**MSc in Mathematical and Computational Finance**

**Examiners’ Report 2023-24**

July 2024

Part I

A. **STATISTICS**

i. **Numbers and percentages in each class/category 53**

|  |  |  |
| --- | --- | --- |
| **Class** | **Number** | **Percentage (%)** |
|   | **2023/24** | **2022/23** | **2021/22** | **2020/21** | **2023/24** | **2022/23** | **2021/22** | **2020/21** |
| **Distinction** | 14 | 11 | 13 | 10 | 26 | 27 | 30 | 29 |
| **Merit** | 24 | 14 | 10 | 16 | 45 | 34 | 23 | 46 |
| **Pass** | 10 | 11 | 19 | 8 | 19 | 27 | 44 | 23 |
| **Fail** | 5 | 4 | 1 | 1 | 9 | 10 | 2 | 2 |
| **Incomplete** | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 |

1. **If vivas are used:**

No candidates were examined viva voce.
iii. **Marking of scripts**

The four written examinations and two take home exams were set and single-marked by lecturers on examined courses and script-checked by a D.Phil. student.

The two C++ practical exams were marked by a lecturer and checked by a D.Phil student.

All dissertations were read and marked independently by two Examiners/Assessors with discrepancies resolved by the Examiners/Assessors.

**B. NEW EXAMINING METHODS AND PROCEDURES**

None

**B. Please list any changes in examining methods, procedures and conventions which the examiners would wish the faculty/department and the divisional board to consider.**

None

**D. Please describe how candidates are made aware of the examination conventions to be followed by the examiners (Please attach to the report a copy of the examination conventions and any other rele­vant documentation, including the relevant standing orders** – see *Examination Regulations*, Regula­tions for the Conduct of University Examinations, Part 4, cl. 4-1-4.2,

[2019-20, Regulations for the Conduct of University Examinations: Part 4 Examiners: Period of Office,](https://examregs.admin.ox.ac.uk/Regulation?code=rftcoue-p4epoocvacaresiandremo&srchYear=2021&srchTerm=1&year=2019&term=1)  [Casual Vacancies, Resignation, and Removal (ox.ac.uk)](https://examregs.admin.ox.ac.uk/Regulation?code=rftcoue-p4epoocvacaresiandremo&srchYear=2021&srchTerm=1&year=2019&term=1)

Examination conventions for this course are included in the Course Handbook.

Part II

1. **GENERAL COMMENTS ON THE EXAMINATION**

The written exams went smoothly this year. Most take-home exams were marked in a timely manner (the Deep Learning marks were received very late, with a few reminders needed).

1. **EQUAL OPPORTUNITIES ISSUES AND BREAKDOWN OF THE RESULTS BY SEX**

There were 12 female candidates and 41 males. Among the 12 female students, 3 received a distinction,

6 received a merit, 2 received a pass, while 1 student failed the course.

Among the 41 male students, 11 received distinctions, 18 received a merit, 8 received a pass and 4 failed the course.

1. **NUMBERS ON CANDIDATES’ PERFORMANCE IN EACH PART OF THE EXAMINATION**

The written papers, statistics take home exam and C++ Part I required some scaling from raw marks to USMs while the Deep Learning assessment only required a small amount of scaling in order to bring them into line with the other components of the examination.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Exam** | **Distinction** | **Merit** | **Pass** | **Fail** | **Average USM** | **Standard Deviation** |
| **Paper A** | 21 | 17 | 8 | 7 | 65 | 13.42 |
| **Paper B** | 24 | 16 | 8 | 5 | 66 | 11.63 |
| **Paper C** | 14 | 16 | 13 | 10 | 61 | 14.85 |
| **Paper D** | 21 | 11 | 11 | 10 | 62 | 19 |
| **Component I** |  |  |  |  |  |  |
| **C++ Part I** | 11 | 8 | 13 | 21 | 55 | 14.73 |
| **C++ Part II** | 52 | 0 | 0 | 1 | 96 | 16.28 |
| **Statistics Take Home** | 19 | 18 | 13 | 3 | 65 | 10.38 |
| **Deep Learning Take Home** | 53 | 0 | 0 | 0 | 94 | 6.59 |
| **Component II** |  |  |  |  |  |  |
| **Dissertation (Component III)** | 25 | 23 | 4 | 1 | 67 | 13.44 |
| **OVERALL** | **240** | **109** | **70** | **58** |  |  |

1. **COMMENTS ON PAPERS AND INDIVIDUAL QUESTIONS**

Across the written exams, marks were broadly similar, average marks in the 60s, with slightly higher marks in Papers A and B compared to Papers C and D. Across the other assessments, the marks for C++II and Deep Learning are very high in comparison to other take-home exam marks. The dissertation marks are good, with 25 Distinctions and 23 Merits. There was also this year (unusually) one failed dissertation.

1. **NAMES OF MEMBERS OF THE BOARD OF EXAMINERS**

Prof Michael Monoyios (Chairman)

Prof Sam Cohen

Prof Ben Hambly

Prof Christoph Reisinger

Dr Leandro Sanchez-Betancourt

Prof Luitgard Veraart (External LSE)