

## OR MSc Dissertation Writing and Marking

You must submit your dissertation as a PDF file electronically **through Learn by 4 pm on Friday 26th August 2022**. If your project requires that the dissertation is treated as confidential, this can be arranged by informing Frances Reid at MTO at the time of submission. Confidential dissertations will only be read by the Academic Supervisor and examiners, and will not be available for reference.

Much of the information provided in this document is also on the website

<https://teaching.maths.ed.ac.uk/main/postgraduate-taught/msc-programmes/operational-research/assessment/projects/dissertations>.

### Dissertation Format

Dissertations are normally expected to be between 10,000 and 14,000 words in length. If an exceptional amount of work has been done then there may be a case for a longer dissertation, but if the dissertation is thought by the examiners to be too long for its content then marks will probably be deducted. **Avoid long appendices which just list data or long programme listings, unless their details are being discussed in the main chapters.** If there is material that you feel should be included for completeness but is not written in the dissertation, for example software code, upload the material to an online repository, e.g., GitHub, and add a note in your dissertation with the link to it.

A L<sup>A</sup>T<sub>E</sub>X template is available at the above URL. Students can also write their dissertations in MS Word and convert to PDF, but we do not provide any template for that and it is the students' responsibility to ensure that all formatting guidelines have been met.

Dissertations should be typeset with single spacing and formatted for A4 paper. The following minimum margins must be observed:

Left	20mm
Right	20mm
Top	20mm
Bottom	20mm

The usual structure for an MSc dissertation is as a single document consisting of the following:

- Title Page
- Abstract
- Acknowledgements
- Table of Contents
- Main text (including an introductory chapter and a final chapter on conclusions and/or recommendations)
- Appendices (optional)
- Bibliography

The pages in the main text, appendices and bibliography must be numbered consecutively. All chapters, tables, figures and citations should be consistently labelled within this single structure. The abstract should be a complete but concise description of the work. As such, it should be short (a maximum of 200 words), while at the same time summarizing the whole of the project (unlike the introduction, which introduces the research area). The abstract should include: the objective (what problem was to be solved? Why is it important?); the methodology used; the results and findings obtained (numbers included if possible without being misleading); and the project's conclusions. The layout of the title page of the dissertation is shown on Page 4.

An alternative to this is to write the material as one or more scientific papers in a style suitable for publication, and in addition have a “wrapper” section which, together with the papers, makes the dissertation self contained and contains all the material that would be there in the single document structure.

## Dissertation Content

All dissertations are expected to conform to the following standards:

- The dissertation must add to the understanding of the dissertation subject.
- The dissertation must show awareness of the relevant literature.
- The dissertation must contain relevant analysis: an informed description of a problem is not sufficient.
- The dissertation must be presented using a satisfactory standard of English.

Each dissertation will be assessed by two markers. The School has an examiner's form which has to be filled for each dissertation by each marker. This form contains a number of marking criteria and the marker has to provide a mark for each criterion. At the end, a single mark is calculated for the dissertation based on the criterion marks of both markers. General guidance is given on this form on how to interpret different marks. You can find the examiner's form with the marking criteria on the web page. The current document gives some additional guidelines and suggestions about things to look out for when preparing a dissertation; however, these are not intended to be prescriptive, merely to list some of the important factors to be considered. The instructions on the official examiner's form are the ones which are followed by the markers.

The mark given for the dissertation will appear on the student's transcript, and the mark can affect whether a student passes or fails the MSc or gains a distinction. All students who are doing a project have already achieved enough marks to get an MSc, provided that the dissertation is satisfactory. **The critical mark thresholds for the dissertation are 50%, which is the lowest mark for which the student will get the MSc, and 70% which is the lowest mark for which a student is eligible for a distinction.** To get a distinction the student will also have had to achieve a distinction mark in the exams. MSc dissertations, unlike PhD dissertations, are not kept in the University library, so they are not public documents

and do not have to have errors corrected. If the student and the supervisors wish to produce a new document, for example for publication, then they are free to do so, but this is not then the MSc dissertation. There is the possibility of giving a mark in the range 47-49% and referring the thesis back for minor amendments, which then have to be completed within two weeks. Markers should not follow this option unless the amendments are minor – this should not be used as a way of giving a student another two weeks to complete a thesis that otherwise would be unsatisfactory, unless the student has faced problems beyond his or her control. Note that the normal rule for **work that is not submitted on time is for the mark to be reduced by 5% for each day that it is late.**

As a guide to levels, a distinction is equivalent recognition of quality to a first class degree. To get a distinction a student should have shown mastery of the subject and done more than just completing the project successfully and competently. A distinction student would be expected to be capable of going on to do independent original work, as for example in a PhD. A student should be given less than 50% if little work has been done, or he or she has failed to achieve the goals of the project without there being extenuating circumstances, or if there are significant errors in a significant proportion of the work.

External projects are often more demanding than internal ones. They are less likely to fit easily into the material of the taught courses, and understanding their essence and the language in which they are expressed is often a significant task in its own right. It is important that allowance is made for this in the marking. Also credit should be given to students who have gone out and found their own projects.

The School of Mathematics



THE UNIVERSITY  
*of* EDINBURGH

# My Incredible Thesis

by

My Name

Dissertation Presented for the Degree of  
MSc in Operational Research ...

August 2020

Supervised by  
Dr. Very Important