may produce working papers, co-authored papers with their supervisors, attend conferences, etc. The research component of the degree programme includes regular meetings with the supervisor, meetings with the research supervisory panel (RSP) every half year and a student Research and Professional Development Plan (RPDP) which is regularly reviewed.

Seminar Series

The school in which you are based – SPIRe, Sociology, Economics, etc. – organises a seminar series for all staff and graduate students in the school. Attendance at these seminars provides an excellent opportunity for you to develop your presentation skills, learn about research that takes place across the school, and practice providing constructive feedback in an academic setting. The [Connected Politics Lab](#) organises a

similar seminar series that is particularly relevant for students on the QCSS program. For these reasons, it is strongly encouraged that you attend all seminars in the school of your supervisor, as well as those of the Connected_Politics Lab.

PhD Forum

The SPIRe PhD Forum is a new series of events at the School of Politics and International Relations. The PhD Forum provides guidance to early-career researchers and facilitates informal discussions between SPIRe faculty and PhD students. Two SPIRe faculty members will provide a short overview of the topic and reflect on their experiences. The remaining time will be devoted to questions and answers. More information on past and upcoming events can be found [here](#).

Thesis preparation

Different theses in SPIRe have very different forms, please work with your supervisor and RSP on determining which thesis form (monograph or in the alternative thesis by papers format), structure, and length etc. is best suited for your project.

You can find the general requirement for a PhD thesis [here](#).

The college's specific requirements for a thesis by individual papers can be found [here](#).

Thesis submission and Viva voce

Please plan well ahead for your submission as setting up the exam committee and getting it approved by the Graduate Research Board can take several months.

For the formal requirements of the submitted document, please see [here](#) and [here](#).

For information on the process of submitting the thesis, please see [here](#).

Please also keep an eye on the SPIRe [PhD FAQ section](#) for up to date information.

Funding opportunities

SPIRe Fund

SPIRe has a very limited amount of money available to fund participation by its own postgraduate research students and postdoctoral researchers in Irish and international conferences and summer schools each year. Applications will be announced and reviewed by the UCD SPIRe Research Committee. funding calls will be communicated via the SPIRe email ListServ. Guidelines and the application form are available on the 'Current PhD Students' section of the SPIRe website:

<https://www.ucd.ie/spire/study/currentphdstudents/>

Irish Research Council

The Irish Research Council (IRC) is an important source for funding for research students. A maximum duration of a grant is usually three years. Since we have a three-to four-year program, your development of the research proposal in the first year is an excellent chance to also develop a proposal to submit to the IRC for funding during the remaining three years.

Keep an eye on the website below for more details and the closing date on the next funding round <http://research.ie/funding/goipg/>.

Please talk with your supervisor, if you wish to apply. Please note that this is a very competitive fellowship and, depending on the current state of your proposal, it might make sense to apply at a later stage. You are allowed to apply for this grant twice.

When preparing an IRC application, your RSP serves as an excellent forum to receive feedback. You could use one of your RSP meetings to discuss a draft of your application.

The IRC also operates an Employment Based Postgraduate Programme and an Enterprise Partnership Scheme. Details can be found below.

<http://research.ie/funding/ebp/>

<http://research.ie/funding/eps-postgrad/>

Graduate Research and Innovations Fund (GRIF)

Grants of between €100 and €1000 may be made available by the College of Social Sciences & Law to support the educational, training and research endeavours of graduate research students within the Graduate School.

<https://www.ucd.ie/socscilaw/graduateschool/graduateresearchinnovationfund/>

Political Studies Association of Ireland (PSAI)

The Political Studies Association of Ireland set up a funding support scheme for PhD researchers to attend national and international conferences. The covers costs for conference registration and/or travel expenses of up to €300. The PSAI website mentions that “Applicants should complete the [application form](#) and send it to the PSAI at psaipresident@gmail.com. For a Ph.D. student applicant, the form must be signed by the student’s Head of Department/School or Supervisor. All applications will be reviewed by the PSAI Secretary, Treasurer, and Postgraduate Representative.” Note that applicants need to be PSAI members.

<https://www.psai.ie/funding-calls/>

General information

Important dates

For UCD term dates, see <https://www.ucd.ie/students/keydates/>

Please note teaching dates for TCD modules may differ from those in UCD. You should consult the TCD website for further information.

Class Rep

The class rep for the SPIRe PhD cohort is Redmond Scales (redmond.scales@ucdconnect.ie). Each trimester, there is a meeting between the PhD Director, PhD Administrator and the Class Rep and any issues/queries are brought to

that forum. So, feel free to contact your class rep at any stage. That does not preclude you from contacting the PhD Director or PhD Administrator personally.

Welfare Resources

[UCD Dignity & Respect Support Service](#)

[UCD Student Counselling Service](#)

[UCD Student Health Service](#)

[UCD Student Advisers](#)

UCD Careers Network

The main webpage of the UCD Careers Network can be found [here](#). You can also book a 20-minute 1-2-1 consultation with one of the Belfield-based Career and Skills Consultants. [Click here for more info](#).

Administration

The PhD Administrator for the QCSS program is Ms Dara Gannon, who is available to provide administrative advice and information to all research graduate students (contact details at the end of this document).

Computer, photocopying, fax and other facilities

Please consult with Dara Gannon about access to photocopying and printing facilities.

Library

When you register with the University, you will be given a UCD student card. This also acts as your Library card. You will need your card to enter and exit the James Joyce Library. A UCARD system has been introduced, which provides an electronic purse for making purchases within the University.

UCD Library (<http://www.ucd.ie/library/>) has access to a vast range of online journals and electronic databases, many of them accessible from remote locations as well as on-

campus. A dedicated information session will be arranged for SPIRe research students during the first semester.

ALCID

This is a co-operative scheme between a group of participating Irish university libraries, which enables postgraduate students (Doctoral, Masters by research and by exam) to have access and reference rights to the stock of participating libraries. The library of Trinity College Dublin is particularly useful as it is a Copyright Library and contains a wide range of books, journals and other publications.

You can apply for an ALCID card at the Information Desk in any UCD Library or download the application form: <https://www.ucd.ie/library/use/visitlibs/>

ILL – Inter Library Loans

Many publications not available directly from the Library are obtainable via the Inter-Library Loan Service. This service is available to all staff and registered students of the College and to registered external borrowers. Staff and students are charged €6.00 per application. Journal articles from branch libraries can be obtained for readers on payment of €2.50. More information can be found via the link below

https://libguides.ucd.ie/collection_services/interlibrary_loans

SPIRe has a limited amount of funding available to assist PhD students with inter-library loans. This can be accessed on a case-by-case basis by contacting the PhD administrator, Dara Gannon.

Contact Details

For matters related to your PhD, the following contacts are most important:

QCSS Program Director

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