MSc in Computational Mathematical Finance, MSc in Financial Modelling and Optimization

Academic year 2019/20

Key sources of information

- https://teaching.maths.ed.ac.uk/ (Information about key dates, optional courses, dissertation, ...),
- https://www. myed.ed.ac.uk/ (Access to email, Learn, ...),

The principal form of communication is email: make sure you check it regularly.

Key people

- You (are the ones who want to learn),
- Your lecturers and tutors (who will help you learn),
- Your personal tutor (who will meet you several times, will help you choose optional courses and is the 1st point of contact for academic and personal problems),
- MTO (Mathematics Teaching Organization, JCMB 5211) and in particular Ms Gemma Aitchison (Gemma.Aitchison@ed.ac.uk) who looks after taught postgraduate courses (room booking, coursework submission,...)
- Your class representatives who you will elect soon,
- MSc Programme Director, who you should contact if there is a problem that no-one above was able to resolve (d.siska@ed.ac.uk, JCMB 4611).

General Framework of your MSc

- Taught component: 120 credits
  - Mix of compulsory and optional courses
  - CMF - three streams (Computantional, Financial or Machine learning)
- Dissertation (research project): 60 credits
- Duration: 12 months (full-time)

FYI: 10 credits correspond to 100 hours of work / study of which typically only about 20 are lectures and 5 are workshops.

FMO - taught course structure

- Core courses are 90 credits.
- Optional courses are 30 credits.

Follow link: Degree Programme table FMO.

CMF - taught course structure

- Core courses are 80 credits.
- Further 20 credits are optional but must fit one of:
    - Computational stream,
    - Financial stream,
    - Machine learning stream.
- Optional courses are 20 credits.

Follow link: Degree Programme table CMF.

Optional Courses

- The optional courses allow each student to specialise in a range of skills that suits his or her own career development. Your Personal Tutor will discuss this with you in details
- You will not be allowed to sign up for new Semester 1 courses after Friday 27th September 2019 and Semester 2 courses after Friday 24th January 2020.
- You can sign up for more than 120 credits initially.
- We will ask you to confirm course cancellations for Semester 1 by Thursday 24th October 2019 and by Friday 24th January 2020 for Semester 2 courses
- A student is allowed to withdraw from a course, at any time up to the end of week five of the Semester, providing that the student has not taken any assessment on that course.

Research-Linked Topics

- The Research-Linked Topics is a course worth a total of 10 credits.
- It is taken as guided reading courses in the second half of each semester.
- In each semester, students attend several talks and then choose (or are assigned) a topic based on this.
- In Semester 1 the talks / topics are presented by academics; typically on a theoretical subject.
- In Semester 2 the talks are run jointly with The Scottish Financial Risk Academy (SFRA) and are given by industry professionals; typically on an area of interest to the company they work in.
- The assessment is either an oral presentation or short written essay towards the end of each semester

Assessment

The UCMS result for the taught component of the programme is the weighted average over courses (compulsory and optional courses). Sufficient conditions for the various awards that can be made are in the table below.

	Diploma	MSc	MSc with Merit	MSc with Distinction
Course average	40% or above	50% or above	60% or above	70% or above
80 points at 50	no	yes	yes	yes
80 points at 40	yes	-	-	-
120 points at 40	-	-	yes	yes
Project/Dissertation	no	50% or above	60% or above	70% or above

Note that candidates are **not** allowed to resit a paper in order to be considered for the award of MSc.

Plagiarism

"The University's degrees and other academic awards are given in recognition of the candidate's personal achievement. Plagiarism (that is to say the action of including or copying, without adequate acknowledgement, the work of another in one's own work) is academically fraudulent, and an occurrence against University discipline.
Plagiarism, at whatever stage of the candidate's course, whether discovered before or after graduation, will be investigated and dealt with appropriately by the University. If after investigation it is established that work submitted has been plagiarised to a significant extent that will be permanently noted on a candidate's record".

Dissertation - Summer projects

- During the period from June to August, candidates for the MSc work on a project on, an approved topic, and write a dissertation based on this work.
- Some projects are offered by industrial partners (often via SFRA) that offer summer placements to MSc students who work on short research projects and write their MSc dissertations under the joint supervision of an industrial partner and a member of an academic department.
  - Industrial projects have flexible format: student may spend whole period working at company or interact through a series of visits.
  - If the project handles any confidential data / information make sure this is discussed with your academic supervisor at the outset.
  - Do not sign contracts with the industrial partner without an approval from the School.
  - Industrial projects will be advertised in Semester 2 (coordinated with SFRA) and you may need to submit CV / go through an interview.
- Academic summer project topics will be made available towards the end of Semester 2.

Key dates

- Semester 1:
  - Teaching period: Monday 16th Sept. - Friday 29th Nov. 2019,
  - December exams: Monday 9th Dec. - Friday 20th Dec. 2019,
  - Winter break: Monday 23rd Dec. 2019 - 10th Jan. 2020,
  - The School of Mathematics will be closed during the period 24th December - 3rd January (inclusive) and (for safety reasons) students will not be able to gain access.
- Semester 2:
  - Teaching period: Monday 13th Jan. - 3rd April 2020,
  - Spring break: Monday 6th April - Friday 17th April 2019,
  - April/May exams: Monday 27th April - 22nd May 2020 **including weekends**,
  - Summer break: Monday 25th May - Sunday 31st May 2020,
  - MSc Project (dissertation): 1st June - 17th August 2020.

Future

It will be here sooner than you think:

- ▶ Choose optional courses in line with your career plan.
- ▶ Big companies' graduate schemes close applications already in November in some cases.
- ▶ PhD programmes for top universities again have open days in the autumn and close applications early (e.g. November).

Plan ahead:

- ▶ Prepare your CV. The university has Careers Service, use them (each time you apply you want to taylor your CV).
- ▶ For PhD applications you'll need references; arrange those well in advance of any deadline.

Questions?