



The PhD Process

Faculty of Science & Engineering

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Session Outline



- 1. Introductions and The Faculty
- 2. The Doctoral College
- 3. Progression through the Degree
- 4. Advice to new Postgraduate Research students
- 5. Final Remarks



Introductions – About Me!

- introductions About Mc.
- Deputy Dean for Postgraduate Research in Science & Engineering
 Manage and Support over 1000 PhD students in the faculty
- Ensure you are supported throughout your PGR life-cycle
- Provide necessary training to PGR supervisors
- Coordinate studentship funding allocation in the faculty
- Support and coordinate large scale PGR bids in the faculty







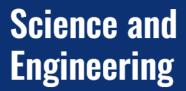


- Professor/Head of the Antennas & Electromagnetics Research Group/Lead for Centre for Electronics
- Team of 19 academics + 45 PhDs + 10 postdocs + 4 technical engineers
- Work on novel antennas and microwave devices for wearable and biomedical solutions from DC to terahertz

Active Outreach Speaker and S&E Communicator (Isambard Brunel Kingdom Award)
British Science Festival and TEDx Speaker (Widening participation)

Our Faculty





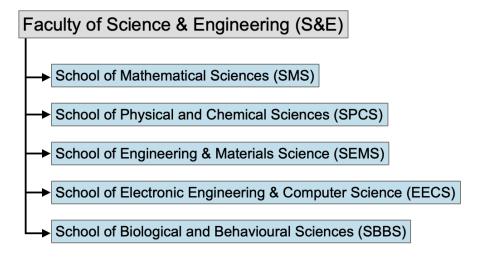


Queen Mary University of London conducts world-class science and engineering research delivering fundamental knowledge and translational impact to benefit society.

Professor Martin Knight



Dean for Research, Faculty of Science and Engineering



Cross-faculty networks/institutes

Bioengineering Network

Material Research Network

Digital Environment Research Institute

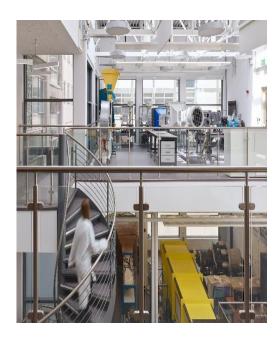
Centre for Urban Transport Technology



Research Excellence in the Faculty



- 7th in the UK for research quality in last national assessment
- Annual research grant income of ~£45M to £50M.
- NERC Doctoral Training Partnership
 - o (UCL, KCL, Kew Gardens, and the Natural History Museum)
- 2 X BBSRC Doctoral Training Partnership
 - LIDO with UCL, KCL and industry
 - Collaborative Training Partnership led by Industry
- 4 x EPSRC Centre for Doctoral Training
 - Data-Centric Engineering
 - Media Arts Technology
 - Al in Music
 - Intelligent Games
- STFC Centre for Doctoral Training in fundamental physics and data intensive science
- Athena Swan accreditation for all Schools.
- Successful spin-out companies; Apatech, Chatterbox, Actual Experience ...





Faculty Vision



- Be recognised as one of the leading science and engineering faculties in the UK, ambition to be ranked in the top 10 universities in the UK
- Have an international reputation for cutting edge research and education, which attracts the best staff and students, and gives them the freedom to excel
- Offer students an education responsive to their personal aspirations and prepares them for leading roles in society
- Have a culture of flexibility and innovation, which embraces diversity, which empowers academic leadership and where excellence is rewarded.





The Doctoral College

Doctoral College Structure





Claudia Cooper
Deputy VP Research & Innovation Culutre
Director of the Doctoral College



Paul Chapple Deputy Dean FMD



Caroline Morris
Deputy Dean HSS



Akram Alomainy Deputy Dean S&E



Zi Parker Head of Doctoral College

- Directors of Graduate
 Studies & Deputies at
 each School
- ➤ PGR Supervisors

Doctoral College Support





Frances Healy
Senior Research Manager
Faculty of Science & Engineering



Anderson Santos Research Degrees Office Academic Registry and Council Secretariat



Melanie Crisfield
Researcher Development Advisor
Doctoral College



Eleanor Groves
Research Manager
Doctoral College



Emma-Marie Fry
Senior Careers Consultant
Queen Mary Careers & Enterprise



Progression through the Degree

Who's Who in PGR at Queen Mary?



Every PGR student has **primary supervisor**(s) and wider supervisory team

Directors of Graduate Studies (DGS) oversee PGR provision in each School/Institute

Schools devise their own detailed regulations for PhD students, but must fit with the **College Code** of **Practice for Research Degrees**:

http://www.arcs.qmul.ac.uk/research_degrees/handbook_code.html

Dean for Postgraduate Research lead the Doctoral College supported by the Faculty Deputy Deans https://www.qmul.ac.uk/doctoralcollege/

Appointment of examiners and award of degrees is approved by the **Research Degrees Programmes** and Examinations Board (RDPEB)

The **Research Degrees Office** provides administrative support for PGR and report to the Doctoral College Management Group and RDPEB.

Dedicated member of the RDO for each Faculty http://www.arcs.gmul.ac.uk/research_degrees/contacts.html



The PhD Thesis



- The PhD thesis must
 - form a distinct contribution to knowledge of the subject
 - afford evidence of originality, shown by the discovery of new facts or by the exercise of independent critical power
 - o be of a standard to merit publication in whole or in part
 - be the work of the candidate



PGR Supervision



- Supervisory team: at least two members of Queen Mary academic staff
- Other members can include postdocs, industrial partners, or other external collaborators
- If problems arise with the supervisory relationship, this should be reported to the School DGS in the first instance



Supervisor's Role



- The responsibilities of supervisors and students are set out in the Code of Practice for Research Degree Programmes
- A clear supervision plan is central to progress
- Full-time (FT) students must have a minimum of 10 supervisions per year
- You should use the Supervision Log on MySIS to record supervisions
 - Full-time: 10 reports/year; Part-time: 5/year
 - Records date of each supervision, and optional box to record notes
 - You can also attach files (eg thesis chapters) for your supervisory team
 - Each log is reviewed and approved by supervisory team





- Good feedback is essential to good progress
- Very useful to discuss and agree format of feedback at each project stage
 - Helpful for both to reflect on how you generally work (or would like to work)
 - How far ahead of meetings should any written material be submitted, etc.
- Important: be clear about how feedback on written work will be provided.
 - How many drafts of each chapter will your supervisor be prepared to read?
 - What form will written comments take (brief annotations, discursive prose, both?

Working Hours and Absences



- FT students are expected to work 35 hours per week
- PT students / supervisors should agree proportion of time spent on research. Typically workload is deemed to be 50%
- Transfer between FT / PT must be approved by the DGS and to be permanent transfer
- Agree holiday periods with your supervisor
 - FT students have the same annual leave entitlement as FT staff
 - 30 days + 8 public holidays + 4 QMUL closure days
- In cases of illness inform your supervisors and School of absence.
 - On 8th day of (including non-working days), supply a doctor's certificate for further absence
- If you expect absence for more than 1 month (consecutively or cumulatively) you must apply to interrupt your studies

Interruption of Studies



- Requests should be supported by supervisor and DGS; submitted to the RDO to refer to RDPEB
- Grounds for interruption may include: illness, personal / family reasons, pregnancy, parental or primary-carer leave, adoption leave, financial difficulties. Evidence must be provided.
- Students may not interrupt simply because of a lack of progress!
- Interruptions cannot be made retrospectively, except in exceptional circumstances
- Interrupting students remain registered on their programme, but are not enrolled with Queen Mary. This has consequences for student status, funding, and immigration permission for international students

Extensions



- You're expected to complete within 4 years!
- Apply for an extension to your maximum registration period if circumstances beyond your control make it impossible to complete on time
- Requests should be supported by the supervisor and DGS, and submitted to the RDO to refer to RDPEB
- Extensions only authorised for students in 4th year, or in writing-up status (see later).
- Extensions of up to one year, (normally on one occasion only). Applications must be made
 3 months before the programme end date
- Provide evidence of good progress and ability to submit within the requested period

Training



- Supervisor is responsible for monitoring your engagement with training, and ensuring you complete the minimum each year
- UKRI expects all PhD students to undergo 210 hours of training /development during their PhD
- Training opportunities are available through four main routes:
 - Your School (at different levels of formalisation)
 - The Researcher Development team <u>https://www.qmul.ac.uk/queenmaryacademy/researcher-development/</u>
 - A Doctoral Landscape Award (DLA) or Doctoral Focal Award (DFA)
 - Sometimes available to students not funded by the partnership itself.
 - Find out about relevant providers, eg IGGI / DISCnet / AIM.
 - External courses eg at other universities or research labs

Funding for Travel



- You may have access to School research support funding
- If unavailable, apply to Queen Mary's Postgraduate Research Fund (PGRF):
 - Max. £1500 to attend an international conference/meeting
 - Max. £2500 for fieldwork, networking, access to training/facilities
 - Can only receive PGRF award once
 - Deadlines on 1 November, 1 February, and 1 June (Schools have earlier internal internal deadlines)
- MUST show evidence of having sought external funding
 - Alternative Guide to Postgraduate Funding https://www.postgraduate-funding.com/
 - Research Professional https://www.researchprofessional.com
 - Queen Mary has subscriptions to both
 - National Societies eg Inst. of Physics / Royal Society of Chemistry

Funding for Travel - continued



- The activities' purpose and significance must be shown
- Activities with potential to increase research quality and quantity, or wider dissemination and networks, are prioritised
- Support from primary supervisor and DGS is needed
- Very competitive not a safety net in any sense

https://www.gmul.ac.uk/doctoralcollege/phd-students/funding/pgrf







- You can also apply to Queen Mary's Doctoral College Initiative Fund (DCIF):
- Supports new student-led activities to enhance students' research experience, intellectual and/or professional development
- May include seminars, conferences, debates, specialist training
- Cannot include equipment or consumables
- Min. £100, max. £1500; applicants without previous DCIF funding are prioritized
- Deadlines on 1 November, 1 February, and 1 June (Schools have earlier internal deadlines)



Doctoral College
Queen Mary University of London

- Must show evidence of having seeking alternative funding
- Activities with a multi/interdisciplinary focus (especially cross-Faculty initiatives), and which engage the maximum number of participants, are prioritised
- Support from primary supervisor and DGS is needed
- Very competitive, like the PGRF scheme

https://www.qmul.ac.uk/doctoralcollege/phd-students/funding/dcif/



Key Milestones: Progression



- Students must pass first-year progression to continue on their programme
- Each School has different implementations
- All require submission of written work between 6 and 9 months after registration (12-18 months PT)
- Annual (FT) and biennial (PT) progress reviews happen thereafter
- Your DGS / supervisor will advise you
- Progression panels must include at least two people at least one should be independent of your supervisory team





- Students have two attempts to pass progression within 3 months
- Students failing to progress are transferred to MPhil, or deregistered
- Students may be deregistered at any time for insufficient progress, following two written warnings
- Recommendations for deregistration must be approved by the DGS and Deputy Dean
- Students may appeal against deregistration decisions under the Appeal Regulations

Doctoral College Queen Mary University of London

Key Milestones: Writing-up Status

- Transfer to writing-up status between 2 and 4 years (4-7 years PT)
- Max. one calendar year, both FT and PT
- Students in writing-up status <u>do not</u> pay tuition fees
- MUST have:
 - completed all experimental work / data collection (Waived for Covid-19 mitigation plan)
 - be in a position to submit the thesis within 12 months
 - outline thesis plan and estimated completion dates of each chapter
- Applications are approved successively by the primary supervisor, DGS, and Deputy Dean http://www.arcs.qmul.ac.uk/research-degrees/research-degree-students/writing-up/index.html







- · Discuss choice of examiners, and timing of submission with supervisor
- Two examiners must be nominated: 1 internal + 1 external, or both external
- Initiate examination entry process via MySIS allow at least 3 months
- Examiners must have examined at least 5 PhDs between them, at least three from the UK
- Examiners must not have had a connection with the supervisor or student (eg extensive collaboration within the past 5 years)

Key Milestones: Submission



- Must submit within 4 years (3 years 364 days)
- Queen Mary may deregister students who do not submit within 4 years
- Funding bodies normally expect students to complete and submit their thesis within 3-3.5 years
- This is the typical duration of a funding award
- All PhD students should aim to complete within their funded period



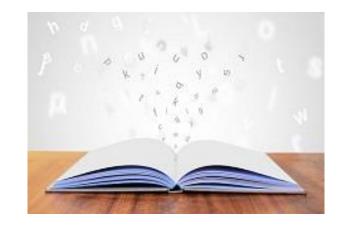
Key Milestones: Submission - continued

- It is **your** decision when to submit your thesis
- Submit Thesis Submission Form RD02
 http://www.arcs.qmul.ac.uk/research-degrees/forms/
- Submit 2 printed versions of the thesis, and 1 electronic (PDF) version, no later than 1 month before the viva (*Currently under review*)
- Thesis has 100,000 words limit, excluding bibliography and appendices



Key Milestones: Submission – last slide

- Appendices should only include material which the examiners aren't required to read in order to examine the thesis, but may consult if they wish
- On successful completion of the examination, or of amendments/ revisions, you must submit 1 digital copy of the thesis to RDO
- RDPEB can't approve PhD award until final thesis is submitted



Key Milestones: The Examination



Following the viva, examiners **may recommend one** of the following:

- 1. Pass
- 2. Pass subject to minor amendments [not affecting arguments or conclusions] to be completed within 6 months
- Pass subject to major amendments [eg rewriting or restructuring of sections], within 9
 months as specified by the examiners
- 4. Not pass, revise and resubmit within 18 months (for PhD) or 12 months (MPhil)
- 5. Not pass, but allowed to take a written paper or practical examination
- 6. Not pass, but allowed to submit to a second oral examination on the same thesis and by the same examiners within 18 months
- 7. Fail PhD but deemed to have met the requirements for an MPhil or should be allowed to resubmit a revised thesis for the MPhil degree within 12 months
- 8. Fail outright: no re-entry permitted



Advice to New PGR Students

Advice to New Students



- Ask supervisor for the best thesis they have supervised or examined. Read it, and discuss it with your supervisor
- Network and interact with others, for mutual support and enrichment
- Ask your supervisor, and other academics in your area, to identify 'classic' papers in your field. Read them at an early stage
- Remember if you leave it more than a fortnight your supervisor may well have forgotten what you discussed.
- Ask your supervisor what your thesis "challenge" is.
- Own your problem. Make it yours. Keep it at the front of your mind, always.
- Let go of the handrail, swim away from the side. Research requires risks.
- There are no stupid questions constantly ask questions

Transferable Skills



- Technical research skills
- Information searching skills
- Turning your hand to a range of technical and data analysis challenges
- Project management skills
- Presentation skills
- Networking skills
- Teaching/instruction of others
- Working to schedules
- Your career management



Final Remarks



Take advantage of all opportunities and embrace the challenge

Enjoy Your PGR Studies!





Thank You

Submitting on Time



Possible Problems

- Slow start
- Never satisfied
- Distracted from main line of research
- Getting a job before thesis complete
- Moving home to write-up



Overall Pattern of Work



- Keeping records
 - Day book
 - Filing system
- Recording achievements
- Papers and references
 - Recording your view of a paper
 - Data base?
- Planning ahead
 - "Research can be planned but not blueprinted"
 - Timetables
 - Setting personal targets



Overall Pattern of Work



- Managing yourself and your time
 - 1% inspiration 99% perspiration
 - office hours vs psychological moment
- Research Groups
- Cooperating with others for mutual helps and support
 - Within groups
 - Across groups
 - Other universities

Knowing What Has Been Done Before



- Not re-inventing the wheel
- Information searching skills
- Conference / seminar attendance
 - Don't just focus on your own specialised area
- Specialist journals
 - Know what's going on in the wider field







- Group seminars
- Conference presentations
 - Forces you to structure and evaluate you research
 - Enables you to spot and remedy flaws in arguments / knowledge
- Feedback
 - Helps identify new ways forward







- Interrupting students may continue research work, subject to retain library access contact with supervisors to be agreed in advance. no access to laboratories no fieldwork to be conducted
- Maximum interruption period is 2 years in total (excluding periods of primarycarer leave)
- Discuss implications of interruption with Advice and Counselling particularly if your fees are paid by a sponsor or, you hold a Tier 4 visa where Queen Mary issued a CAS

Advice to New Students



- Take training seriously not just for thesis project, but for your career
- Keep meticulous records will save endless reference-checking later
- Don't be reluctant to experiment or to be honest about when experiments don't work
- · Play with ideas, problems and techniques
- Make sure you can explain your work clearly to non-specialists takes practice!
- Only a handful of people in the world are genuinely experts in your field. Research always means dealing with non-specialists
- Seek out critical analysis, at conferences etc. Dealing with feedback is a skill that most people need to develop

Advice to New Students - continued



- Manage your time effectively
 - keep regular working hours, set targets, take time off; it's a marathon, not a sprint
 - what tasks need particular resources (internet connection, a desk, quiet...)? what tasks don't need specific resources can be done at odd ends of the day (eg background reading on the Tube)?
- Back-up everything (twice!)
- Storing your data, references, notes is useless you can retrieve it easily
- It's easy to forget what's new and exciting about your work, especially in the closing stages. Remember
 this is something that nobody else knows
- Print the title-page of your thesis, in the required format. Put it in a file. Congratulations. You've started
- Three years will go past surprisingly quickly don't half-do things so you have to return to





- Ask your supervisor what your thesis "challenge" is.
- Own your problem. Make it yours. Keep it at the front of your mind, always.
- Let go of the handrail, swim away from the side. Research requires risks.
- Be ready to abandon ideas if they do not work but do not kill them before they have had a chance to fly.

