

MSc Quantitative Methods for Risk Management

ORIENTATION SESSION

FRIDAY 5TH SEPTEMBER 2025

HERE TODAY:

ANDREAS SØJMARK, PROGRAMME DIRECTOR SARAH MCMANUS, MSC PROGRAMMES MANAGER

Ise.ac.uk/statistics

@LSEStatistics





Welcome to the LSE!

- Programme Director: That's me! Andreas Søjmark
 - Academic mentor
 - Approve course choices
 - Practitioner events



- Meet each other!
- I'll talk about the programme
- Sarah will say a few things (Sarah is our MSc Programmes Manager)







Structure of the Academic Year:

- <u>Autumn Term AT</u>: 29 September 12 December, 2025 (Previously: Michaelmas Term MT)
- January Exam Period: 7 January 16 January, 2026
- ■Winter Term WT: 19 January 2 April, 2026 (Previously: Lent Term – LT)
- Spring Term ST: 5 May 19 June, 2026 (Previously: Summer Term ST)



MSc Quantitative Methods for Risk Management **Orientation Session**

Course Structure: 3 core + 5 options

Probability and Stochastics



| astic Models |
|---------------------------|
| Stochastic Processes (AT) |
| |

Risk and Computation

| Quantifying and Assessing Risk | Simulation and Machine Learning |
|------------------------------------|--|
| ST429 Statistical Methods for Risk | ST463 Stochastic Simulation, Training, |
| Management (AT) | and Calibration (WT) |

Five Optional Courses: Finance, Stats, ML, Maths



Examples of Optional Courses

| Probability Theory | Statistics and ML |
|--|--|
| ST452 Probability and Mathematical Statistics I (AT) ST453 Probability and Mathematical Statistics II (WT) ST459 Quantum Computation and Information | ST436 Financial Statistics (AT) ST458 Finanical Statistic II (WT) ST456 Deep Learning (WT) ST455 Reinforcement Learning (WT) |
| Financial Mathematics | Finance |
| MA415 The Maths of Black and Scholes Theory (AT) MA416 The Foundations of Interest Rate and Credit Risk Theory (WT) MA435 Machine Learning in Financial Maths (WT) | FM441 Derivatives (WT) FM442 Quantitative Methods for Finance and Risk Analysis (AT) ST461 Maths of Market Microstructure (WT) |
| Practical Applications (non-assessed 0 units) | Numerical Methods |
| MA438 Financial Mathematics in Practice (AT & WT) | MA417 Computational Methods in Finance (AT) |

List of courses: https://www.lse.ac.uk/resources/calendar/programmeRegulations/taughtMasters /2025/MScQuantitativeMethodsForRiskManagement.htm @LSEStatistics





Beyond Your 8 Courses

- 'Additional courses' (non-assessed 0.0 units):
 - MA438 Financial Mathematics in Practice (AT, WT)
 - First class already 24 September (Week 0) at 5-7pm in CKK.1.04 (cannot yet register at this point, so just go)
 - AT classes 6-8pm on October 13, October 20, and November 10
 - MA422 Research Topics in Financial Mathematics (AT, WT, ST)
 - Research seminars (professors visiting from other universities)
- Occasional practitioner events (e.g., quant coming to talk about their work)
- Department of Statistics will host social and alumni events



Mentor meetings before start of term

- We'll meet around two weeks from now
 - ■It'll be in groups of ~5 (during term you can book one-on-ones)
 - I will email you about the details later this week
- Can discuss course choice + any questions you might have
- For now, focus on your pre-sessional course



Teaching Format

- Lectures 2 hours per week
- ■Seminars 1 hour per week
 - Problem classes run by Lecturer or Teaching Assistant (GTA)
 - These are mandatory! Attendance is taken
- Office Hours Usually 1 time slot per week for all students
 - Lecturers will provide details: email, show up, or book on Student Hub



Assessment

- ■Different Formats: 100% written exams, 100% coursework, and mixes thereof
 - Written exams are 2 hours (for a standard 0.5 unit course)
 - Optional courses typically have exams in ST (but can differ!)

■Exams for the Core Courses:

- ST409 (Stochastic Processes) is 100% written exam in Jan
- ST429 (Risk Management) is 25% coursework in AT, 75% written exam in Jan
- ST463 (Simulation, Training, Calibration) is 100% coursework in WT
- Details and Award Classification: see the Programme Regulations online



Prizes!

- Winton Prize for the Best Performance in the Core Courses on the MSc. QMRM (£500)
 - Highest overall marks on core courses ST409, ST429, ST463
 - Sponsored by the quantitative investment management firm Winton
- Rajendra Bhansali Prize for the Best Overall Performance on the MSc QMRM (£200)
 - Sponsored by Rajendra Bhansali, graduate (BSc(Econ, 1967 and PhD 1971) and former member of staff (1967-68) of LSE and now Emeritus Professor of Mathematical Sciences at the University of Liverpool.



MSc Quantitative Methods for Risk Management Orientation Session

Course Selection

- Most courses in the Department of Statistics are controlled access you must meet pre-requisites. List of all controlled access courses can be found here: https://info.lse.ac.uk/current-students/services/course-choice/controlled-access-courses. For information on course requirements and application process, please see the individual course guides
- Many other Departments (for example Finance) also operate on this basis.
- Select your courses as early as possible in the process!
- During the AT course choice period, you should choose both AT and WT courses
 - → You can then revisit this start of WT (details two slides later)



Course Selection Process – Key Dates

- Can browse course selection (LSE For You) from 10am Monday 22 September
- LSE For You opens for course selection from 10am Thursday 25 September
 - https://info.lse.ac.uk/current-students/services/course-choice/course-selection
- Can amend choices until the final deadline 5pm Friday 10 October
- Once you have accepted an offer for a controlled access course, you will be able to sign up to your seminar groups.
- ■Autumn Term (AT) Week 1 starts **Monday 29 September** → Teaching begins!



Course Selection Process – A Few Final Points

- ■Timetables: https://info.lse.ac.uk/current-students/timetables
- Some LSE courses allow students to audit attend lectures but not seminars, and no assessments. Email lecturer to ask for permission.
- ■Course Selection re-opens start of Winter term (19th-30th January).
 - You can change half-unit Winter Term courses only subject to availability!
 - It is <u>not</u> possible to change (i) full-unit courses or (ii) half-unit courses that were already taught during AT



MSc Study Room

■7th Floor, Columbia House – across from Andreas's office, so behave! ©

- Open to all MSc students in our Department
 - Make use of the whole campus!
- Workspaces, PCs, power and network points, whiteboard
- You will need your LSE ID card to enter



Making the most of your year at LSE

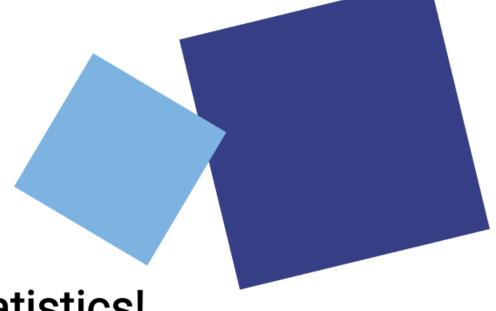
- Group work: work together on problem sheets, discuss what you learn!
- Keep up with your study, participate in seminars (problem classes)
- Don't forget communication and presentation skills
- Keep an eye out for alumni and industry events in the department
 - Information to follow later: practitioner talks for our MSc programme
- LSE Careers organises more general events + various career services



Your Career

- LSE Careers
- Alumni Q&A Panel (date tbc)
- Alumni Mixer Event (Winter Term)
- LSE Practitioner's Challenge (first half of Winter Term)
- Presentations by industry practitioners





Welcome to the Department of Statistics!

Sarah McManus, MSc Programmes Manager



Role of MSc Programmes Manager

- Answer non-academic queries related to Department and School policies e.g. exams, assessment, course selection process
- Co-ordinate Staff-student liaison committee meetings
- General support and signposting through your LSE journey
- Visit COL 6.11, or email <u>Stats-Msc@lse.ac.uk</u>



Staff-student Liaison Committee (SSLC)

- SSLC meeting once in Autumn Term and once in Winter Term student rep(s),
 Programme Directors, MSc Programmes Manager
- Taught Graduate Forum at School level termly
- Volunteer to be an academic rep raise your profile in the Department, rewarding experience
- More information to follow!

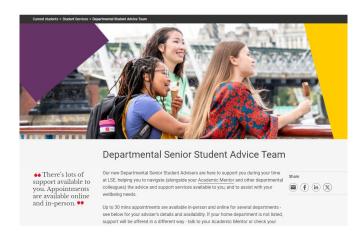


Departmental Student Adviser

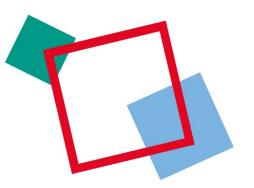
Franks Reyes-Sarria



- Advice when circumstances are affecting our studies or assessments and are impacting your ability to get the most from your LSE experience
- Cannot advise on visas, course selection or academic performance







How to contact me?

- Book a 30 min appointment (online/in-person in COL.5.09)
- Stop by the weekly drop-in for quick queries (online)
 Email (ssc.dssa@lse.ac.uk)





Support in the School

lse.ac.uk/find-support

Student Wellbeing Service

1:1 appointments and workshops

Disability and Mental Health Service

Assigned Advisers, MyAdjustments

LSE LIFE and the Learning Lab

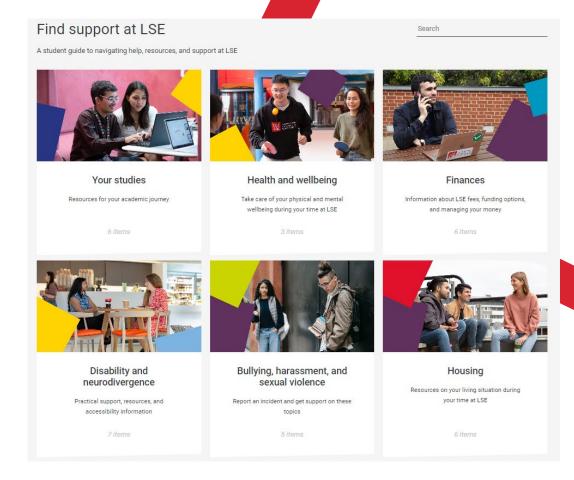
Study skills in 1:1 appointments, workshops, online materials

Student Services Centre

Student records, documents and visa advice

LSE Students' Union

Impartial advice on academic and housing issues, hardship fund





Student Wellbeing Service

Here are a couple of short videos from the Student Wellbeing Service with some more information about what they can offer you:

Looking after your mental health at LSE: Student Wellbeing Service

Our Peer Supporters | LSE



Important: Consent.ed Training

- Explores issues around sexual consent, opportunity to discuss how to look out for one another, and create a positive consent culture.
- It is expected that everyone in the LSE community takes part
- Level 1 and Level 2 are mandatory for all students.
- Level 2 Sessions are on Friday 12 September KSW 2.12
- Survivor sessions also offered if needed. Visit <u>LSE Consent.Ed</u> to book and to get further advice if you are unable to participate due to personal experience.



Upcoming Social and other Events

- MSc Welcome Lunch Wednesday 24 September 2025, 11.30am 1.30pm,
- LSE Careers Introductory Session Thursday 25 September 2025, 11am 12.30pm
- Introduction to Linux Seminar Friday 26 September 2025, 2.00pm –
 4.30pm
- Pre-sessional Games Night (with MSc Financial Maths) Wednesday 17
 September 2025, 4.00pm 5.45pm,
- Games Night (all new students) Monday 29 September 2025, 4pm –
 5.45pm, Marquee
- Bowling Night at Bloomsbury Lanes 3 October 2025, 6pm-10pm Note:

All except Careers session require sign-up. Look out for details by email! All events are listed at: https://www.lse.ac.uk/statistics/welcome-2025/msc-welcome-information



Cumberland Lodge Residential Weekend Friday 10 to Sunday 12 October Limited places – sign up opening soon!





Language Courses

English for Academic Purposes (EAP) – a range of courses run in AT and WT. Sign up is possible from 22 September. See the link for more information. No cost!
https://info.lse.ac.uk/current-students/lse-life/events/english-language-skills

- All MSc students can claim £100 towards the cost of any non-degree language course.
 Details to follow!
- Non-degree language courses: registration opens Thursday 25 September
 - https://www.lse.ac.uk/language-centre/non-degree-language-courses



What Next?

- Read the MSc Student Handbook
- Attend Welcome events organised by the School and the Department
- Sign up for LSE LIFE's Buddy Scheme
- Order your free LSE Hoodie!







Communications Team

- John Barlow Engagement and Communications Lead
- Daniel Titherington Communications and External Engagement Officer
- Penny Smith Communications Officer





What do we do?

- Promote the department's teaching, research, and people
- Run the website and social media channels
- Share news, events, and achievements





Please do let us know if you are involved in any special projects, if you receive any awards, or about any achievements you think are worth celebrating!





Once again – Welcome to the Department and LSE!

Any questions?

Or feel free to contact me at stats-msc@lse.ac.uk

