

Heriot-Watt University

The University of Edinburgh

MSc in Financial Mathematics

Summer Projects 2009

Project Guidelines

## 1 Introduction

This document tells you how the projects will operate during summer 2009.

**Please read the full document now and then again near the completion of your project** in order to make sure that your dissertation adheres to our standard requirements.

## 2 Supervision

Arrangements need to be fluid, as staff have many other things to do beside project supervision (including holidays). Students should establish appropriate supervision arrangements with their supervisors at the start of the project. It is the students' obligation to make regular contact with their supervisors.

If you are involved in a pair of linked projects on the same area with the same supervisor, you should expect joint meetings with the supervisor in the early stages. Contact your supervisor as soon as possible to arrange a first meeting when you can discuss a rough timetable, in case he or she is about to leave town! Temporary substitute supervision may sometimes be arranged. If you have an external placement, you will need to make arrangements with both supervisors to ensure that you meet the requirements of the MSc degree.

As a matter of courtesy to your supervisor you should always arrive on time for your arranged meetings. You should never fail to turn up at a meeting without good reason. If you have to cancel an appointment then you should endeavour to contact your supervisor in advance.

## 3 Timetable

It is suggested that project work should be near completion by late July. This may vary depending on how much work is being written up as the project progresses.

A first draft of the completed project should normally be ready in late July, but precise timing of this should be agreed with the supervisor.

As a rule of thumb, you have about 11 weeks: four weeks to read around the subject; four weeks to do a piece of work; and three weeks to pull the dissertation together. That does not mean that you should wait for two months before drafting anything!

### 3.1 Submission date

*Projects must be handed in to the course director, Anke Wiese, by 12h noon on Friday 14 August, 2009.*

## 4 Dissertation

This section contains some guidance on what may be expected of a satisfactory dissertation.

- **The main text of the dissertation must not exceed 30 pages**, based upon a 12-point font size and 1.0-line spacing (that is, the same font size and line spacing as in this document). One page of text typically contains 300-350 words. The *main text* referred to here does not include such things as tables, graphs, figures, references, appendices and computer code. As a general rule the inclusion of computer code is not encouraged unless it is central to the aim of the project. If there is any doubt over any of these requirements then please consult your supervisor.
- Past experience suggests that the best dissertations are written up as the project progresses. This allows supervisors to comment, which can lead to improvements. Also many students don't seem to realise just how time-consuming writing up can be! Past experience also suggests that taking too much time off does not lead to good dissertations. We suggest you take your longest holiday break in September after submission.
- Past experience suggests that poor dissertations can often be the result of: a poor record of attendance at supervisions; writing the dissertation at the last minute, particularly where the supervisor has not even seen a first draft.
- Dissertations *must* contain:
  - a cover page which gives the title of the project, the name of the student, and the year;
  - an abstract;

- a detailed list of contents at the start;
- an introduction to the project and the dissertation;
- proper structure in the main body of the text including section numbering;
- conclusions;
- a full and detailed list of references;
- acknowledgement of all persons who have contributed to the development of the project.

Failure to comply with this structure may mean that, instead of being awarded a pass, a candidate is asked to resubmit the project after revision. This *will* result in a delay in the award of the MSc until July the following year.

- Dissertations *must* use consistent mathematical notation throughout.
- Some questions that the examiners will be asking:
  - Does the introduction say clearly what the dissertation is about?
  - How well has the student explained the area of work and summarised the relevant literature?
  - Does the dissertation show evidence of learning beyond the material of the taught courses and options?
  - If the dissertation is mainly a survey, is it complete and up to date, and has the student shown clearly, by summarising and comparing the literature *in their own words*, that they have mastered the subject?
  - If the dissertation involves numerical work, is it described clearly enough for someone else to reproduce the calculations, if required, and do the conclusions demonstrate that the student understands what he or she has done?
  - Does the dissertation have a logical structure?
  - Are books and journal articles adequately referenced?
  - Where the results of numerical and other work are being discussed is this just a statement of *what* the results are or does the text contain real interpretation of the results. For example, does the text explain *why* the results are as they are?
- It is not necessary, and in fact would be quite uncommon, for a dissertation to contain truly original work that would be classified as research. What matters is that it shows the student's own understanding of the chosen subject (not the supervisor's!).

- Remember, it is your work that is being examined and not the supervisor's. In particular, the supervisor is *not* there to proof-read your drafts or to teach you to write in English.
- Style and layout are up to the student subject to the constraints on structure detailed above. However, it is a good idea to look through a few journal articles and note the elements of good style. Remember, the examiners are researchers which means that they are, to a large extent, professional authors, and will not appreciate having to navigate a badly laid-out or sloppily-written dissertation.

## 5 Plagiarism

It is quite unacceptable to copy text from another source (be it a book, paper or another MSc project) without clear and regular references in the text to the source material. Students are expected, on the whole, to paraphrase relevant material and give appropriate references: that is, relevant source material should be rewritten in the student's own words rather than copied. Where it is absolutely essential to quote directly from another text the copied material should be "*written in italics and enclosed in quotation marks.*"

At the time of submission you will each be asked to sign a declaration that the dissertation is your own work and that you have not copied material as noted above without giving adequate references.

If you have any doubts about this then you must seek the advice of your supervisor. Please see also the 'Student Guide to Plagiarism' provided by the academic registry at [http://www.hw.ac.uk/registry/resources/PlagiarismGuide\(Oct05\).pdf](http://www.hw.ac.uk/registry/resources/PlagiarismGuide(Oct05).pdf).

Plagiarism is a serious offence. Any student who is found guilty of plagiarism will have their project failed without any opportunity to resubmit.