

Department of Mathematics - The MSc Dissertation

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MSc Dissertation...

- A substantial project which will account for a third of the credits for your MSc.
- An opportunity to study an area of mathematics in depth.
- The work is done in a three month period from early June until early September under supervision provided by the Department.
- An extended piece of mathematical writing.

MSc Dissertation...

- Requires strong self-motivation and good time management.
- Develop skills and confidence in independent learning.
- A chance to demonstrate initiative.
- You are **not** expected to develop truly original research.
- It is a good training and preparation for both the world of work and further (PhD) study.
- There is a set of intended learning outcomes for the dissertation.

Choosing your project...

Pure - can be an extension of your extended project completed in the Research and Study skills module.

Applied Mathematics, Mathematical Finance, Statistics - you will be provided with a list of project titles and descriptions and return a list of your preferences. You will be choosing a project and not a supervisor. Your Programme Tutor will decide the actual allocations.

Further information will be provided in the follow-up break-out sessions (Statistics, Applied Mathematic Science, and Pure Mathematics).

For Mathematical Finance the break-out session has been held earlier and the list of project titles has already been provided.

Supervision arrangements...

- You are required to work on your dissertation over the summer in Manchester.
- If you have exceptional reasons to not continue in Manchester you will have to apply for permission , giving your reasons. We will then look to see what supervision arrangements can be made for you going forward.
- Holiday breaks (and other absences) in the summer should be agreed with your supervisor.

Student visa attendance requirements

- An email has been sent earlier about arrangements this summer.
- Checkpoint.
You must complete one in-person check-in on campus between Wednesday 1 July and Friday 31 July. You can check in at the School of Natural Sciences Student Support Hub, Ground Floor, Alan Turing Building, or at the Main Library front desk.

What you can expect from your supervision...

- Provide you with advice and guidance about: the nature of your project, the expected standard, planning the work required, relevant existing literature.
- Have contact with you at regular meetings (eg. once a week) to discuss your progress, the next steps in your work and give guidance.
- You can expect to get some feedback about your writing. However, it is not their job to proof-read your work.
- Be accessible via email or during office hours, subject to discretion.
- Let you know when they will be absent from the Department/work for more than a few days.

Your responsibilities...

- Work consistently on your project in stages which have been agreed with your supervisor(s).
- Keep written notes on the progress of your work.
- Be sure to raise any problems or difficulties you are having promptly with your supervisor/ supervision team.
- Your supervisor/ supervision team will regularly give you help and advice but, in the end, your dissertation should reflect your understanding and abilities with respect to the project.
- Your Programme Tutor will talk to you about how we expect a dissertation to be structured and prepared.

Online resources for further support...

The **University Library** is a valuable resource for text books and publications in academic journals. (Lots of e-books and e-journal articles can be accessed directly from your own computer.)

<http://www.library.manchester.ac.uk/>

Remember that you can use the Library Order a Book Service:

<https://www.library.manchester.ac.uk/resources/order-resources/order-a-book-students/>

- A (Google) search on the internet can reveal plenty of useful information relevant to your dissertation work.
- Google Scholar is useful for literature review. For example it shows papers the cited a particular paper
- MathOverFlow.net and Maths.StackExchange.com contain a number of questions and answers. You can also ask your question there.
- Other online forums.

Online resources for further support...

The University Library, under the "**My Learning Essentials**" heading has various online tutorials and guides which you may find helpful to read through.

<https://www.library.manchester.ac.uk/training/my-learning-essentials/>

They also arrange **regular open workshops** and the link to these is on the above webpage.

These offer non-degree specific skills support which can greatly enhance your studies.

University Centre for Academic English

The UCAE have online resources available which you can use for self-study. You can find a link to self-enrol at their web page:

<https://www.ucae.manchester.ac.uk/resources/online-resources/>

Dissertation

- Length: typically 50-80 pages.
- Should be prepared using \LaTeX . You will lose marks if \LaTeX is not used.
- \LaTeX : there is a style file with page layout and some structure. It can be found at <https://www.overleaf.com/read/wqksgckzrjnf#405923>
- \LaTeX : can be used locally, download the copy of the project above. In Overleaf you can copy the project above.
- \LaTeX videos with slides by Paul Johnson can be found at
 - ▶ <https://video.manchester.ac.uk/embedded/00000000-5990-fc54-0000-01754865ea00>
 - ▶ <https://video.manchester.ac.uk/embedded/ffffffe00b-3f31-0000-01754873a5a0>
- Some structure: abstract and introduction, list of references, other parts may be varied.

Plagiarism...

It is extremely important that your completed dissertation represents **your own work**.

Do **not** copy and paste material from other work (published or otherwise). Put things into **your own words**.

Be sure to reference carefully and thoroughly all the books, research papers and other (web) sources you have used.

Your work will be analysed by Turnitin and a similarity report will be generated.

If it is upheld that a student has committed plagiarism then disciplinary action (penalties) will ensue.

Using AI - ChatGPT, etc.

- University guidelines for staff and students are available at <https://documents.manchester.ac.uk/display.aspx?DocID=75355>
- Five core principles
 - ① Transparency - Always clearly indicate when and how you have used AI in your work.
 - ② Accountability – We are all responsible for the outputs generated by AI. It is important to verify that information generated is accurate and acknowledges where information has come from.
 - ③ Competence - Regularly update your AI knowledge and skills through continuous professional development.
 - ④ Responsibility - Ensure your use of AI tools is ethical, legal, and fair by avoiding malicious uses, mitigating biases, protecting personal information, and respecting copyright and intellectual property rights.
 - ⑤ Respect - Ensure your use of AI tools respects individuals' privacy, mitigates negative societal impacts, and minimises environmental harm.

Mitigating circumstances...

Students having to take resit examinations as deferrals (first attempts) in August will be allowed one week extension to the dissertation deadline up to a maximum of four weeks.

If you experience any special circumstances (health or otherwise) which you feel have affected your studies then please let your Supervisor, Advisor (or myself) know and complete and submit to the Department a mitigating circumstances form.

Please see the following web page for further advice, information and the form to be completed.

<https://www.studentsupport.manchester.ac.uk/study-support/mitigating-circumstances/>

Decisions about any allowance(s) for mitigating circumstances are made by a Departmental committee.

Submission...

The (strict) submission deadline is **4:00 pm (UK time), Friday 11 September 2026**.

You will need to submit electronically via the appropriate Canvas site for your programme. A copy will be run through Turnitin and a similarity report and score will be generated.

Note that you are **not** required to submit a hard copy.

You should consult the University guidance document entitled "Guidance for the Presentation of Taught Dissertations for UG and PGT Provision" for further details of how your dissertation should be presented. This can be found at:

<https://documents.manchester.ac.uk/display.aspx?DocID=42901>

Assessment...

Your dissertation will be marked independently by two examiners - these are your supervisor plus one other academic member of staff.

They will score your work (out of a total of 100) and write their comments under the following headings:

- Abstract and Introduction - 5 marks
- Visuals and Formatting - 10 marks
- Writing - 15 marks
- Accuracy - 20 marks
- Content - 25 marks
- Understanding - 25 marks

Marks awarded within each of the criteria above are based on scoring rubrics. These will be made available to all MSc students at a later date.

Assessment...

They will have a meeting to discuss their individual reports and decide on a joint moderated mark.

Nb. there are further procedures to be carried out if the two examiners have widely differing opinions about the dissertation.

They will jointly prepare a feedback statement which will be emailed to you with your results after the final Examiners' Meeting in November.

The Turnitin reports will be looked at by a panel of academics within the Department to assess whether any dissertations should be referred on to the Faculty because of suspected academic malpractice.

Assessment...

To pass the dissertation and be awarded 60 credits you must have a mark of at least 50%.

If your mark is in the range 30 – 49 you will be allowed to work further on it and resubmit within three months (provided you have passed the MSc teaching component). To pass the resubmission and get the credits you will need a mark of at least 50.

However, the dissertation mark then used for degree classification purposes will be less than 50.

Note that your dissertation mark will be communicated to you only after passing the teaching component and after approval of the Exam Boards.

The final Department PGT and Faculty Examination Boards are to be held in November, 2026 - your degree result will be available a few days after the latter one.

Break-out sessions...

These are with your Programme Tutor in the following rooms:

- [Applied Mathematics](#) - at the end of Transferable Skill session - Dr Yanghong Huang.
- [Pure Mathematics](#) - Simon Building 2.60 (2 pm) - Dr Marianne Johnson
- [Statistics](#) - Simon Building 4.09 (2 pm) – Dr Yuk Ka Chung
- [Mathematical Finance](#) - Simon Building 5.08 (2 pm) – Professor Goran Peskir