

# MSc in Mathematics by Coursework (Track 2, 80MC)

### Graduation Requirements for students admitted from AY2022/23

Follow either Option 1 or Option 2:

#### **OPTION 1**

- 1. In Year 1, to read and pass:
  - Ten MA3xxx (except MA3259 & MA3269), MA4xxx (except MA4230, MA4261, MA4269 & MA4270) or MA5xxx (except MA5232 & MA5266) modules, with MA3xxx module capped at two throughout the entire candidature
- 2. In Year 2, to read and pass:
  - Five basic elective modules (20 MCs) selected from the following modules:
    - MA4203 Galois Theory
    - MA4229 Fourier Analysis and Approximation Theory
    - MA4260 Stochastic Operation Research
    - MA4268 Mathematics for Visual Data Processing
    - MA4273 Algebraic Geometry of Curves and Surfaces
    - MA5203 Graduate Algebra I
    - MA5205 Graduate Analysis I
    - MA5210 Differentiable Manifolds
    - MA5213 Advanced Partial Differential Equations
    - MA5233 Computational Mathematics
    - MA5243 Advanced Mathematical Programming
    - MA5245 Advanced Financial Mathematics
    - MA5259 Probability I

At most two MA4xxx modules can be selected throughout the entire candidature

- Five general elective modules (20 MCs) selected from any MA5xxx (except MA5232, MA5266, MA5295 or MA54xx), QF5xxx (except for all the MQF core modules and capped at three such modules), DSA5xxx (except for all the MDSML core modules and capped at three such modules) or any level 5000 modules offered by other departments/faculties (up to 8MC), subject to department's approval.
- 3. Obtain a minimum Cumulated Average Point (CAP)\* of 3.00 or an average grade of at least B-.

#### Option 2

- 1. In Year 1, to read and pass:
  - Eight MA3xxx (except MA3259 & MA3269), MA4xxx (except MA4230, MA4261, MA4269 & MA4270) or MA5xxx (except MA5232 & MA5266) modules, with MA3xxx module capped at two throughout the entire candidature
  - Complete MA5295 Project Module and written report (equivalent to 8 MCs), with a passing grading over a maximum of two semester
- 2. In Year 2, to read and pass:
  - Five basic elective modules (20 MCs) selected from the following modules:
    - MA4203 Galois Theory
    - MA4229 Fourier Analysis and Approximation Theory
    - MA4260 Stochastic Operation Research
    - MA4268 Mathematics for Visual Data Processing
    - MA4273 Algebraic Geometry of Curves and Surfaces
    - MA5203 Graduate Algebra I
    - MA5205 Graduate Analysis I
    - MA5210 Differentiable Manifolds
    - MA5213 Advanced Partial Differential Equations
    - MA5233 Computational Mathematics
    - MA5243 Advanced Mathematical Programming
    - MA5245 Advanced Financial Mathematics
    - MA5259 Probability I

At most two MA4xxx modules can be selected throughout the entire candidature

- Five general elective modules (20 MCs) selected from any MA5xxx (except MA5232, MA5266, MA5295 or MA54xx), QF5xxx (except for all the MQF core modules and capped at three such modules), DSA5xxx (except for all the MDSML core modules and capped at three such modules) or any level 5000 modules offered by other departments/faculties (up to 8MC), subject to department's approval.
- 3. Obtain a minimum Cumulated Average Point (CAP)\* of 3.00 or an average grade of at least B-.

#### For either option:

- Students who wish to read modules offered by other departments/faculties to fulfil their graduation requirement are to refer to the 'Module Substitution' section of our Department's webpage for the procedure.
- Students in the 3+2 programme with intention to switch programme to read MSc in Statistics by
  <u>Coursework</u> during their Year 2 studies are allowed to read ST4231, ST4233, ST4234, ST4251, ST4245,
  <u>DSA4211</u>, DSA4212 in Year 1, subject to module host's approval. Students need to check with
  <u>Department of Statistics and Data Science</u> for the precise requirements before planning to switch
  programme.

- The following module cannot be used to fulfil the general elective modules requirement for graduation:
  - o QF4102 Financial Modelling and Computation

## **Continuation Requirement**

A student will be issued a warning for any semester in which his/her CAP falls below 3.00. If in the following semester, the student's CAP again falls below 3.00 but is above 2.50, he/she will be placed on probation.

The candidature of a student may be terminated if he/she obtains the following:

- 1. A CAP of less than 2.50 for two consecutive semesters;
- 2. A CAP of less than 3.00 for three consecutive semesters.

CAP for continuation is computed based on all modules read (be it pass or fail).

Updated on 28 July 2022