

MATH0068 (MSc Project)

Year: 2022–2023
Code: MATH0068
Level: Masters
Value: 60 UCL credits (= 30 ECTS credits)
Term: Third Term and Summer (June 2023 - early September 2023)
Structure: Report Dissertation (15,000 words); Oral Project presentation

Assessment: 90% project, 10% oral presentation.
Lecturer: Dr S Timoshin

Course Description and Objectives

A list of topics and corresponding supervisors will be prepared and made available in the Second Term. Titles and summaries should be agreed by supervisors and the MSc Tutor by the end of the Second Term. The projects must be completed and submitted by early September. The date will be fixed and students informed of the date.

Detailed Syllabus

MSc Project Guidelines and Information

The MSc summer project MATH0068 contributes 1/3 of the overall MSc mark, with the 8 taught components making up the remaining 2/3. The module MATH0068 itself has two components: the written project, and the project presentation. The written project carries 90% of the module marks and the project presentation 10%.

Each year the project submission deadline is early September, the actual date to be announced. All students should submit two hard copies of their Project to the Mathematics Departmental Office in Room 610 by this deadline. Students will also be required to email an electronic version of the project in pdf (portable document format, see <http://www.adobe.com/downloads/>) format to s.timoshin@ucl.ac.uk.

Project Presentations

The MSc presentations will commence 10am on the same day as the submission deadline, with the venue to be announced. Each student will be allocated a 20-minute time slot: 15 minutes for their presentation and 5 minutes for questions. Data projection facilities will be available for use of laptops if required. Members of staff in the audience will grade the presentations. Students will be expected to stay for all the presentations.

General Project Guidelines

Given the wide range of topics, the various focuses of projects, and the different aspirations of students, the rules and requirements for the MSc project are suitably flexible. The project can range from an extensive survey and critique of existing research to the development of a new model or an extension of an existing one. Each project will be assessed taking into account where the main focus of effort lies. A component of original research is not a requirement of the project, but will be given due credit if present. A student should discuss these details with their supervisor.

Whatever the student decides with their supervisor, there are some things that all projects should include:

- An introduction outlining the project and giving a clear statement of the objectives of the project.
- A relevant literature survey with discussion.
- Details of mathematical calculations that can be checked. Where it makes the text more readable, an appendix could be used for some calculations.
- Listings of any innovative computer code (C++, MatLab, Mathematica, etc) that is central to the project in an appendix. (Standard code, or minor modifications of such, need not be listed.)
- Clear referencing of all material sourced, whether from books, published journals, the internet, personal communication, or similar. Essentially, if it is not the student's idea or work, it needs to be referenced. Failure to reference material may be construed as plagiarism. The college takes a firm stance on plagiarism (see the link: <https://www.ucl.ac.uk/students/exams-and-assessments/plagiarism>). If in doubt the student should ask the advice of their supervisor.
- Conclusions, including a summary of the project findings, and, where new research was carried out, a discussion of the strengths and weaknesses of the model/method, and possible improvements.

Style and Presentation

There is no imposed style, nor specification of the word-processing package to be used, as long as it is capable of out-putting the final document in pdf format. Projects that are hand-written or typed on a manual typewriter will not be accepted. Some marks will be allocated for the quality of the written work, including its readability, clarity of argument and overall presentation.

Supervision

Students should agree with their supervisor how often they meet for supervision. The role of the supervisor is to help guide the student in the production of the project. It is expected that the student will be able to do a significant amount of the project work independently.

Writing up

Students should be warned to leave ample time for writing-up the project. Penalties will be incurred on projects that are submitted after the deadline.

Project Assessment

Each project will be marked by the student's supervisor and also by a second examiner. A final mark will then be agreed between the two examiners, combined with the presentation score to give a final mark in percent.