



THE UNIVERSITY *of* EDINBURGH

Welcome

School of Mathematics

– Welcome

Influencing the world since 1583



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Welcome

Welcome New Postgraduate Taught Students

Professor Bernd Schroers
Head of School

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Welcome

Welcome New Postgraduate Taught Students

Dr Richard Gratwick
Director of Teaching

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Welcome

Joining the School of Maths

Dr Ben Goddard

Deputy Director of Teaching

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Welcome

Asking Questions

There may be some time for questions at the end, so please save them for then.

If we don't have time, you can ask any questions at the Programme Introductions which come next (after tea/coffee).

A large, stylized speech bubble with a white interior and a thick yellow border. The word "Welcome" is written inside in a bold, dark blue font.

Welcome

In today's meeting, we will cover:

- Welcome from Head of School
- Welcome from Director of Teaching
- This week's activities
- Overview of MSc degree programmes
- Advice for succeeding in your maths degree
- Practical information
- Support to help you succeed



Welcome

Who We Are: School of Mathematics

A community where we work together to learn, discover and communicate mathematics

- 100+ academic staff
- 400+ postgraduates
- 1000+ undergraduates

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Welcome

Degree Programme	Year 1
Computational Applied Mathematics (MSc)	37
Computational Mathematical Finance (MSc)	31
Financial Modelling and Optimization (MSc)	35
Operational Research (MSc)	19
Operational Research with Computational Optimization (MSc)	7
Operational Research with Data Science (MSc)	32
Operational Research with Risk (MSc)	9
Statistics and Operational Research (MSc)	7
Statistics with Data Science (MSc)	85
Total	262

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Welcome

This week

All information is on [teaching.maths](https://teaching.maths.ed.ac.uk/main/postgraduate-taught/):

<https://teaching.maths.ed.ac.uk/main/postgraduate-taught/>

Today (Monday):

11:00-11:30 Tea, Coffee and Pastries (JCMB Magnet Café)

11:30-13:00 Introduction to Programmes (See end of talk)

13:00-14:00 Lunch (JCMB Magnet Café)

14:00-17:00 Course Fair (Larch LT, Nucleus)

A white speech bubble with a yellow outline and a drop shadow, containing the word "Welcome" in blue text.

Welcome

This week

Tuesday:

09:00-13:00 Meet your Academic Cohort Lead (JCMB)

09:00-13:00 Diagnostic/Revision Test
(JCMB 5205, deadline noon Friday)

14:00-17:00 Course Enrolment Session (JCMB)

- Finance 5326
- OR 5327
- CAM 5328
- Statistics 5205



Welcome

This week

Thursday:

10:30-11:30 Careers and Edinburgh Innovations Talk (Larch, Nucleus)

14:00- Blackford Hill Walk and Pub Trip

14:00-16:00 Course Enrolment Drop-in (JCMB 5205)

Friday:

12:00 (Deadline for Diagnostic Test)

14:00-17:00 Course Enrolment Drop-in (JCMB 5205)



Welcome

MSc Degree Overview

Note that there may be degree-specific regulations

- MSc degrees consist of 180 credits
- Taught courses are 120 credits (Sep-May)
- Dissertations are 60 credits (May-Aug)
- We **strongly** recommend 60 credits per semester
- A mix of compulsory and optional course
- At least 90 credits at SCQF level 11 (e.g., MATH11XXX)
- To progress to the dissertation you need to average at least 50% and pass at least 80 credits with a mark of at least 50%.



Welcome

Choosing your courses

Today (Monday):

11:30-13:00 Introduction to Programmes

14:00-17:00 Course Fair

Tuesday:

09:00-13:00 Meet your Academic Cohort Lead

14:00-17:00 Course Enrolment Session

Thursday/Friday:

14:00-16:00 Course Enrolment Drop-in

Reminder: You need to take 120 credits of taught courses.



Choosing your courses

<https://path.is.ed.ac.uk/> - Programme Builder

Selected courses (120 credits)

Full Year

Research Skills for Computational Applied Mathematics
20 Credits • Level 11 • NV

Semester 1

Numerical Linear Algebra
10 Credits • Level 10

Python Programming
10 Credits • Level 11 • NV

Semester 2

Applied Dynamical Systems
10 Credits • Level 11

Numerical Partial Differential Equations
10 Credits • Level 11

Other courses

Dissertation (CAM)
60 Credits • Level 11 • NV

Select **exactly 30 credits** from the following collections of courses:
Currently selected: 0 credits

A1 Select **up to one** of the following courses:
Currently selected: 0 courses

You must gain approval from your cohort lead before registering for these courses

Semester 1: Introduction Probability and Statistics (10 Credits • Level 11 • NV), Statistical Modelling (10 Credits • Level 11)

Semester 2: No courses

AND

A2 Select either **two or three** of the following courses:
Currently selected: 0 courses

Semester 1: Bayesian Theory (10 Credits • Level 11 • NV), Stochastic Modelling (10 Credits • Level 11 • NV), Statistical Programming (10 Credits • Level 11 • NV), Industrial Mathematics (10 Credits • Level 11 • NV), Fundamentals of Sparse Linear Algebra (10 Credits • Level 11 • NV), Applied Stochastic Differential Equations (10 Credits • Level 11)

Semester 2: No courses

AND

B Select **exactly 30 credits** from the following collections of courses:
Currently selected: 0 credits

B1 Select **three** of the following courses:
Currently selected: 0 courses

Semester 1: No courses

Semester 2: Bayesian Data Analysis (10 Credits • Level 11 • NV), Time Series (10 Credits • Level 11 • NV), Machine Learning in Python (10 Credits • Level 11 • NV), Large Scale Computational Data Science (10 Credits • Level 11), High Performance Sparse Linear Algebra (10 Credits • Level 11), Uncertainty Quantification (10 Credits • Level 11), Optimization Methods of Finance (10 Credits • Level 11), Numerical Ordinary Differential Equations and Applications (10 Credits • Level 11), Numerical Methods for Data (10 Credits • Level 11), Nonlinear Optimization (10 Credits • Level 11), Mathematics in Action (10 Credits • Level 11)



Welcome

Choosing your courses

<https://path.is.ed.ac.uk/> - Programme Builder

Some courses state:

Note that PGT students on [School of Mathematics MSc programmes] are not required to have taken pre-requisite courses, but they are advised to check that they have studied the material covered in the syllabus of each pre-requisite course before enrolling.

Some Semester 2 courses will require you to have taken the pre-requisites

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Industrial Mathematics

POSTGRAD MATH11231 10 CREDITS LEVEL 11 SEMESTER 1

Overview Information Requirements Student Reviews

Prerequisites

Honours Differential Equations (20 Credits • Level 10) AND Numerical Linear Algebra (10 Credits • Level 10) AND Probability (10 Credits • Level 8)

Additional Requirements

Note that PGT students on School of Mathematics MSc programmes are not required to have taken pre-requisite courses, but they are advised to check that they have studied the material covered in the syllabus of each pre-requisite course before enrolling.

Corequisites

There are no compulsory corequisites for this course.

Prohibited combinations

There are no compulsory prohibited combinations for this course.



Welcome

Choosing your courses

<https://path.is.ed.ac.uk/> - Programme Builder

- Use Path (and information from various sessions) to **plan which courses you would like to take.**
- **Fill in the paper form** (available in the Programme Introduction sessions, or at later events) to select your courses.
- **Attend one of the Course Selection sessions** or drop the form into Student Support Office (JCMB 6203) or Maths Teaching Organisation (MTO, JCMB 5211).
- **Decide for Semesters 1 and 2;** can change up to Week 2 of the relevant Semester.



Welcome

Workload

- Full time study means **40 hours** per week of work – why?
- Each programme is **180 credits**:
- Each credit is considered to be 10 hours of student load:
- 1800 hours over 49 weeks
 - Subtract 4 weeks “break”
 - $1800/45 = 40$ hours per week
 - Consequence: You should not do more than 16 hours per week of paid work at any time



Welcome

Assessment Structure

- Important information regarding the Assessment guidelines can be found here:
[Assessment information | teaching.maths.ed.ac.uk](https://teaching.maths.ed.ac.uk/assessment-information)
(and on teaching.maths for other programmes)



Welcome

Academic Misconduct - Plagiarism

- Definition “... the action of including or copying, without adequate acknowledgement, the work of another in one’s own work.” If (significant) plagiarism is detected, it will be referred to the College. Penalties for plagiarism range from loss of marks to exclusion from the Programme.
- More information: [Academic misconduct | teaching.maths.ed.ac.uk](https://teaching.maths.ed.ac.uk)



Welcome

Generative AI in your studies

- **What is it:** neural network models which generate new outputs (text, images), e.g. ChatGPT, Copilot, Gemini, Dall-e, Midjourney...
- **What can it do:** summarize text, explain concepts, improve drafts, create practice questions, brainstorm, translate, write code...
- **Problems:** plagiarism, reproduction of human bias, factual inaccuracy, out-of-date data, sustainability

A yellow speech bubble with a white interior, containing the word "Welcome" in blue text.

Welcome

Guidance for use of Generative AI

- We are training you to develop certain skills
- Reliance on GenAI might lead to superficial understanding leaving you ill-equipped for later study
- GenAI can be flawed and you need to be able to judge that
- GenAI plagiarises from training materials
- Lecturers will explain when you can and cannot use it **and why**
- Inappropriate use will be treated as academic misconduct

You are responsible for the work you submit!

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Welcome

Categories for pieces of work and assessment

- 1) GenAI tools should be used, as the work has been designed with this intended
- 2) GenAI tools can be used in this work wherever you feel they are useful at your discretion
- 3) You can use GenAI tools to help with substantive parts of this work but not in the write up (*e.g., to help with your coding but not with writing a final report*)
- 4) You cannot use GenAI tools to help with substantive parts of this work, but you can use it to help in the final write up (*e.g., to not to help with your coding but alright to use it to help in writing a final report*)
- 5) You may use GenAI tools to help you organize your thoughts, particularly in preparing your writing, but you should not use it for substantive work or in the final wording of your work
- 6) You should not use GenAI in any stage of this work



Welcome

University regulations

- General: <https://www.ed.ac.uk/bayes/ai-guidance-for-staff-and-students>
- Formal UoE guidelines:
<https://www.ed.ac.uk/sites/default/files/atoms/files/universityguidanceforstudentsonworkingwithgenerativeai.pdf>
- School of Mathematics guidance:
<https://teaching.maths.ed.ac.uk/main/postgraduate-taught/resources-learning>
- University Academic Misconduct Procedures:
<https://www.ed.ac.uk/sites/default/files/atoms/files/academicmisconductprocedures.pdf>



Welcome

Access to Generative AI tools

- ELM <https://elm.edina.ac.uk/> (requires EASE authentication) gives access to current and some past versions of GPT Engine
 - No data is used by OpenAI to train further models
- Microsoft Copilot (uses ChatGPT 4)
<https://copilot.microsoft.com/>
 - If accessed through your UoE Microsoft account, then no data is used by them to train further models



Welcome

Email

- Your **University of Edinburgh Email** is the formal means of communication – you are required to read email regularly and use this for all university correspondence.



Welcome

IT

- <https://teaching.maths.ed.ac.uk/main/postgraduate-taught>
- Timetable information is on your Office 365 personal timetable
- Course material via **Learn**: <https://www.learn.ed.ac.uk>
(via **MyEd**: <https://www.myed.ed.ac.uk>)
- Course information on **Path** <https://path.is.ed.ac.uk/>



Welcome

Facilities - Libraries

- Murray Library (at KB) for books, study space and the “reserve collection”
- Main Library (in George Square) as study space in town (open 24hrs)



Welcome

Facilities - JCMB

- **JCMB** is open:
 - 08.30-18.00 Monday–Friday: No restriction
 - 18.00-21.00 Monday–Friday: Swipe your student card
 - 09.00-17.00 Saturday–Sunday: Swipe your student card
- You must not:
 - Stay in JCMB after “closing time”
 - Sleep overnight in JCMB
 - Try to get into JCMB when it is closed



Welcome

Teaching Organisation

- Administrative oversight of PGT Programmes and courses
- Based in JCMB 5211
- Monday-Friday 09.00-17.00
- Course Secretaries (see Path for details)
- Luke Caudrey, Deputy Manager &
Gemma Aitchison, Programmes Administrator



Welcome

University & Academic Culture

- Not all university systems are the same
- Academic culture varies

Interact with staff – Don't be afraid to ask questions, we will not be insulted.



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Welcome

Support and Development

Dr Vanda Inacio

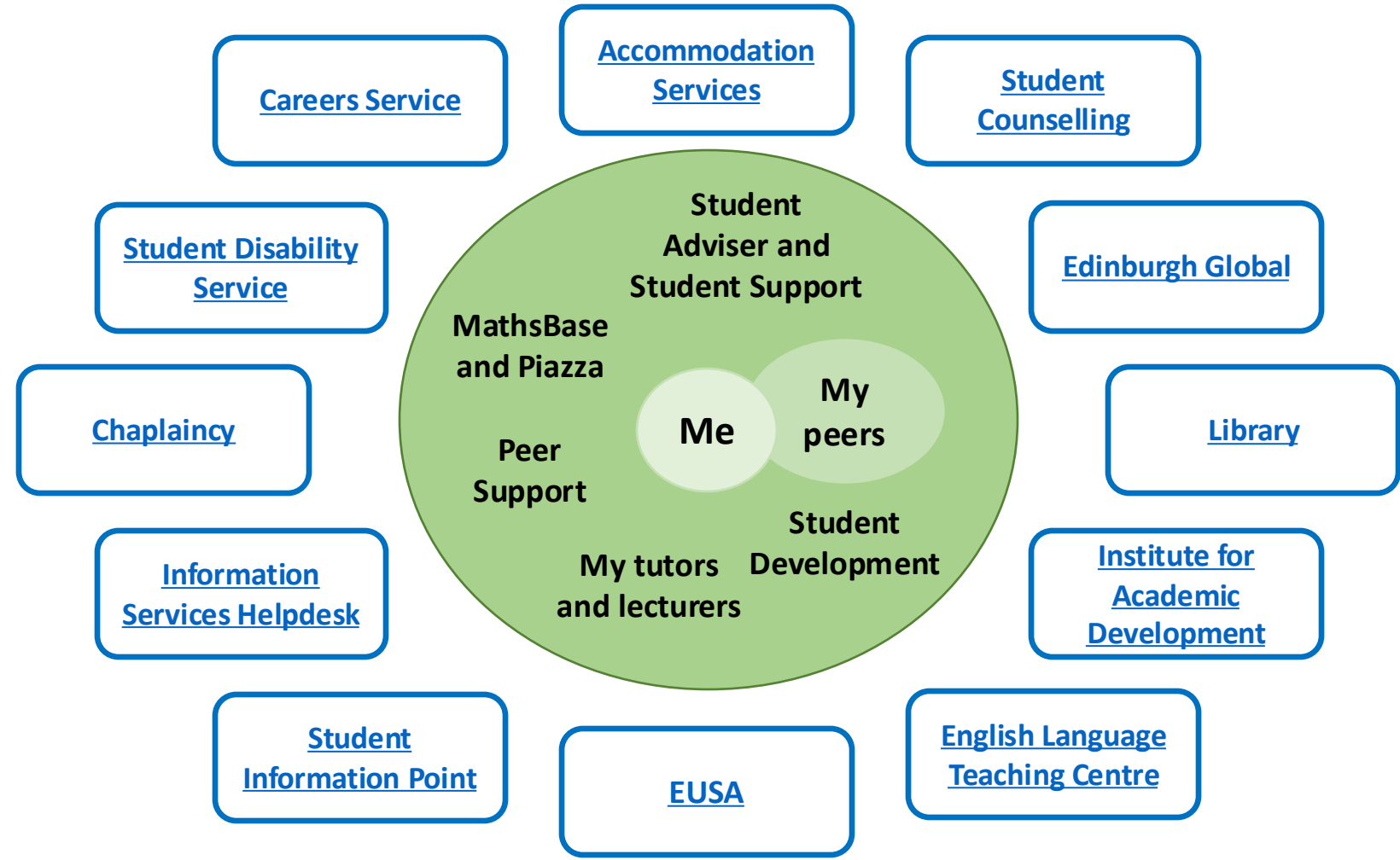
Director of Students

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Welcome

Who can I speak to if I have questions/need help?



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Welcome

Student Adviser

- You have been allocated a **Student Adviser** and an **Academic Cohort Lead**.
- Your Student Adviser is your **first point of contact** within the school who will provide support for any challenges you face.
- If there are **any circumstances that you feel are affecting your progress or wellbeing at university**, you should not hesitate to contact your Student Adviser.
- If you are **struggling, feeling unmotivated or think things could be going better**, talk to your Student Adviser about it.
- Your Student Adviser will refer you on to other services where appropriate.

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Welcome

Academic Cohort Lead

- Your Academic Cohort Lead will assist you with **questions relating to Mathematics and your studies**, as well offering **academic advice about your further academic journey and your career aspirations**.
- You will get the chance to meet your ACL tomorrow!



Welcome

- Technical queries and problems with a particular **course**? Contact the **lecturer/course organiser**.
- There will be **student representatives for each programme** who are elected to represent their concerns and highlight your positive feedback.



Welcome

Student Development

It's not just your degree that future employers are looking for but also your transferable skills (study and employability). **Student Development** is here to help!

Events throughout the year, including:

- **Employability Tuesday**
- **Alumni Careers Showcase** (Week 2 – Friday, 27 September)

Drop-in sessions – In the MSc Hub, JCMB – Every Week – Time TBC

Room: 6313, JCMB

Email: studentdevelopment@maths.ed.ac.uk



Welcome

University Support

Careers Service

The Careers Service have a range of support resources and services to help you explore career and further study ideas, build experience and make future plans.

Point of Contact for the School – Matt Vickers

Meet on Thursday at your "Careers Service" session.



Welcome

Health and Wellbeing

- There are a range of services provided by the University and throughout Edinburgh to support your **physical and mental wellbeing**.
- All students have access to **Student Wellbeing Advisers** for support on issues that may affect your health, wellbeing, or personal life.
- You can speak to your Student Adviser for a referral, or you can self refer on the Student Wellbeing Service website.
- More information at:
<https://student-wellbeing-service.ed.ac.uk/>



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Welcome

Maths and Physics Neurodiversity Network

Join us for tea and coffee! Staff and students welcome

Fourth Wednesday of every month, 13:00-15:00

JCMB

Join the Teams channel for updates and further discussions



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School of Mathematics



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School of Physics
& Astronomy

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You can also contact **Dr Charlotte Desvages** directly if you want to join:
Charlotte.Desvages@ed.ac.uk



Welcome

Where next?

Tea/Coffee and Pastries

Magnet Café, 3rd floor of JCMB

Introduction to Programmes

Operational Research: JCMB 5327

Statistics: Alder Lecture Theatre, Nucleus

Finance: JCMB 5326

Computational Applied Maths: JCMB 5328



Thank you for your attention and...

Welcome

**Enjoy
the year!**