

# UNDERGRADUATE HANDBOOK SUPPLEMENT

For students entering Year 5 of courses in 2023/2024

**Department of Mathematics and Statistics** 

# INFORMATION FOR STUDENTS ENTERING FIFTH YEAR IN SESSION 2023/24

**Degree Courses:** MMath Mathematics

**MMath Mathematics and Statistics** 

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The modules are taught in two semesters, each consisting of an 11-week teaching period followed by an examination diet.

# **CALENDAR OF DATES 2023/2024**

• First Semester Welcome and Development Week

Monday 11 September — Friday 15 September 2023

• First Semester Teaching Monday 18 September – Friday 1 December 2023

• Second Semester Consolidation and Development Week

Monday 8 January – Friday 12 January 2024

Second Semester Teaching Monday 15 January – Friday 29 March 2024

• Examination Diets: Monday 4 December – Friday 15 December 2023

Monday 15 April – Friday 17 May 2024

(Normally examinations are held in the diet immediately

following the completion of the module.)

During the course of the summer, provisional lecture times and rooms for each module in the John Anderson Campus will become available at <a href="https://www.strath.ac.uk/timetables">www.strath.ac.uk/timetables</a>

### **Choice of Curriculum**

To help you decide which modules are of interest to you, please consult the descriptors for year 5 modules on the Module Catalogue (<a href="https://ben.mis.strath.ac.uk/modulecatalogue">https://ben.mis.strath.ac.uk/modulecatalogue</a>) You may also consult with the lecturer in charge of the module and with the Year Co-ordinator if you want further information.

In choosing your curriculum, you should note the following points.

- In selecting modules, you should ensure that you have taken or are taking any stated
  pre-requisites for a module and that it does not overlap with a module you have
  previously taken.
- Ensure a reasonable split of modules between Semester 1 and Semester 2.
- Once it becomes available, check your provisional timetable to ensure that the lectures for the modules you choose do not clash.

If you have any difficulty in using the online provisional registration facility, please contact the Year Co-ordinator.

# <u>Criteria for Progressing into Year 5</u>

The accumulation of no fewer than 480 credits from the course curriculum with a **credit weighted average of at least 60%** in Level 4 modules.

A student who fails to achieve the standard indicated above shall be transferred to the corresponding BSc course and awarded the appropriate degree by the Honours Board of Examiners.

# **Assessment**

The award of the MMath degree is based upon performance in Level 4 and Level 5 modules. If the quality of the performance is of the required standard (see below), then the MMath will be awarded "with Distinction" or "with Merit", as appropriate.

The final assessment for the degree of MMath is based on your attempts at the Level 4 and Level 5 modules taken in your fourth and fifth years.

The first requirement for the award of MMath is successful completion of your fifth year in order to be awarded 120 credits at Level 5.

Normally, this is the achievement of an overall fifth year average of at least 50%.

If this is achieved, then your Level 4 and Level 5 weighted averages will be combined to provide a composite mark, C, calculated as

$$C = 0.25 \times L4 + 0.75 \times L5$$

where *L4* and *L5* are your Level 4 and Level 5 weighted average marks, respectively.

The type of degree awarded is based upon the guidelines in the table below.

$$C$$
 ≤ 49 50-59 60-69 ≥70 degree: BSc(Hons) MMath MMath with Merit MMath with Distinction

If you fail to achieve a composite mark C of at least 50 then you will be awarded the Honours BSc degree in Mathematics or Mathematics and Statistics in accordance with the decision made at the Final Honours Examination Board that took place at the end of your fourth year. This also applies if you fail to complete the fifth year.

Borderline cases are given very careful consideration.

### **Note**

 There are <u>no resits</u> of Year 5 examinations. The award of Year 5 credits is based on your overall year performance.

# Mathematics and Statistics Level 5 modules, 2023/24

Please note that the degree regulations on the University webpage include some modules that definitely will not run in 2023/24: you should take the list below as a clearer indication of your options.

The list below details the modules offered by the Department of Mathematics and Statistics. Full information about modules can be found in the Module Catalogue,

https://ben.mis.strath.ac.uk/modulecatalogue

All full-time students shall undertake modules amounting to 120 credits as follows:

### **MMath in Mathematics**

MM500 Mathematics 120 credits

The "superclass" MM500 consists of

MM501 Project (in Mathematics) 40 credits

and modules amounting to 80 credits chosen from the list below.

### **MMath in Mathematics and Statistics**

MM510 Mathematics and Statistics 120 credits

The "superclass" MM510 consists of

MM501 Project (in Statistics) 40 credits

and modules amounting to 80 credits chosen from the list below.

# **Optional Modules (each is worth 20 credits unless noted otherwise)**

MM502 Modelling and Simulation with Applications to Financial Derivatives

MM503 Applicable Analysis 3

MM505 Fluids and Waves

MM506 Finite Element methods for Boundary Value Problems and Approximation

MM508 Mathematical Biology and Marine Population Modelling

MM509 Mathematical Introduction to Networks

MM512 Optimisation: Theory and Practice

MM515 Topics in Applied Analysis

MM516	Topics in Applied Statistics (not available in 2023-24).
MM517	Topics in Applied Mathematics
MM518	Topics in Numerical Analysis
MM519	Topics in Biological and Ecological Modelling
MM552	Applied Analysis and PDEs 1
MM554	Applied Mathematics Methods 1
MM560	Statistics 1
MM561	Statistics 2
MM909	Medical Statistics
MM911	Effective Statistical Consultancy (10 Credits)
MM912	Survey Design and Analysis (10 Credits)
MM913	Quantitative Risk Analysis (10 Credits)
MM915	Spatial Statistics (10 Credits)
MM953	Experimental Design (10 Credits)
MM954	Multivariate Analysis (10 Credits)

# **NOTES**

Not all of these modules will run every year. The modules that will run each year, and the semester in which they will take place, will depend on student numbers and staff availability. It is essential to discuss your options with the Year Co-ordinator before choosing your curriculum. Note that you cannot take an "enhanced" version of a Level 4 module that you have previously taken.

- **MM501 (Project):** A separate document giving information and guidelines for the Year 5 project will be issued to you in due course. You will be required to give a presentation on your project work that will be worth 20% of your overall project mark.
- MM502 MM509 are enhanced versions of Level 4 modules. In these modules MMath students will join Year 4 students for the relevant lectures but will have additional coursework to do and/or will be assessed differently.
- **MM512** consists of one semester delivered by M&S, followed by a second semester in which students join the Management Science module MS987.
- MM515 MM519 will be delivered as "reading" modules based on prescribed texts (or notes supplied by the lecturers). Each week, you will be expected to read appropriate

material and to attempt related problems. Assessment will be via a combination of coursework and a written examination.

- MM552 MM561 are modules delivered within the framework of the Scottish Mathematical Sciences Training Centre (SMSTC). Teaching is by video-conferenced lectures with local tutorial support.
- MM909 MM954 are Level 5 modules taught at Strathclyde to MMath and MSc students. MM909 largely overlaps with MM415; MM912 and MM913 overlap with parts of MM407; MM953 and MM954 overlap with parts of MM404.

DATE MODIFIED: 18 August 2023